#### A-Team Meeting 8.4.2022 Final notes

Voted on and passed on 10/25/2022 meeting

#### **Chairperson: Scott Gritters Iowa DNR**

#### **Attendance**

#### A-Team Reps:

Scott Gritters (Chair and IA Rep) Nick Schlesser (MN Rep) Shawn Giblin (WI Rep) Matt O'Hara (IL Rep) Matt Vitello (MO Rep) Steve Winter (USFWS Rep)

USGS:

Jeff Houser Jennie Sauer Jennifer Dieck Kristen Bouska Molly Van Appledorn Danelle Larson

#### USACE:

Karen Hagerty Marshall Plumley Davi Michl David Potter

UMRBA: Andrew Stephenson

<u>MN:</u> Nichole Ward

#### <u>WI:</u>

<u>IA:</u> Dave Bierman Seth Fopma

<u>IL:</u> John Chick Jim Lamer

<u>MO:</u>

Dave Herzog Molly Sobotka

USFWS:

## Note \*\*\* means an Action or "to do" item

#### Next meeting discussion:

Scott Gritters- The next meeting will be in October, we should decide on how we want these meetings from now on, virtually or in person. Discussion ensued with most folks thinking that at least for the foreseeable future that we will meet virtually. These meetings have been well attended and save drive time for participants. No one is ruling out a future in person meeting but for now meetings will stay in a virtual format.

#### \*\*\*\*SG will set up virtual meeting with Karen for the October meeting

#### A-Team past meeting minutes

SG : With a vote today we will be caught up on A team meeting past notes. It takes an effort to keep up on notes.

Steve Winter moved to approve both minutes. Nick Schlesser seconded. Previous meeting notes vote received unanimous approval.

SG : We had a good meeting, lots of notes from April. I appreciate everyone's help with notes including Andrew Stephenson. It really helps to combine note versions to capture the meeting fully.

#### A-Team Corner

SG: I want to get that caught up on meeting minutes and now want to catch back up on things like the yearly highlights. During COVID missed some years on highlights. What do folks think about the need to get these yearly highlights UTD.

Karen Hagerty – also keeps information on USACE UMRR page.

Jen Sauer – it was hard to keep up to date getting all highlights in from all field stations and consolidating them. Those were put on hold for a while. If folks find them useful, we can revisit them. All assistance that states do for example what Matt did to take folks out would've been on highlights?

SG: I don't want to push work onto Jennie, Karen or myself, but if we're going to do it does seem strange to stop. Looking back 10-years from now the information in the missing COVID years might be useful.

KH: Did people look at highlights?

Nick Schlesser: I do look back on things to see how things were ordered and easily forget when projects happened.

Andrew Stephenson: Does the UMRR CC updates cover these activities?

JS: Not all activities are things above and beyond SOW for field stations.

from Upper Mississippi River Basin Association to everyone: 1:18 PM - I think keeping the activities highlights would be useful.

# \*\*\*SG: Sounds like these updates were helpful and will gently push to work toward getting caught up on activities for A-Team since FY19.

#### UMRR Update (Marshall Plumley)

We are quickly approaching the end of fiscal year and anticipate wrapping up the year in good fiscal shape.

Outstanding construction contracts in each district will round out expenditures. LTRM obligated dollars early as is typical.

The next quarterly meetings will be in St. Paul in-person and virtual option will be available.

The President's budget for FY23 has UMRR in \$55M with a new authorized amount and the House concurred with that amount. Today the Senate released an appropriations bill that also includes \$55M. It is not signed, but nice to see concurrence across those budgets. Appreciate the fact that everyone has full plates and more demands. Reflects the success of work you all do to support the program. The fact of the matter is it may be busier next year.

#### HREP updates

MVP has feasibility reports in St. Paul; the Reno Bottoms has recommended TSP. It is a significant milestone as agencies received consensus and MVD approved. The final report is being prepared.

Lock and Dam 10: The feasibility report is approved and we are ready to move into the design phase.

In the MVR: On August 18 we will host the Quincy Bay open house. Due to COVID numbers in the county the Army policy means can't hold in -person events. There was great interest in the event though.

Lower Pool 13: The TSP was identified for the project and approved by MVD, and the PDT is completing the report.

**MVS:** The Yorkinut Slough TSP will be completed by September.

#### Design/Construction:

McGregor Lake: The Stage II contract advertised and bids opened on July 8<sup>th</sup>, have an apparent low bid so we hope to have that contract signed by September.

Steamboat Island Stage I: The bid opening scheduled for next week.

Piasa : The rock structure construction is ongoing.

