



# **Upper Mississippi River Restoration Program Coordinating Committee Quarterly Meeting**

**Agenda with  
Background and Supporting Materials**

**August 6, 2025  
Virtual**



## Quarterly Meeting Virtual

### Agenda August 6, 2025

Time	Topic	Page	Presenter
8:00 a.m.	Call to Order and Introductions		Kelly Keefe, <i>USACE</i>
8:10	Approval of Minutes of May 21, 2025 Meeting	A1-8	
8:20	Regional Management and Partnership Collaboration — Fiscal Report — UMRR Strategic Planning		Marshall Plumley, <i>USACE</i>
9:15	UMRR Showcases — Past Insights and Current Status of the LTRM Macroinvertebrate Component in the Mississippi and Illinois Rivers — Lower Pool 13 Phase II HREP: Water Level Management		Manisha Pant, <i>Illinois Natural History Survey</i>  Clayton Corken, <i>USACE</i>
9:45	Break		
10:00	Program Reports — Long Term Resource Monitoring and Science • USACE Update • FY 2025 Third Quarter Highlights • Implementation Planning Update • A-Team Report		Davi Michl, <i>USACE</i>  Jeff Houser, <i>USGS</i>  Shawn Giblin, <i>Wisconsin DNR</i>

## **Agenda, continued**

<b>Time</b>	<b>Topic</b>	<b>Page</b>	<b>Presenter</b>
	<ul style="list-style-type: none"><li>— Habitat Rehabilitation and Enhancement Projects<ul style="list-style-type: none"><li>• District Reports</li></ul></li></ul>		John Henderson, Jessie Dunton, and Jasen Brown, <i>USACE</i>
11:20	Communications		
	— DOI Brochure and LTRM Brochure	B1-4	Laura Talbert, <i>UMRBA</i>
	— UMRCC Cell Phone Data	B5-10	Matt Vitello, <i>Missouri DoC</i>
11:50	Other Business	C1-13	Kelly Keefe, <i>USACE</i>
	— Future Meeting Schedule		
12:00 p.m.	Adjourn		Kelly Keefe, <i>USACE</i>

# **Upper Mississippi River Restoration Program Quarterly Meetings**

## **Attachment A**

### **UMRR Coordinating Committee Draft Minutes**

<b>Page Number</b>	<b>Document Title</b>
A-1 to A-8	Draft Minutes of the May 21, 2025 UMRR Quarterly Meeting

**Draft Minutes of the  
Upper Mississippi River Restoration Program  
Coordinating Committee**

**May 21, 2025  
Quarterly Meeting**

**Virtual**

Sabrina Chandler of the U.S. Fish and Wildlife Service called the meeting to order at 8:03 a.m. on May 21, 2025. Other UMRR Coordinating Committee representatives present were Kelly Keefe (USACE), Jon Amberg (USGS), 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 February 26, 2025, Meeting**

Vanessa Perry moved and Matt Vitello seconded a motion to approve the draft minutes of the February 26, 2025, meeting. The motion carried unanimously.

**Regional Management and Partnership Collaboration**

*Fiscal Report*

Marshall Plumley thanked the partnership for their support during the last several months, acknowledging that it has been a difficult time.

On March 15, 2025, Congress passed a full-year continuing resolution authority (CRA) funding federal agencies through the remainder of FY 2025. The CRA limited the Corps' FY 2025 construction budget to \$1.8 billion, equaling a 44 percent reduction from FY 2024 spending levels. Additionally, Congress completely delegated to the Administration the allocations of those funds among programs and projects. The Upper Mississippi River Restoration (UMRR) program receives its funding through the Corps' construction general account.

On May 15, the Administration published the FY 2025 spending allocations in "Work Plans," allocating \$13.5 million to UMRR. Prior to the enactment of the FY 2025 CRA, the Corps was instructed to implement UMRR at \$55 million given the inclusion of \$55 million for UMRR in the FY 2025 President's budget and House and Senate FY 2025 appropriations measures. As a result, for the remainder of the fiscal year, the program is halting most programmatic work and prioritizing active HREP construction contracts and LTRM base monitoring.

UMRR will exhaust all the available FY 2025 funding by the end of the fiscal year, leaving no ability to carry over funds at the beginning of the year. Funding at the beginning of FY 2026 is unknown and depends on a variety of factors. The UMRR Coordinating Committee has initiated planning for program implementation at various funding scenarios.

Plumley assured attendees that this decrease in funding is not demonstrative of the program's performance; compared to the Corps' other Aquatic Ecosystem Restoration programs, UMRR fared well.

In response to this change in funding, there has been a large decrease in funding for HREPs. The program is prioritizing maintaining existing construction contracts. For HREPs in design, the priority is to reach the next level of design, if possible, and then pause. For HREPs in planning, the priority is to complete a milestone (e.g., tentatively selected plan) if possible before pausing any further developments. For LTRM, the priority for UMRR is to maintain base monitoring through field station data collection. Science in support of restoration efforts have been scaled down to completing topobathy contracts and conducting fieldwork on the Lower Pool 13 HREP Associated Research Project (HARP). Plumley reported that the program suspended Stage 1 & 2 Design efforts.

### *Regional Program Initiatives*

The Communications and Outreach Team (COT) has suspended its work due to lack of funding. Plumley hopes that the group will restart their efforts by the end of the year in anticipation of FY 2026. The effort to pull together a Future HREP Monitoring Taskforce has been paused due to lack of funding, as has the effort to update the Environmental Design Handbook.

### *10 Year Outlook*

Plumley noted that, given the current funding situation, program staff at the Corps have shifted to working on other projects; if the program receives appropriations in FY 2026, it will take some time to pull a team back together. Given the descoping already underway, the program's timeline for completing its construction, design, and feasibility work is pushed back by roughly twelve months.

### *HREP Selection*

UMRR partners have been working for eighteen months to evaluate potential project opportunities and selecting a suite of projects for implementation in FYs 2026 through 2030. Plumley expressed his support for finishing the effort, noting that the fact sheets that were presented at the February quarterly meeting represented a range of cost sizes. Plumley stated that the program may later add project fact sheets for the Illinois River.

### *Strategic Planning*

Plumley recalled that the strategic planning team reviewed the draft plan in February and the next step is to seek review by the COT and Analysis Team (A-Team) followed by the participants of the strategic planning process and the Coordinating Committee. A public review will then follow. Plumley noted that, while the effort is currently paused, he is hopeful it can start back up in the next month or two. Plumley highlighted the strategic plan as an important resource given the personnel changes in the program. In response to a question from Andrew Stephenson, Plumley reported that Angela Deen and Brian Markert have left the Corps and John Henderson and Jasen Brown are temporarily serving those District HREP Manager roles. While Julie Milhollin temporarily works on a different project, Jessie Dunton is filling in her role. Plumley noted that there is potential for more permanent backfills once the financial situation is sorted.

Brian Stenquist commended Plumley's leadership during this tumultuous time and asked for examples of what has gone well and what has been challenging. Plumley replied that the partnership placed a great deal of trust in him and all program staff at the Corps as the FY 2025 work plan was being recalibrated. Plumley acknowledged that making important decisions in a short time frame was difficult.

Jim Fischer also applauded Plumley's and Davi Michl's leadership of the program and LTRM in particular. Fischer stated that a lesson learned from this process is the importance of having a continuity of operations plan for the program, noting the ease with which institutional knowledge can be lost.

Fischer reported personnel changes from UMESC. Four LTRM staff members were let go and then re-hired. Shirley Yuan, the water quality program manager for LTRM, left after several years of service. Brian Ickes, the fisheries program leader for LTRM, and Randy Hines, UMESC's outreach coordinator, also left after years of working with the program.

## **Fact Sheet Consideration**

### *River Resources Action Team (RRAT Tech)*

Matt Vitello presented the RRAT Tech's proposed HREP fact sheets, noting that the RRAT Tech unanimously endorsed all the fact sheets being submitted. The group proposed fact sheets for the following projects:

1. Mason Island, Pool 26. This project would address degrading backwater habitat. Potential features include island creation, dikes, and dredging.
2. Spatterdock Slough, Pool 26. This project would address backwater sedimentation and loss of bathymetric diversity. Proposed features include island restoration, sediment deflection, and excavation.
3. Chouteau Island, open river. This project would increase aquatic diversity by improving the island's side channel and restore degraded forests. Proposed features include shoreline protection and backwater slough restoration.
4. Illinois Bayou, open river. This project would address degrading marsh, wetland, and forest habitat. Proposed features include water control structures and bank stabilization.