UPPER MISSISSIPPI RIVER F	RESTORATION PROGRAM
Partner Engagements:           UMRR CC 10 August St. Paul           Execution:           • FY 22 Program - \$33,170,000/\$21,999,719         66.3%           • UMRR Regional Program - \$3,875,000/\$1,952,398         50.4%           • UMRR Regional Program - \$3,875,000/\$1,952,398         50.4%           • UMRR LTRM - \$8,800,000/\$8,043,660         91.4%           • UMRR MVP HREP - \$6,718,000/\$2,147,912         32.0%           • UMRR MVR HREP - \$7,502,000/\$3,707,569         49.4%           • UMRR MVS HREP - \$7,525,000/\$6,148,180         81.7%	<ul> <li>HREP Design/Construction:</li> <li>McGregor Lake (MVP) – Stage II advertised and bids opened July 8th</li> <li>Steamboat Island (MVR) Stage I – advertised, bid opening late August</li> <li>Keithsburg Division (MVR) – Stage IIA – Real estate acquisition ongoing. Contractor placed material for storage building (photo)</li> <li>Piasa &amp; Eagles Nest Islands (MVS) – Stage I rock structure construction on-going (photos)</li> </ul>
<ul> <li>HREP Feasibility:</li> <li>Reno Bottoms (MVP) – TSP selected 18 July</li> <li>Lower Pool 10 (MVP) – Feasibility report approved</li> <li>Quincy Bay (MVR) – Public Open House August 18th</li> <li>Pool 12 Forestry (MVR) – On April 25th, a planning workshop was held to work on priority areas and potential features.</li> <li>Lower Pool 13 (MVR) – TSP selected May 2</li> <li>Yorkinut Slough (MVS) – TSP by September</li> </ul>	LTRM: • UMRR LTRM strategic implementation planning – to identify highest priority information/science & actions • Biweekly meetings, in person workshop in Sept 13-14 • UMRR science proposals • SOW completed; funding obligated • 3rd UMRR Ecological Status & Trends Report published 21 June

There were project dedication for Conway Lake and Harpers Slough.

There is a new feasibility study for Pool 4 Big Lake. The team is thinking through measures and restoration features. Some work we do in UMRR fits in nicely with USACE initiative Engineering with Nature and we had outreach opportunities to convey that to folks from around the country.

#### Keithsburg... (Lost communication here)

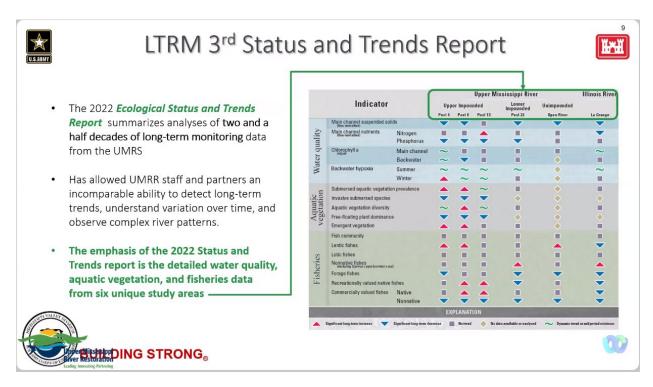
Huron Island: Site visit aquatic to the vegetation exclosures which seem to be performing well. At the November 2022 UMRR CC meeting, we may talk about the success of that project over the last few years.

Pool 12 Overwintering Site Visit: Col. Curry came out for ribbon cutting to celebrate successful completion of construction of that project which has been ongoing for 10 years. Partners report the benefits for pieces constructed years ago have been accruing for some time

Piasa and Eagles Nest, Rock work pictures:

The Report to Congress will be submitted by the end of year and has gone through a number of reviews with MVD going on now. Anticipate this to be wrapped up this year and then will proceed with review by USACE HQ. We expect that we'll share some conclusions and recommendations from that report that will be significant talking points of the program for next few years.

LTRM Status and Trends report – had a strategic approach to developing messages.

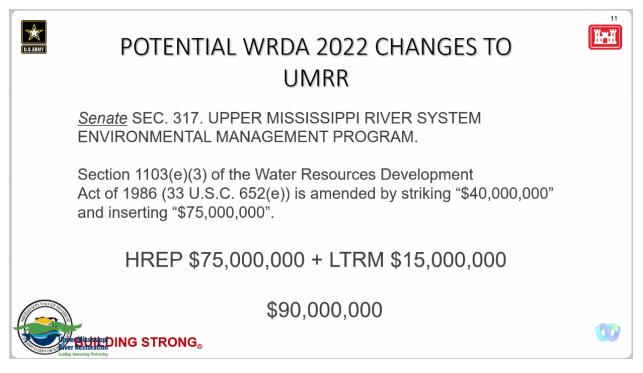


MP up over 65 news articles, tv, radio, etc. from national to local media outlets. This effort gives us a chance to tell that story to a broad audience. Many folks helped put together media campaigns and efforts. Did a brief "After Action" review to document what went well, what did not to come up with future initiatives.