### *Fish and Wildlife Interagency Committee (FWIC)*

Bethany Hoster presented the HREP fact sheets proposed by the FWIC. Hoster noted that the FWIC is still waiting on the RRCT to vote and endorse the fact sheets being proposed today. The draft fact sheets are included in the meeting packet. The FWIC used a tiered ranking system on their nine fact sheets based on urgency of implementation need. The group recommended the following three projects be implemented in the near term:

1. Upper Pool 13, which was carried forward from the last project selection process in 2020.
2. Geneva and Hersey Islands, which was carried forward from the last project selection process in 2020.
3. Multi Pool Habitat Protection, which was carried forward from the last project selection process in 2020.

The group recommended the following three projects be implemented through FY 2030:

4. Turkey River Bottom, which was updated and carried forward from the last project selection process in 2020.
5. Odessa Floodplain Forest and Fox Pond Wetland, Pools 17 and 18
6. Lower Long Island and Shandrew Island, Pool 21.

These remaining three fact sheets required less immediate action.

In response to a question from Sabrina Chandler, Hoster explained that the FWIC is submitting five new projects for endorsement along with the tiered list of all nine fact sheets. In response to a question from Vanessa Perry, Marshall Plumley noted that the three Districts do not compete for projects, so there is no issue with the Rock Island District using tiers for their projects and the St. Louis and St. Paul Districts not using tiers.

In response to a question from Chandler, Hoster reported that there are no issues with the Coordinating Committee endorsing the fact sheets before the RRCT. Plumley added that, in the past, the Coordinating Committee has issued endorsements conditional on River Team approval. Chandler stated that this was not an attempt to skip the RRCT's endorsement, noting that the Coordinating Committee can undo its endorsement if needed.

#### *Fish and Wildlife Working Group (FWWG)*

Ryan Hupfeld presented the FWWG's proposed HREP fact sheets. The group proposed the following project fact sheets:

1. Wing Lake/Hunter's Point Backwaters, Pool 8. This project would address island fragmentation and a decline in forest habitat. Proposed features include island restoration, forest establishment, dredging, and shoreline stabilization.
2. Sny Magill – Methodist Lake, Pool 10. This project would address a decline in forest habitat, island fragmentation, and backwater sedimentation. Features would include island restoration and forest establishment.
3. Tempealeau National Wildlife Refuge, Phase 2, Pool 6. This project would address impaired water quality and harmful algal blooms. Features would include increased emergent and submergent aquatic vegetation and water control structures.

Hupfeld noted that the FWWG has four secondary fact sheets that could easily be picked up with any additional program funding. These secondary fact sheets are for Probst Lake, Lake Onalaska Inlets, Snyder Lake and Sandy Hook Slough, and Black Deer/Brice Prairie Channel. In response to a question from Chandler, Plumley stated that it was not necessary to endorse these secondary fact sheets today, but rather if the opportunity arises, then the Coordinating Committee can vote to endorse them.

Vitello made a motion to endorse all three District's fact sheets, pending RRCT endorsement. Kirk Hansen seconded the motion. The motion carried unanimously.

Kirsten Wallace noted that these endorsed fact sheets present an opportunity to communicate with the general public about potential projects in their community. Liz Scherber pointed out that such an effort would align well with the strategic plan's goals.



## Program Reports

### *HREP Planning and Construction*

John Henderson, Jessie Dunton, and Jasen Brown reported on the progress in implementing UMRR HREPs, including the following milestones:

- The St. Paul District is prioritizing completing construction on the McGregor Lake HREP.
- The St. Paul District awarded a contract for the Lower Pool 10 Stage 1 HREP.
- The St. Paul District is evaluating public comments received on the Robinson Lake HREP.
- The Rock Island District initiated construction on the Steamboat Island Stage 2 HREP.
- MVD approved the TSP for Rock Island's Pool 18 Forestry HREP.
- Design for the Clarence Cannon HREP in the St. Louis District is near completion.
- The St. Louis District River Resources Action Team fall 2025 partner river trip will travel from St. Louis to Hannibal, pending any changes due to funding.

In response to a question from Jim Fischer, Henderson reported that aquatic vegetation at the McGregor Lake HREP is being monitored for a response to the thin layer placement. Brian Stenquist requested additional context regarding a statement made about public sentiment put forward during a public meeting for Robinson Lake HREP. Sabrina Chandler explained that negative comments were offered by members of the public regarding dredging and were not relevant to the habitat objectives. Chandler congratulated the St. Paul District for their handling of the concerns voiced by members of the public.

### *Long Term Resource Monitoring, Research, and Other Science*

Marshall Plumley reiterated that maintaining base monitoring is the top priority for the LTRM element. The topobathy data acquisition will continue as planned as the contracts terminate soon. These twelve task orders were awarded at the end of FY 24 in collaboration with the Navigation and Ecosystem Sustainability Program (NESP).

### Quarterly Progress Report

Jeff Houser reported that the accomplishments of the second quarter of FY 2025 include the publication of the following five manuscripts that were supported by UMRR funding and the partnership infrastructure:

- 1) Identifying recruitment sources across trophic levels in a large river food web
- 2) Seasonal variation in dietary overlap between yellow perch and bluegill in backwater lakes of a large river
- 3) Relationships between zooplankton and habitat conditions in the Upper Mississippi River System
- 4) Climate and connectivity mediate overwintering habitat suitability for centrarchids in a large floodplain river network
- 5) Managing for tomorrow – a climate adaptation decision framework

The phytoplankton, zooplankton, and geomorphology projects, which were allocated funding in previous years, have been postponed indefinitely to cover monitoring costs in this current fiscal year.

The UMRR science and planning projects that were prioritized through the UMRR LTRM implementation planning process and that had been expected to be funded in FY 2025, including aquatic plant distribution and learning from restoration, are postponed indefinitely to cover monitoring costs in this current fiscal year.

Jennie Sauer reported that another UMESC staff member, Theresa Newton, has retired after conducting mussel work for the program for over thirty years.

#### A-Team Report

Shawn Giblin, Chair of the A-Team, presented content from the group's April meeting. The next A-Team meeting is scheduled for July 31, 2025 to be convened virtually.

Nate De Jager recognized the value of interdisciplinary collaboration was evident in the Reno Bottoms project and applauded the partnership work.

### **Other Business**

#### *NGO Advocacy*

Olivia Dorothy reported that One Mississippi implemented a social media campaign that generated over 3,000 letters submitted to members of Congress in support of UMRR. Dorothy stated that respondents shared personal stories and memories of their experiences with the program. The responses have been summarized and can be obtained by contacting Dorothy.

#### *Future Meeting Schedule*

Given travel restrictions for federal employees, the August and October meetings will be held at UMESC in La Crosse unless otherwise reported.

- August 2025 to be held virtually
  - UMRBA quarterly meeting – August 5
  - UMRR Coordinating Committee quarterly meeting – August 6
- October 2025 in La Crosse, Wisconsin
  - UMRBA quarterly meeting – October 28
  - UMRR Coordinating Committee quarterly meeting – October 29
- February 2026 to be held virtually
  - UMRBA quarterly meeting – February 24
  - UMRR Coordinating Committee quarterly meeting – February 25

## Attendance List

### UMRR Coordinating Committee Members

Kelly Keefe	U.S. Army Corps of Engineers
Sabrina Chandler	U.S. Fish and Wildlife Service, UMR Refuges
Jon Amberg	U.S. Geological Survey, UMESC
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

LeeAnn Riggs	U.S. Army Corps of Engineers, MVD
Kacie Grupa	U.S. Army Corps of Engineers, MVP
John Henderson	U.S. Army Corps of Engineers, MVP
Samantha Thompson	U.S. Army Corps of Engineers, MVP
Jessie Dunton	U.S. Army Corps of Engineers, MVR
Bethany Hoster	U.S. Army Corps of Engineers, MVR
Davi Michl	U.S. Army Corps of Engineers, MVR
Rachel Perrine	U.S. Army Corps of Engineers, MVR
Marshall Plumley	U.S. Army Corps of Engineers, MVR
Jasen Brown	U.S. Army Corps of Engineers, MVS
Brian Johnson	U.S. Army Corps of Engineers, MVS
Greg Kohler	U.S. Army Corps of Engineers, MVS
Stephanie Edeler	U.S. Fish and Wildlife Service, National Wildlife Refuge System
Steve Winter	U.S. Fish and Wildlife Service, National Wildlife Refuge System
Lauren Larson	U.S. Fish and Wildlife Service, Ecological Services
Matt Mangan	U.S. Fish and Wildlife Service, Ecological Services
Sara Schmuecker	U.S. Fish and Wildlife Service, Ecological Services
Kristen Bouska	U.S. Geological Survey, UMESC
Jennifer Dieck	U.S. Geological Survey, UMESC
Jeff Houser	U.S. Geological Survey, UMESC
Jim Fischer	U.S. Geological Survey, UMESC
Kathi Jo Jankowski	U.S. Geological Survey, UMESC
Carrie Link	U.S. Geological Survey, UMESC
Brad Morris	U.S. Geological Survey, UMESC
Rebekah Anderson	Illinois Department of Natural Resources
John Seitz	Illinois Department of Natural Resources
Ryan Hupfeld	Iowa Department of Natural Resources
Neil Rude	Minnesota Department of Natural Resources
Nick Heredia	Minnesota Energy Transition Advisory Committee
Noah Cadwell	Missouri Department of Conservation
Sam Clary	Missouri Department of Conservation
Alicia Carhart	Wisconsin Department of Natural Resources
Shawn Giblin	Wisconsin Department of Natural Resources
Patrick Kelly	Wisconsin Department of Natural Resources
Olivia Dorothy	One Mississippi
Brent Newman	Audubon

Alicia Vasto	Audubon
Anshu Singh	Corn Belt Ports
Madeline Heim	Milwaukee Journal Sentinel
Fritz Funk	Izaak Walton League
Barry Draskowski	Izaak Walton League
Jennie Sauer	National Experienced Workforce
Christine Favilla	Sierra Club
Andrew Stephenson	The Nature Conservancy
Rick Stoff	Stoff Communications
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
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
Josh Wolf	Upper Mississippi River Basin Association

# Upper Mississippi River Restoration Program Quarterly Meetings

## Attachment B

### Communications

<b>Page Number</b>	<b>Document Title</b>
B-1 to B-2	UMRR and the Department of Interior Brochure
B-3 to B-4	Long Term Resource Monitoring Brochure
B-5 to B-6	UMRCC Pool 4 Data Excerpt
B-7 to B-8	UMRCC Pool 13 Data Excerpt
B-9 to B-10	UMRCC Pool 26 Data Excerpt

Full UMRCC report linked on the meeting web page:

<<https://umrba.org/event/umrr-coordinating-committee-quarterlymeeting/08-06-25>>

# U.S. Fish and Wildlife Service in the Upper Mississippi River Restoration Program

The Upper Mississippi River Restoration program (UMRR) operates through a truly unique and remarkable partnership infrastructure.

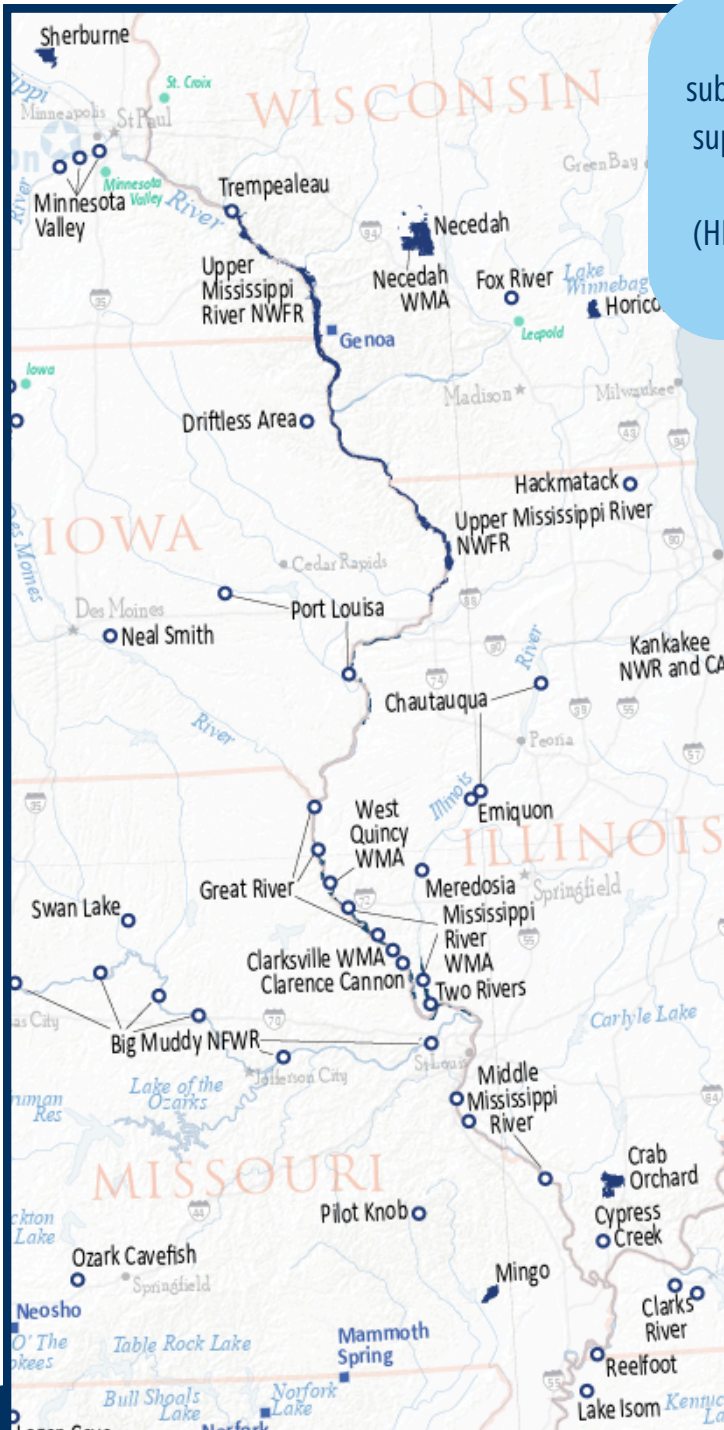
The **U.S. Fish and Wildlife Service (USFWS)** makes substantial investments in directly implementing UMRR. USFWS supports the **planning, design, and monitoring of UMRR's Habitat Rehabilitation and Enhancement Projects (HREPs)** through the National Wildlife Refuge System, fisheries resource offices, and ecological services field offices.

## How Does the Service Support UMRR?

- Holds responsibility for **operation, maintenance, repair, rehabilitation, and replacement (OMRR&R) for habitat projects located on land they manage**. From FYs 2017-2022, the Service spent an annual average of over \$400,000 on OMRR&R.
- Assists with the **planning and design of habitat projects**. From 2016-2022, UMRR restored over 15,000 acres of habitat through these projects.
- Participates in pre- and post-project monitoring on sponsored projects.

The UMRR program's **interagency partnership ensures the program's success** in achieving a healthier and more resilient system that sustains the river's multiple uses.

The partnership enables the **UMRR program to manage resources provided by Congress in the most efficient and effective way possible.**



# U.S. Geological Survey in the Upper Mississippi River Restoration Program

The Upper Mississippi River Restoration program (UMRR) operates through a truly unique and remarkable partnership infrastructure.

The **U.S. Geological Survey (USGS)**, through its Upper Midwest Environmental Sciences Center, provides scientific expertise and administration for **implementing UMRR's Long Term Resource Monitoring (LTRM)**.

The data collected **over 30 years** has produced many insights that would be otherwise unobtainable.