from Jennie Sauer to everyone: 1:33 PM - We should receive hard copies on Monday for distribution

Implementation Issues		
<ul> <li>Project Partnership Agreements</li> <li>Non-Profits as Cost Share Sponsors</li> <li>Land Acquisition</li> <li>State Floodplain Regulations</li> </ul>	<ul> <li>External Communications</li> <li>Federal Easement Lands</li> <li>Water Level Management</li> <li>Watershed Inputs and Climate Change</li> </ul>	

UMRR Coordinating Committee has been working on these issue papers. We have a meeting scheduled for the end of August to get last changes to those and will share those after that process.



In WRDA 2022 the house had additional increases on HREP to \$75M. Senate included that as well. Like I always say, the increased authorization does not mean increased appropriations, but it is a good step and shows the depth and respect of the program.

MP: We may see increases in LTRM funding too but see how everything plays out in committee.

#### \*\*\*SG: I will keep a placeholder for agenda items for the next A-Team meeting.

MP: We need to know what are the key messages we need to convey in this report. Think we'll have that nailed down at some point.

#### AS –With higher inflation rates are we seeing higher bids on HREP construction contracts?

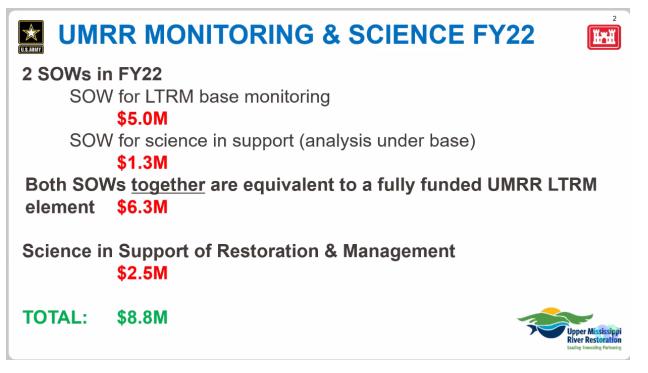
MP: inflation is on everyone's mind now and I have been concerned about what that means for construction contracts and things we have out on the street for bid. Will we see higher bids coming in than anticipated? Already may have seen some of this maybe with the McGregor project. These prices are driven by diesel fuel and labor. All of our projects are pretty dependent on heavy equipment and barges so fuel is part of that. Will have a bid opening for Steamboat next week and should gain more insights on the trajectory of things. I can say broadly that COE is keeping an eye on this issue. The Corps has started to see an increase in costs due to inflation in many contracting efforts across the county. So the issues are not unique to UMRR.

SG: successful programs have strong partner leadership. Congrats back to you.

from John Chick to everyone: 1:38 PM - That was a very uplifting report! Thanks Marshall!

from Matt O'Hara to everyone: 1:39 PM - Great news for the river Marshall.

#### LTRM Update: Karen Hagerty



Echo Status and Trends report: We had lots of good press with great interviews. Recent interview picked up by NPR nationwide. That is huge for the program.

UMRR MONITORING & S	CIENCE FY22	
FULLY FUNDED to date		
LTRM		
A. Standardized base monitoring	\$5,000,000	
B. Analysis under Base*	\$1,300,000	
<ul><li>A. LTRM balance</li><li>B. IWW monitoring (FY22)</li><li>C. IWW aerial data collection report</li></ul>	\$ 554,097 \$ 32,135* \$ 25,034	
Total	\$6,911,266	
*budget before states carry-in=\$96,970	R	Upper Mississippi River Restoration

Going into Science Meeting, were at \$6.9M.