## How Does the USGS Support UMRR?

- Provides a scientific basis for restoration **practitioners** to assess the river ecosystem's habitat needs and optimize project investments
- Creates **new tools to better understand the ecosystem, informing decision makers**
- Collaborates with partner agencies to **identify information needs**
- Executes research, data analysis, and management, modeling, and decision support
- Produces scientific reports, including a **thorough assessment of the ecological resilience of the river**, identifying key indicators of ecosystem structure and function critical to understanding, restoring, and managing the river and watershed
- Enables the program to understand and address the most pressing issues the UMRS is facing



B-2

Recent advancements in knowledge supported by USGS are outlined in the following scientific publications:



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

2018 UMRR  
Habitat Needs  
Assessment II



# Long Term Resource Monitoring of the Upper Mississippi River System

The Upper Mississippi River System is changing for a variety of reasons, mostly because of **changing hydrology** and **invasive species**.

Changing hydrology affects habitat quality and food sources for fish, wildlife, and other critters.

We know these changes are occurring because of the **Long Term Resource Monitoring (LTRM)** element of the Upper Mississippi River Restoration Program. The data collected over 30 years at six field stations has **produced many insights that would be otherwise unobtainable**.

## Lake City Field Station

Monitored by the state of Minnesota. This station's findings illuminate how investing in nutrient reduction leads to a healthier ecosystem.

## La Crosse Field Station

Monitored by the state of Wisconsin. Findings from this field station show the value of UMRR's habitat projects, particularly island and backwater restoration.

## Bellevue Field Station

Monitored by the state of Iowa. This station found that the Maquoketa River, which flows into Pool 13, contributes the most sediment out of the tributaries studied. This has led to a decline in aquatic plant diversity and abundance.

## Havana Field Station

Monitored by the state of Illinois. The establishment of invasive carp in the La Grange Reach has led to a decrease in recreationally valued native fish populations at this field station.

## Great Rivers Field Station

Monitored by the state of Illinois. Water levels at Pool 26 have been managed to expand the areas where native emergent plants can grow. The plants then help to limit sediment movement and enhance water clarity.

## Open River Field Station

Monitored by the state of Missouri. In contrast to the Havana field station, recreationally valued native fish populations are stable in the Open River Reach despite the presence of invasive carp.

The six field stations collect data on **water quality, forests, aquatic vegetation, fish, and other variables** to measure the river's health. The six study reaches have different habitats, threats, and conditions.





# Long Term Resource Monitoring of the Upper Mississippi River System

For 30 years UMRR's Long Term Resource Monitoring (LTRM) element 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.

**LTRM has enabled the UMRR program to understand the most pressing issues, focus future restoration efforts where needed, and has advanced the understanding of the UMRS.**

## What Does LTRM Tell Us?

- 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.

## How Does LTRM Benefit People Along the River?

- By collecting and evaluating data over decades, scientists can assess the health of the river and target habitat restoration projects for the **greatest benefit of the river and the public**.

In the 1980s, there was a massive collapse of vegetation on the Upper Mississippi River that increased sedimentation of the navigation channel, negatively impacting the river's ability to support navigation. The collapse was likely caused by poor water quality. Monitoring vegetation, sediment and water quality is important to maintaining reliable transportation of commerce.

UMRR long term monitoring of nutrients provides the agricultural community with long term information about trends, informing the success of past investments in nutrient management and informing decisions about future investments in conservation practices.



B-4

**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 Needs  
Assessment II

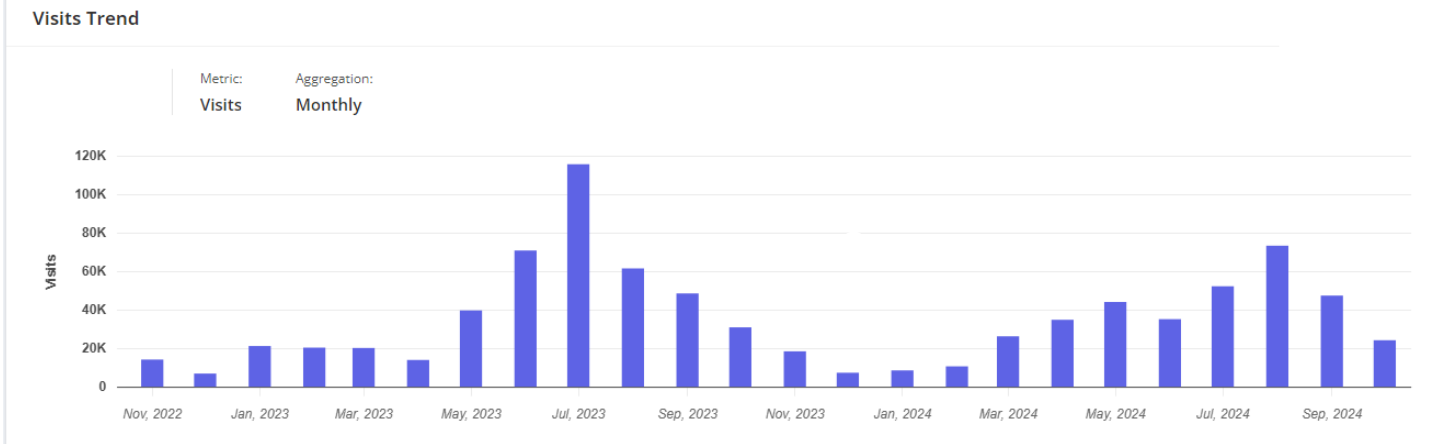
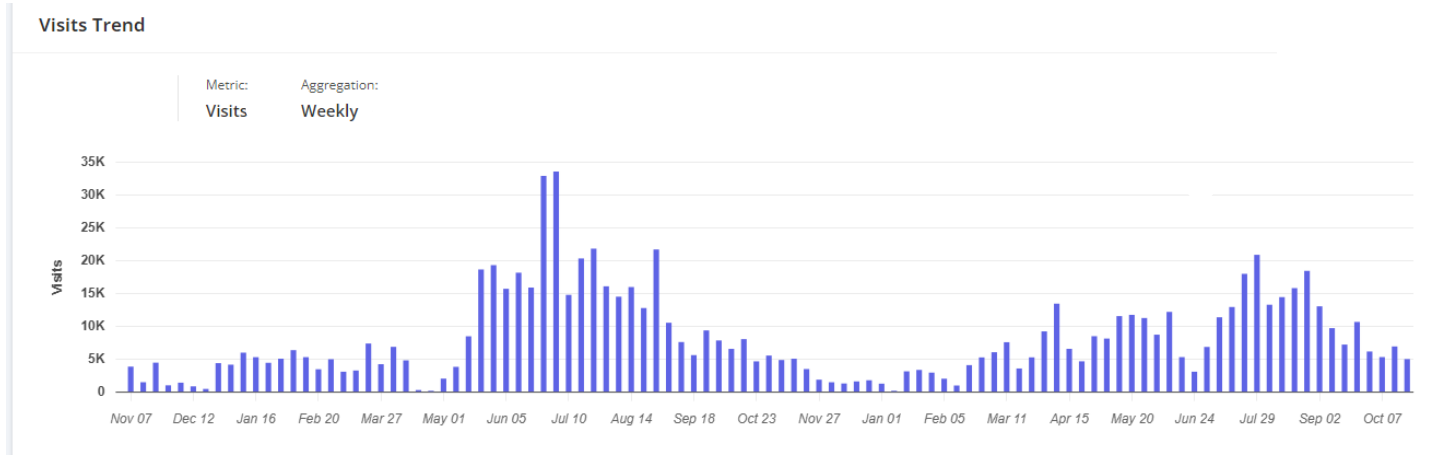