# MRR MONITORING & SCIENCE FY2022

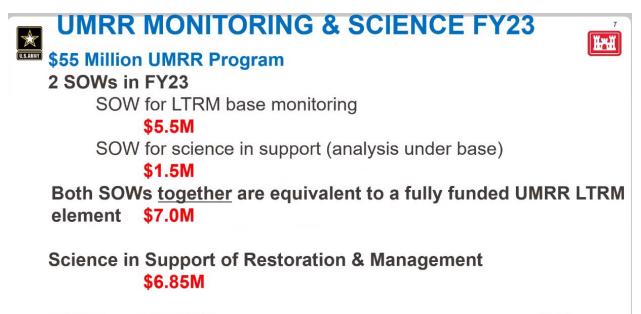
WY			
	PROPOSAL	PI(s)	COST
	Evaluating the LOCA-VIC-mizuRoute hydrology data products for scientific and management applications in the UMRS	Sawyer (MVR) Van Appledorn, Delaney (UMESC)	\$390,528
	Assessing forest development processes and pathways in floodplain forests along the UMR using dendrochronology	Windmuller-Campione (UM), Van Appledorn (UMESC), Meier (MVP)	\$447,158
	Assessing long term changes and spatial patterns in macroinvertebrates through standardized long- term monitoring	Lamer et al (IRBS), Sobotka (MDC), Giblin (WDNR), DeLain (MDNR), Gritters (IDNR), Vander Vorste (UWL)	\$620,475*
	Putting LTRM's long-term phytoplankton archive to work to understand ecosystem transitions and improve methodological approaches	J. Larson, Jankowski (UMESC), Magee (WDNR), Fulgoni (KWC)	\$326,986 V

The Macroinvertebrate line item reflects recommendation to postpone contaminant piece of Macroinvertebrate proposal, which was worked out with Chairperson SG and the UMRR program leadership.

Jennie Sauer reminded folks that the contaminant macroinvertebrates work will go forward but be supported from FY23 funds.

<b>UMRR MONITORING &amp; SCIEN</b> FY2022 Funding	CE FY22	5
<ul><li>LTRM/Analysis</li><li>Previous Science support work</li></ul>	\$ 6,300,000 \$ 611,266	
<ul><li> 4 new science proposals</li><li> Facilitators for LTRM Implementation Planning</li></ul>	\$  1,785,157 \$     59,303	
GRAND TOTAL	\$ 8,755,726	

KH: We still have to pay our facilitators for implementation planning. Overall it was a very successful year for all involved. If UMRR received \$33.17 million, then the SOW would be reflected in FY22. Under the \$55M funding scenario, UMRR LTRM would be funded at \$13.85M.



TOTAL: \$13.85M



KH: We have a group focused on how we would best balance UMRR science needs.

Shawn Giblin: The 2020 science proposals - do we presently have current milestones for those?

KH: Check the UMRBA quarterly meeting minutes... <u>https://umrba.org/event/umrr-coordinating-</u> <u>committee-quarterly-meeting/08-10-22</u>

AS: There is \$13.85M for LTRM FY23 SOW? But the allocation is \$15M? Why the slight discrepancy?

KH: LTRM gets allocation of \$15M for LTRM and Science. There are some things considered science that are not in LTRM specifically but on the Corps side of funding.

MP: Regional science and monitoring have base monitoring, then regional science will support. Then other things are included in regional science such as the budget package for adaptive management, report to Congress which includes the Habitat Needs Assessment in those years... Also, PER and monitoring of habitat projects fits under this category. LTRM is a combination of activities. These categories are the same under FY23 draft SOW as they are in FY22.

KH: LTRM is in a tight budget year, while originally funded out of the LTRM line is now funded out of the regional line.

#### LTRM Implementation Planning – Jennie Sauer

Opportunity statement needed with a potential increased \$5M funding for LTRM.



## **Opportunity statement**

- ...increased funding from \$10.42M to \$15M creates an opportunity for new work above base monitoring, analysis, and current research..
- ...expand understanding of UMRS, restoration and management...
- ...portfolios of funding actions that address priority information needs...
- Invest in:
  - multiyear projects, baseline monitoring, analysis of existing data
- JS: The prioritization of information needs to come out yet.



### Draft objectives

- Provide information that is relevant to:
  - fundamental health and resilience of the UMRS (<u>Monitoring</u> <u>objective</u>)
  - management and restoration of the UMRS (<u>Management</u> <u>objective</u>)
  - respond to emerging issues (<u>Responsiveness objective</u>)
- Maximize benefits from information for a given cost (Efficiency objective)
- Process objectives (additional considerations): Integrate HREP and LTRM; Complement or build upon existing program; Produce LTRM information relevant to partners' priorities



# Draft Identifying (specifying) the information needs *Complete*

- What is the Information need?
- <u>How will the information be used?</u> Improving mgmt & restoration; Preparing for emerging issues; Assessing ecosystem health and resilience
- What will be measured or what will be the endpoint?
- What will be the geographic extent? Reach/UMRS scale; Project Scale
- What will be the primary approach to meet the information need? longterm monitoring (or expansion of baseline monitoring); analysis of existing data; sequence of defined-term studies (or adaptive management); other

JS: We will operate on two Geographic scales, the pool level and the reach level.

from John Chick to everyone: 1:56 PM - Can we consider investment to update/improve infrastructure?

from Matt O'Hara to everyone: 1:59 PM - Also may consider more outpool work to fill in data/information gaps?

from Upper Mississippi River Basin Association to everyone: 1:59 PM - Fine scale - Pool or smaller, Large (?) scale (multi-pool or system)

from Karen H Hagerty to everyone: 1:59 PM - Matt - yes!

from Jeff Houser to everyone: 2:00 PM - @Matt - yes, outpool sampling is part of the discussion

JS: Four broad categories of information needs have been established:

Floodplain ecology (5)

Hydrogeomorphic change (6)

Aquatic ecology (13)

Restoration ecology (7)



## Next Step Sharing with other Agency Staff

Consider whether the information need is stated clearly.

Significant information need that is not in the draft list:

- Assess whether your information need is similar enough to an already listed need that it could be added to that need.
- If your information need does not fit well with any of the already listed information needs, then add it as a new information need and describe it using the same format as those on the draft list.

consolidated comments to Jennie (jsauer@usgs.gov) no later than 25 Aug

JS: We have cross-walked some past reports such as the focal areas document, HNA-II report in an effort to look at information needs. Now is the time to identify if there are missing information needs.

LTRM Implementation Planning Update

#### In-Person Meeting Sept. 12-15 Information need prioritization

- Score the information needs based on objectives and quality
- Qualitative value of information:
  - How relevant (important) is each information need to the stated objectives?
  - How much uncertainty is associated with each information need?
  - How feasible is it to reduce the uncertainty?
  - How expensive is it to provide the information?

JS: Next meeting will be in the September 13-15 time frame.

# Thank you to all participants!

- Kirk Hansen IDNR
- Jim Lamer IRBS
- Molly Sobotka MDC
- MattVitello MDC
- Rob Burdis MDNR
- Nick Schlesser MDNR
- Neil Rude MDNR
- Andrew Stephenson UMRBA
- Davi Michl USACE
- Rob Cosgriff USACE

- Karen Hagerty USACE
- Matt Mangan USFWS
- Steve Winter USFWS
- Kristen Bouska USGS
- Nate De Jager USGS
- Jeff Houser USGS
- Jennie Sauer USGS
- Robb Jacobsen USGS
- Jim Fischer WDNR
- Madeline Magee WDNR



David Smith and Max Post van der Burg (USGS, IP facilitators)

**Scott Gritters:** From our past meeting notes we are going to do a check-in with our A-team representatives on the thoughts on the type of updates we regularly receive from our UMRR leadership. This is not a criticism at all but just wants to make sure all our getting the information feed all feels is necessary from our leadership. I personally appreciate the updates and feel they do a great job of keeping us informed.

Shawn Giblin: I am happy with how they've been presented.

Nick S – same with MN especially budgets and upcoming issues. Helpful to keep on top of future discussions

Matt O'Hara: They have been good and appreciate the reports as is.

Matt Vitello: Like most have stated, I appreciate the reports and the time put into them to make them happen. I really appreciated the last update as well.

<u>Scott Gritters:</u> Again from previous notes we are going to have a discussion concerning the time crunch experience last year on the Science proposals and any way we can help alleviate that. If you remember we notified folks that the crunch was coming and we were a victim of calendar timing and COVID type issues. This discussion is just meant to be an early discussion on what we can do better next year on this issue, in which the time crunch was not the fault of anyone. Just want to get as solid of reviews of projects as possible.

<u>Jeff Houser</u>: Due to circumstances we had 3-4 weeks more crunched than usual. Hopefully we will have a slightly longer review time frame however it will still go fast and need a quick turnaround.

Comments/concerns for next time around.

from Karen H Hagerty to everyone: 2:12 PM - it might be useful to work on the focal areas and do some more work before the science meeting

AS: We had some great virtual elements that we used such as the mural.

JH: So possibly include a virtual platform as lead up to a science meeting?

Nick Schlesser: I envisioned future science meetings might have some virtual capabilities with collating information well. If we are getting increases in money in the short term now we will need a science meeting two years from now. Might have to meet during the year?

JH: I hope we don't increase the amount of money through science meetings, but rather additional funds are invested in things that are less easily tackled in 1-3 year projects that the science meeting focuses on. My hope is that it doesn't have a big effect on the science meeting. I hope we develop longer term or additional infrastructure or people investments that don't require writing proposals every two years.

JH: As for right now we are in decent shape for FY23 with existing information needs and projects.

JS: At the field station level we put out a call for equipment list and have that ready. Bellevue for example is in need of an airboat estimated at \$100,000 which is now going to be \$134K due to inflation. Have phytoplankton samples to be done beyond ongoing work. Have FY22 science proposals that were not selected for funding this year. Think we'll be able to address increased funds adequately this year and are in good shape.

KH: The land cover land use (LCLU) processing is left to fund and several UMESC scientists are on 3-year contracts we need to review. We would then get partner priorities for other allocation.