Date Range: November 1, 2022– October 31, 2024

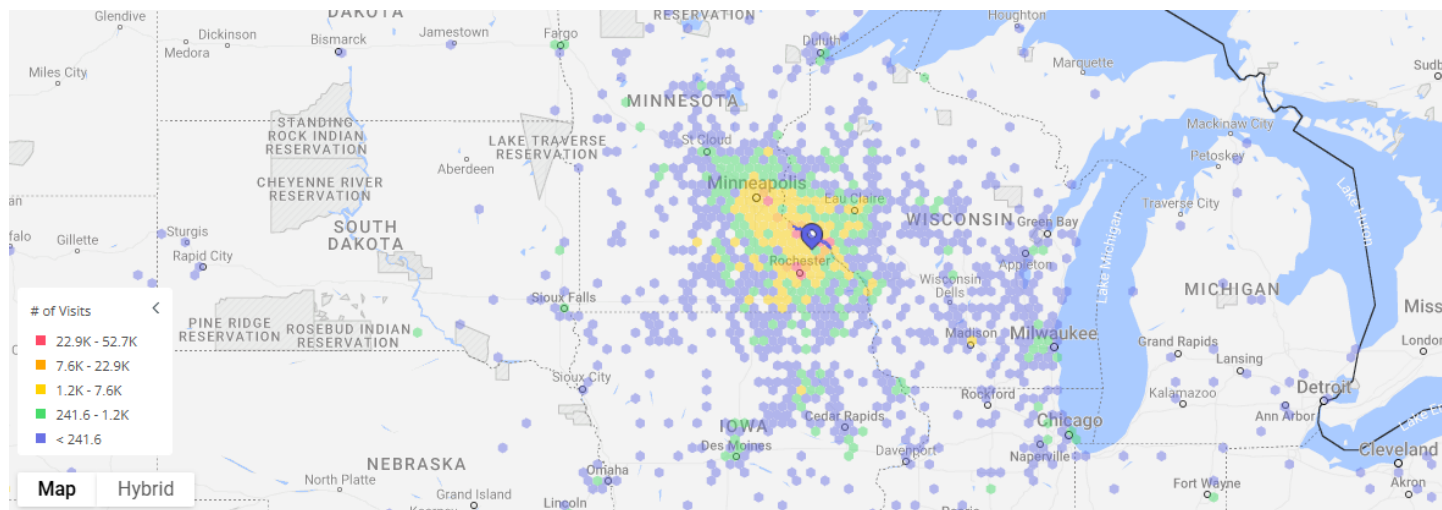
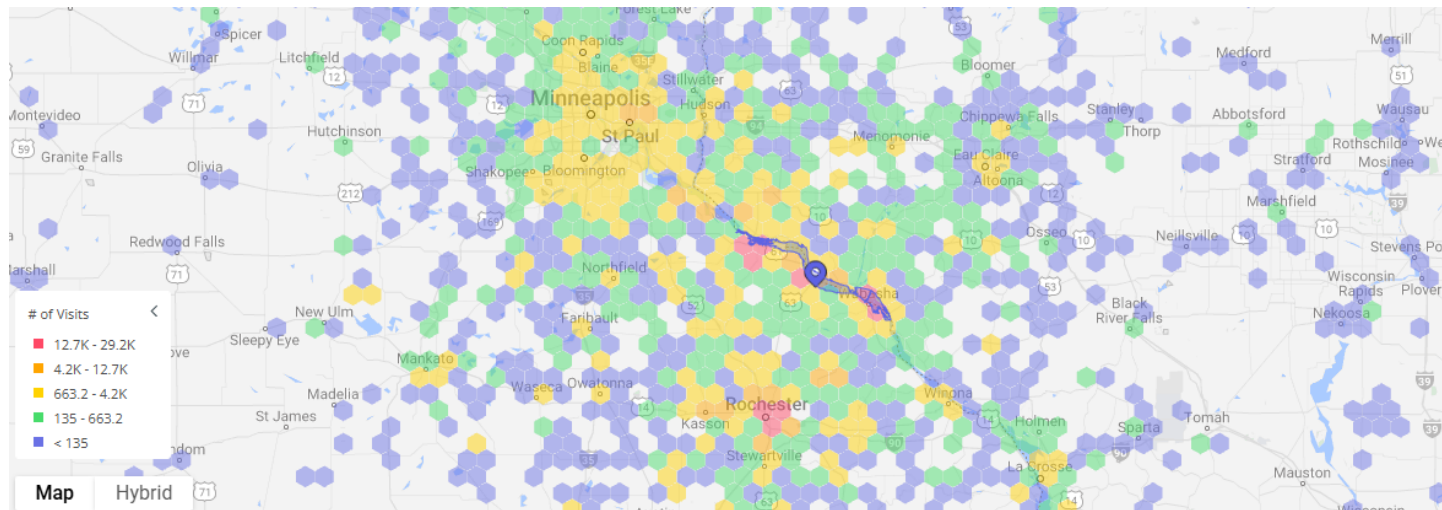
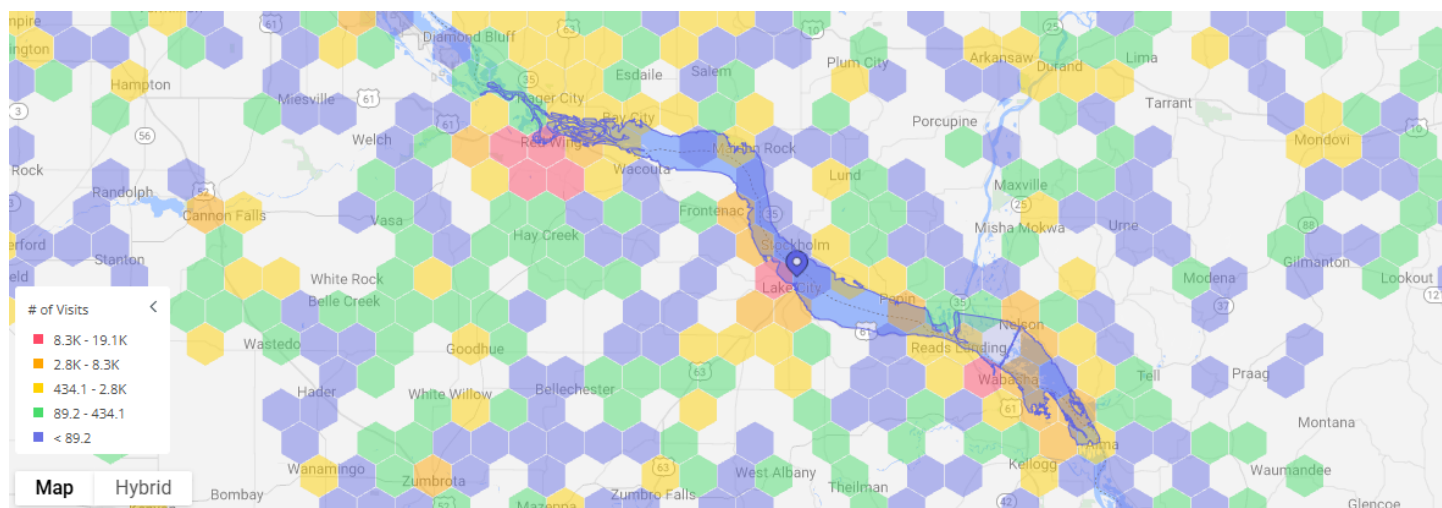
This report includes visitors in the point of interest. Visitors must have remained in the point of interest for at least 10 minutes to be counted. People are counted only once per day if they leave and return.

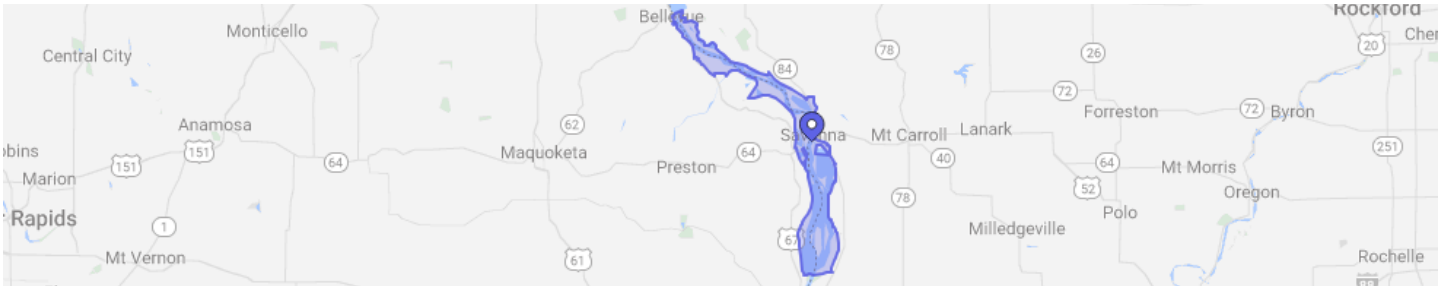
Total visits in study period: 850.7K	Unique individuals visiting: 174.3K	Average visits per individual: 4.88
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## Distance

The maps below show distance people traveled from home location.





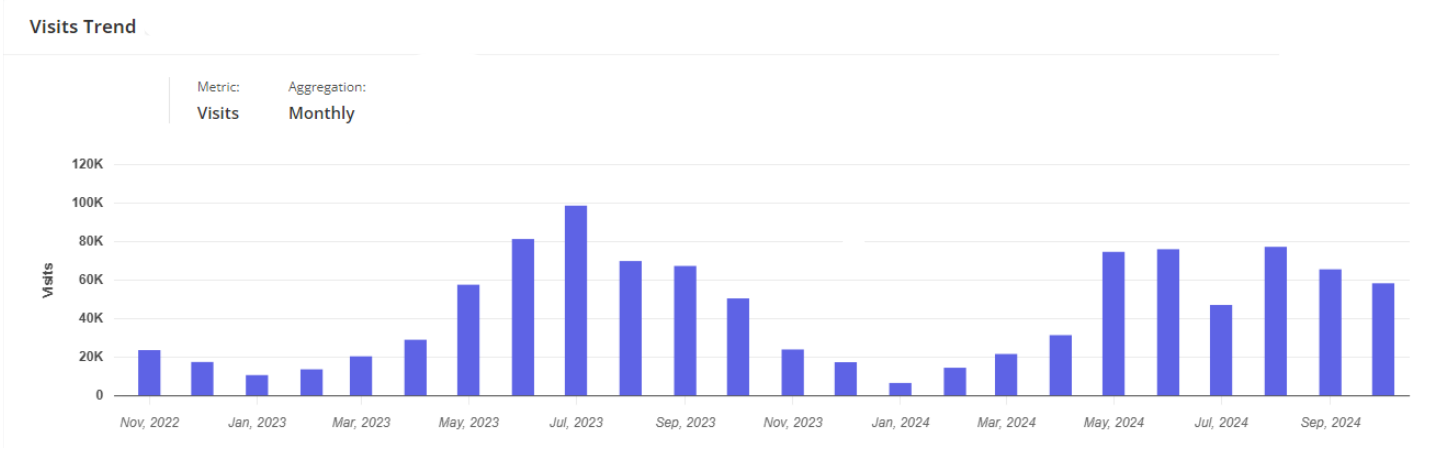
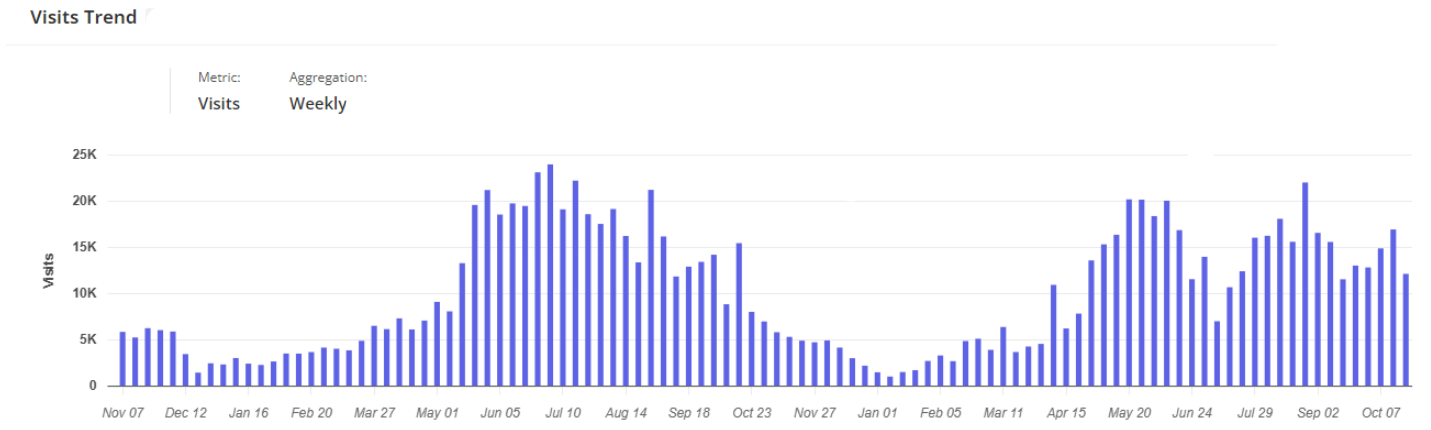
Date Range: November 1, 2022– October 31, 2024

This report includes visitors in the point of interest. Visitors must have remained in the point of interest for at least 10 minutes to be counted. People are counted only once per day if they leave and return.