SG: We will again try to be as transparent as possible with our staff on the turnaround needed to have science proposals properly reviewed. It will be my responsibility to make sure all are informed about the upcoming review and will try to discuss it frequently. I think we can improve the process by some of these items stated in this discussion and will review this for next year.

JH: This all could be alleviated if we are able to have meetings earlier and then have longer turnaround time for review requests.

#### Jeff Houser: LTRM Science Highlights

Ecological Status and Trends: The report is fully and completely done.

We had a coordinated press release with the partners. Appreciate Andrew from UMRBA effort into that and additional summary slides of report findings.

We put together a media release that folks found useful. Appreciate effort to put together media release and subsequent

Profuse thank you to all involved. Chapter leads, contributing offers, state field station folks. A-team, Jason did maps, Jennie Sauer kept it moving. 30 year track record of partnership as well.

from Karen H Hagerty to everyone: 2:24 PM - kudos to all who worked on the S&T report. It's a great accomplishment for our program!

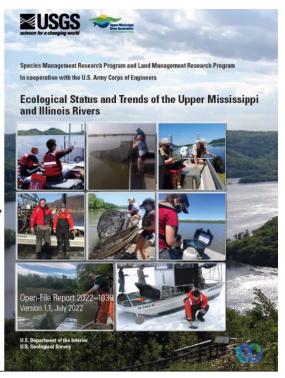
AS: This was a great coordinated effort on the press release. Has opened doors for future messaging on the good work we are doing on the river.

JH: Had an inquiry from the Ag and Water Desk which has reporters embedded across the region. Make stories available to media outlets for free. The Milwaukee Journal Sentinel reporter and the editor came to the river and got to see the WQ crews, fish crews, and veg crews talk about what they're doing on the river. Would be very receptive to invitations to come see anything that might be of interest.

from Jennie Sauer to everyone: 2:29 PM - Thanks to WDNR field Crew for the Show and Tell!

Ecological Status and Trends of the Upper Mississippi and Illinois Rivers https://doi.org/10.3133/ofr\_20221039

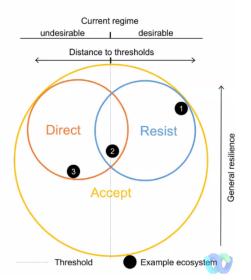
- Chapter Leads
  - Nathan De Jager; Jeff Houser; Brian Ickes; KathiJo Jankowski; Danelle Larson; Molly Van Appledorn
- Contributing Authors
  - Rob Burdis (MNDNR), Eric Lund (MNDNR), Andy Bartels (WDNR), Alicia Carhart (WDNR), Deanne Drake (WDNR), Shawn Giblin (WDNR), John Kalas (WDNR), Kyle Bayles (IADNR), Mel Bowler (IADNR), Kris Maxson (INHS), Levi Solomon (INHS), Kristen Bouska (UMESC), Jim Rogala (UMESC)
- Maps
  - Jason Rohweder (UMESC)
- Jennifer Sauer (UMESC)
- Upper Mississippi River Restoration Program and its Long Term Resource Monitoring (LTRM) element
- All LTRM field station staff past and present



## Resisting-Accepting-Directing: Ecosystem Management Guided by an Ecological Resilience Assessment

Bouska, De Jager, and Houser. 2022. Environmental Management. http://dx.doi.org/10.1007/s00267-022-01667-y

- Management implications of the resilience assessment
  - Ties together aspects of general resilience, distance to thresholds, and desirability of current conditions (via HNAII) to navigate the resist-accept-direct framework
  - Describes a suite of RAD mgmt. strategies in the context of aquatic vegetation, floodplain vegetation, and fish communities in the UMRS
  - Highlights a few specific HREPs: Reno Bottoms, Lower Pool 13, Crains Island

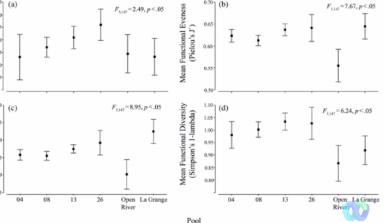


https://www.usgs.gov/publications/resisting-accepting-directing-ecosystem-management-guidedecological-resilience

# Evidence of alternative trophic pathways for fish consumers in a large river system in the face of invasion

https://doi.org/10.1002/rra.3992 John Gatto, Brian Ickes, John Chick

- evaluated spatial— (b) Richness Functional Evenes temporal changes in Ð Pielou's J') Mean Functional (Margalef the functional fish communities of the UMRS =8.95, p <.05 Species classified into 0.80 (c) unctional Diversity pson's 1-lambda) 1.0 14 feeding guilds 1.00 (Shannon H') 0.95 Estimated function
  - diversity for each LTRM study reach