Total visits in study period: 1.1M

Unique individuals visiting: 215.4K

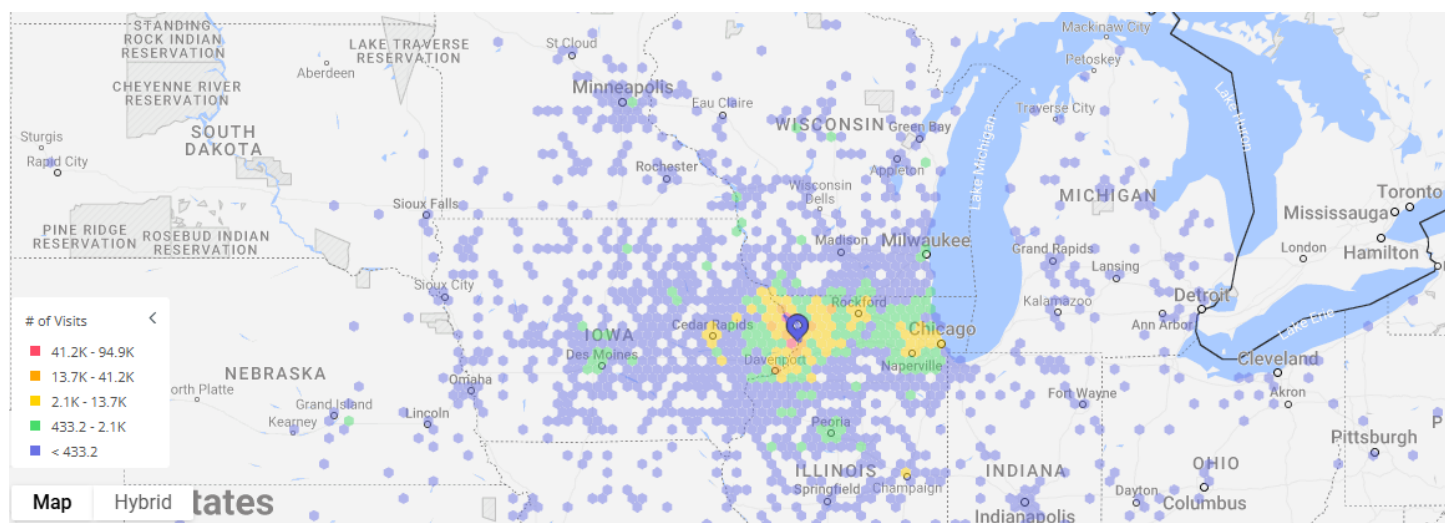
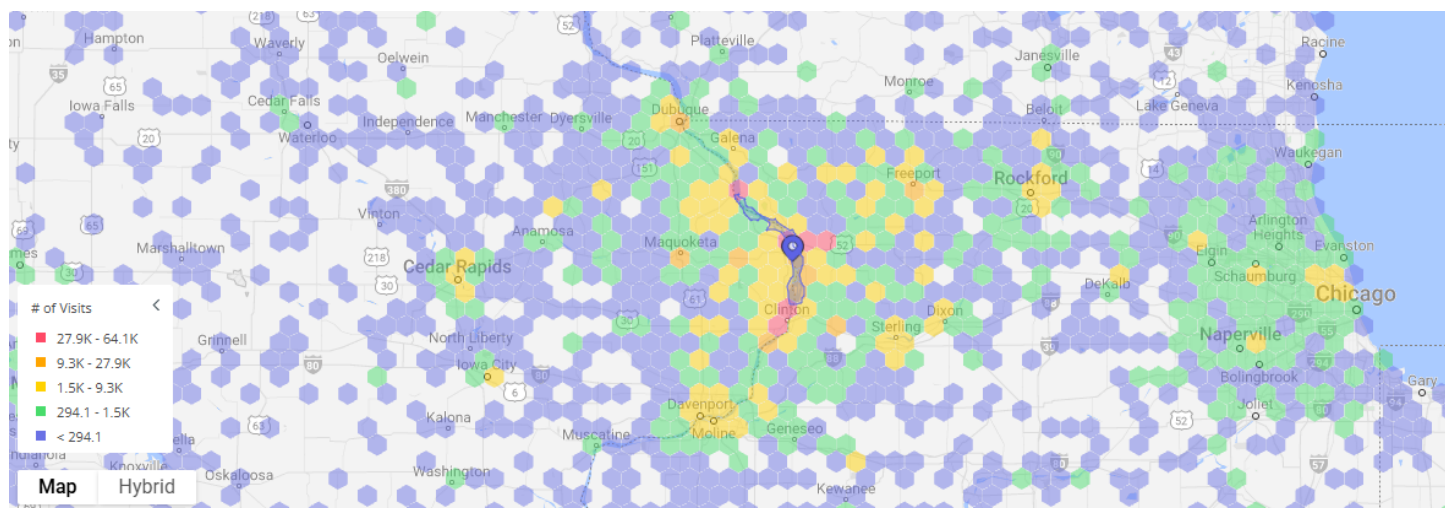
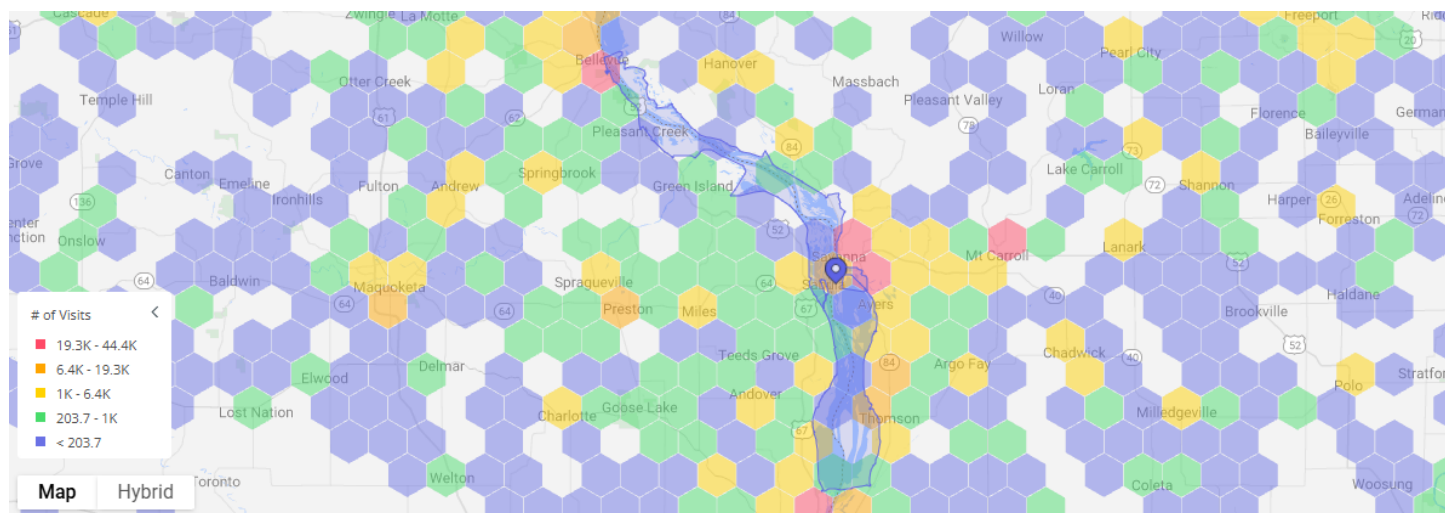
Average visits per individual: 4.9





## Distance

The maps below show distance people traveled from home location.





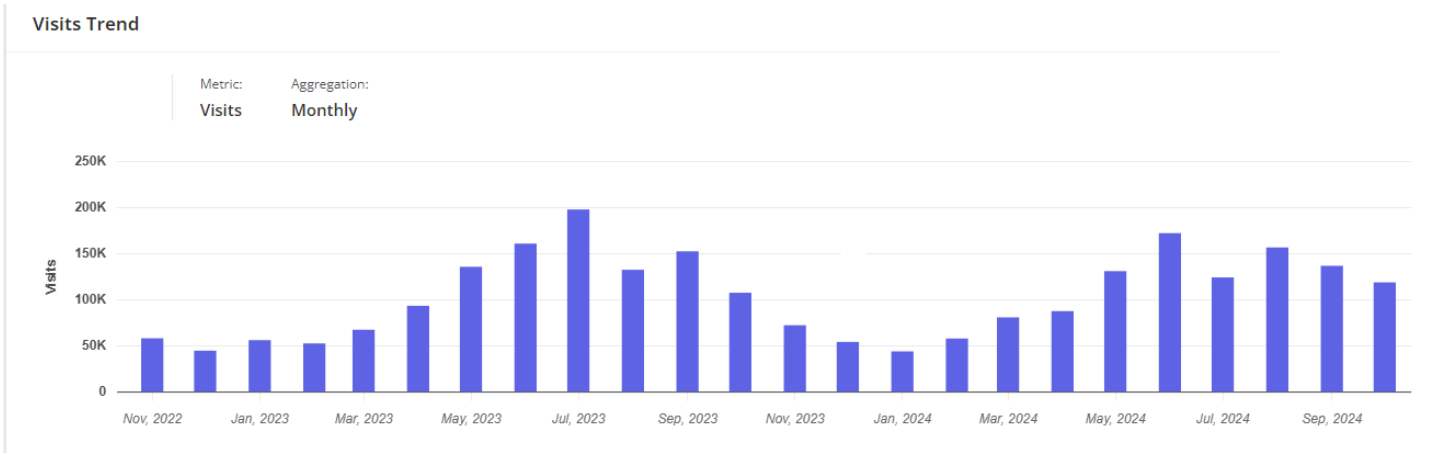
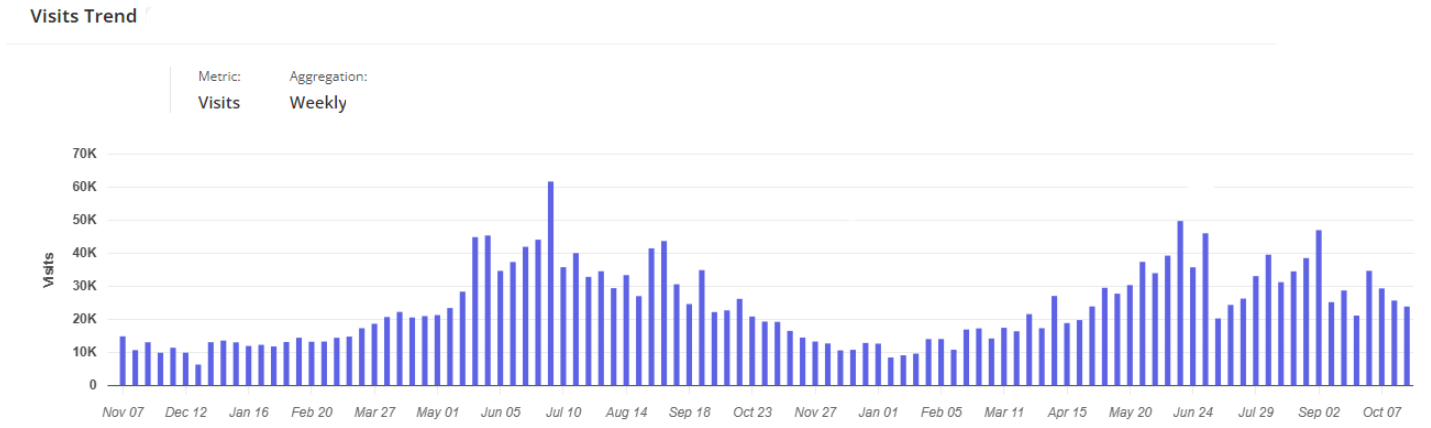
Date Range: November 1, 2022– October 31, 2024

This report includes visitors in the point of interest. Visitors must have remained in the point of interest for at least 10 minutes to be counted. People are counted only once per day if they leave and return.