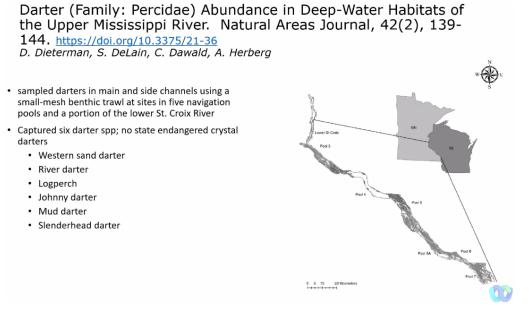


https://onlinelibrary.wiley.com/doi/10.1002/rra.3992

Results... [see slide]...

Long-term decline in proportional mass of invertivore/detritivore feeding guild across all study reaches and associated with decline of common carp.

Good example of work from a science meeting proposal.



JS: Another report the INHS is doing which long list of authors (levi Salamon, Kris Maxson, Doug Blodgett, Matt O'hara):

A Case Study of Large Floodplain River Restoration: Two Decades of Monitoring the Merwin Preserve and Lessons Learned through Water Level Fluctuations and Uncontrolled Reconnection to a Large River | SpringerLink

from Matt O'Hara to everyone: 2:37 PM - Thanks Jeff lots of great work.

from Jennie Sauer to everyone: 2:40 PM - Another publication Molly Van Appledorn and others: What is a stand? Assessing the variability of composition and structure in floodplain forest ecosystems across spatial scales in the Upper Mississippi River

#### https://www.sciencedirect.com/science/article/abs/pii/S0378112722003796

Scott Gritters: We were a little short on presentations so I guess that means the Chairperson is responsible for some of the "filler" but I hope everyone finds this of interest. It is a talk about the probably short-term unusual diet of Paddlefish in the early spring on the Mississippi River.

When agency people are asked "What does a Paddlefish eat?", most scientists reply that they are "indiscriminate filter feeders that consume crustacean zooplankton according to Rosen and Hales, 1981" This is a very well done study deserving of the numerous citations but every once in a while things in nature do not follow strict scientific roles...

On the Mississippi River in Iowa we have a Paddlefish fishery which is a spring fishery from March 1 through April 15. Occurs at the same time people are out fishing sauger. The fishery is confined to the tailwaters of dams in Iowa and Illinois and the fish are snagged because they don't bite.

Anglers have some rules such as they have to stay in a snagging area close to the dam. Have to use a small treble hook to minimize the damage to the released fish. There is also a length limit where the bigger fish must be released. These are 33 inches and over when measured eye to fork of tail. This in effect has potential for higher survival of the large egg laying females.

In this study just after ice out it was found that burrowing mayflies actually made up a large portion of the diet. Also nearly all paddlefish had consumed small fish (mainly Centrarchids) which fish consumption by Paddlefish was poorly documented in the literature. Again this was in the immediate ice out period in early March.

## **Results:**

- 1. Mayflies made up 88% of wet weight.
- 2. All nine Paddlefish ingested Mayflies, seven with fish
- 3. Six species of fish were ingested, with bluegill being the most abundant.
- 4. Others were Bullhead Minnow, Gizzard Shad, Golden Shiner, Orangespot Sunfish and Pumpkinseed
- 5. Odds and ends of other material found, but no plankton was seen...
- 6. Literature search on Paddlefish diet

## Literature Review- Mayfly consumption

- Meyer (1967) by Burlington Iowa found insects to make up a bulk of spring diet in Paddlefish
- Rule and Hudson (1977) found Mayflies but this was during the hatch in summer.
- Hoxmeier and De Vries (1997) found mayfly nymphs were consumed heavily in the channel habitat during winter and spring on the Alabama River
- Other insects documented such as grasshoppers which are blown into water on windy days in the plains.





Interestingly a study on the Cordova power plant in 1985 also documented Pool 14 bluegill drift in this same time period. The bluegills they documented drifting in 1985 were nearly the identical size of bluegills found in the 2016 study found in Paddlefish stomachs.

The ice out period may be a treacherous period for small bluegills and burrowing mayflies. The scraping action of the ice-out period probably gets both mayflies and small fish into the main channel drift which

is certainly not their habitat. Subsequently when they go through the Lock and Dam they concentrate in the deeper waters below the dam and are opportunistically eaten by the resident paddlefish.

John Chick: Interesting study as there is always some unusual feeding behaviors of fish taking advantage of their opportunities. We noticed channel catfish were ingesting mulberries during spring floods, and wanted to see how that affected germination of seeds. We also caught paddlefish but their guts were packed with mud. Diet is extremely diverse and unpredictable in some ways.