**Total visits in study period: 2.5M**

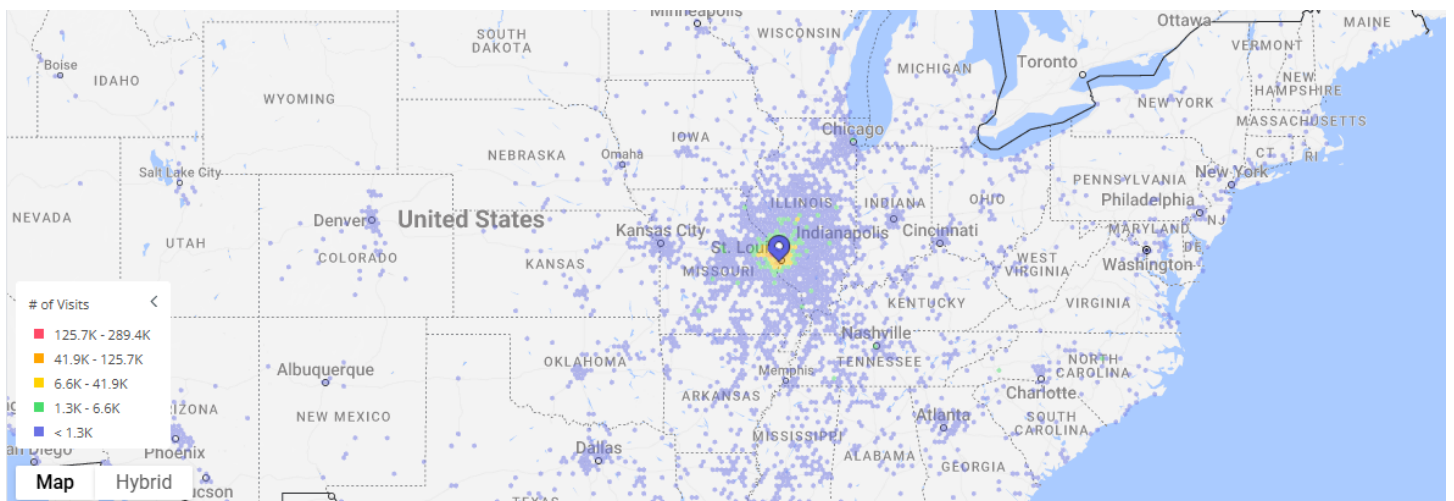
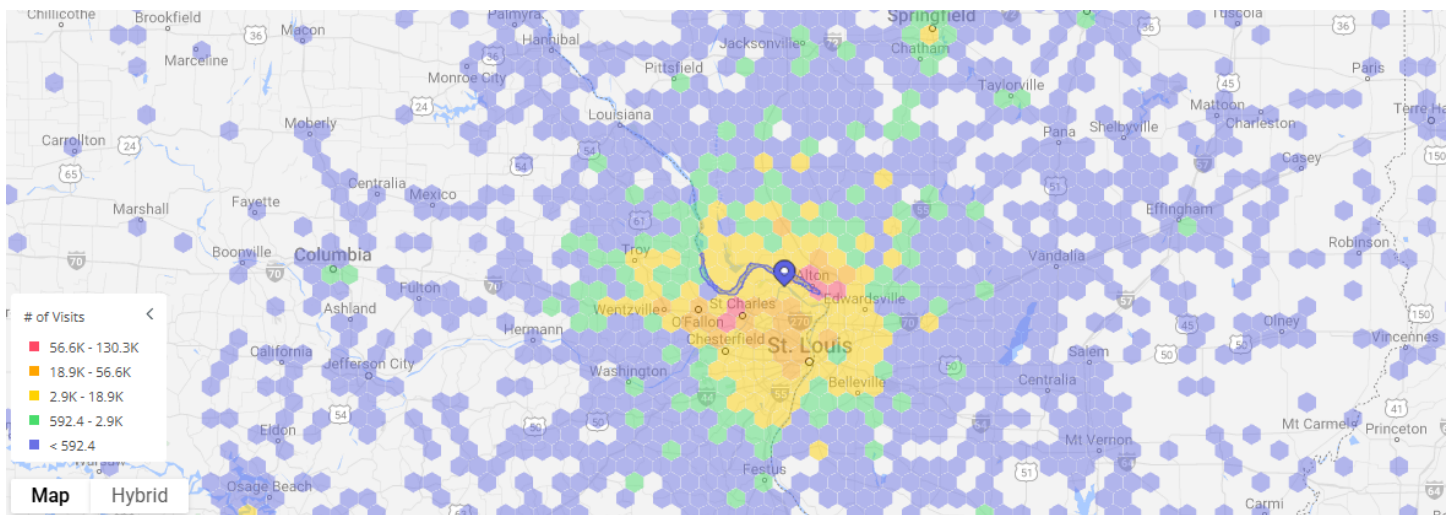
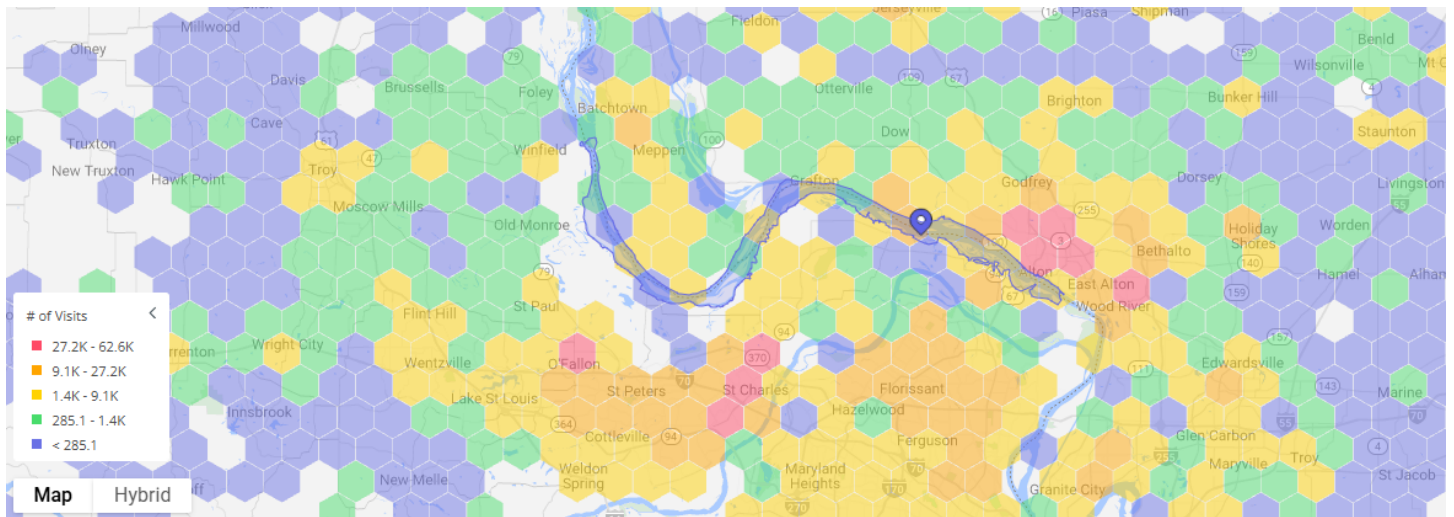
**Unique individuals visiting: 471.5K**

**Average visits per individual: 5.3**



## Distance

The maps below show distance people traveled from home location.



# **Upper Mississippi River Restoration Program Quarterly Meetings**

## **Attachment C**

### **Additional Items**

<b>Page Number</b>	<b>Document Title</b>
C-1	Future Meeting Schedule
C-2 to C-8	Frequently Used Acronyms (4-29-2022)
C-9 to C-13	UMRR Authorization and Operating Approach (12-23-2022)



# **Upper Mississippi River Quarterly Meetings**

## **Future Meeting Schedule**

### **October 2025 — La Crosse**

October 28	UMRBA Quarterly Meeting
October 29	UMRR Coordinating Committee Quarterly Meeting

### **February 2026 — Virtual**

February 24	UMRBA Quarterly Meeting
February 25	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 20<sup>th</sup> 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.