Dave Herzog: Have you done Paddlefish telemetry Scotty?

SG: We have done some in the late 1980's and it told us a lot. They can be high movers. Paddlefish hang out in tail water but some studies have documented them moving hundreds of miles. Receivers will pick them up but they are home bodies until they vanish and move... sometimes large distances.

NS: We have some information on paddlefish which the DNR is looking to publish next year. It has to do with Paddlefish movement. We are spinning down blood samples to determine sex and found that 15-20% of the fish have about 2x as many blood cells as the rest. These fish may be the long distance movers.

SG: Fascinating, maybe we can answer some questions in the future about Paddlefish and other long distance migrating fish.

#### Steve Winter – Species of Greatest Conservation need discussion

The USFWS has completed a habitat management plan to prioritize refuge work and have identified priority resources of concern. These are species, guilds, habitats the Service would like to prioritize on refuge lands. Most of the fish and freshwater mussel conservation activities we do is through partnership activities, especially in UMRR HREP's. We would like to explore my building habitat that priority resources of concern would use.

We don't have capacity to do inventory, monitoring, and research activities with fish and mussel resources on the refuge as we don't have expertise or equipment. We rely on partners to assist with those information needs. Over the years we have received great information about fish and mussels from our partners. One thing we hope to do is concentrate with priority resources of concern. The service has a greater level of uncertainty that they might benefit from our traditional HREP activities. We would like to know if there are definite features or approaches HREPs could use to benefit these species. Discussions of this have gone on in individual projects. This was brought up at the FWWG within the USFWS we have had discussions with La Crosse office folks, Genoa fish hatchery and Neal Jackson. We are now asking beyond the refuge, how we could facilitate completing work. We would like to involve the A-team as well on how to do this.

For example the lower Pool 4 Big Lake HREP project is planned to have 1-2 backwater overwintering dredging areas. Models used are bluegill overwintering models. We have a priority resource of concern guild of lentic backwater fishes. These are priority because that means multiple fishes were identified by state wildlife action plans as SGCN. We are wondering if they will benefit from classic backwater dredging. Or, is it possible to figure out what their backwater habitat requirements are and we can tweak HREP's to that? Jeff Janvrin (Wisconsin DNR) is looking at what HREP species are common enough they could be sampled regularly but could also serve as surrogates, and that may be the way to go... I do not know.

Pirate perch is a good example. LTRM has some data with encounters/detection. However there may not be enough samples to use to determine physical structures, velocity, etc. Maybe golden shiner is a good surrogate as those seem to occupy similar habitats but the Pirate perch is not collected as often. It is a rare species...

In recent meeting we have had a discussion ensued about helping Jeff with more rigorous analysis from the dataset. One thing about the previous discussions we've been having... should we develop a proposal for LTRM funding under science meeting? Our refuge doesn't have the fisheries technical expertise to do this. If this is to get done, it will require others with great interest and showing value in it. Jeff Janvrin has done that for Big Lake. We may look to help to generate a science proposal at the fish tech section in September.

Nick Schlesser: The Minnesota DNR wanted to bring up work with PDT, since Shawn and Steve are here.

We feel the LTRM data is not being utilized as well as it could be for the design of the Big Lake project. Interested in perspectives on how that is going. Given the fact we've pressed hard on using LTRM data for HREP's so much in so many forums. Also would like to get Marshall's and Karen's perspective.

There was a big area with lots of LTRM sampling that will continue well into the future. This is one HREP that will get long term monitoring and evaluation long after it is done simply by nature of being in LTRM trend pool. We want to make sure that information is fully utilized and feel maybe that was not the case.

# from Karen H Hagerty to everyone: 3:48 PM - the lower Pool 13 PDT struggled because there was so much data

#### from Jeff Houser to everyone: 3:48 PM - but they used it extensively

Steve Winter: PDT came up with a large suite of potential features/measures. Islands, dredged areas, rock closures, timber stand improvement and had many polygons on map. Large suite of those we were considering and have narrowed down quite a bit to most essential. Part of narrowing down was done with utilizing LTRM data. Part of it was narrowed down with other good data such as Corps velocity data and how features affect velocities. We have gotten down to a set of features and Corps put the question out... are these the features we want to move forward with or what would we need to do? What tweaks are still needed or identified? Is there LTRM data you need to help you make that decision?

Agency leads responded and the USFWS said we don't need LTRM data as we are happy with features as depicted. We didn't need LTRM data to help us with those specific decisions. Other agencies said they would like to use LTRM data.

Had a number of email exchanges which didn't get to conclusion. We had a meeting (Monday/Tuesday?) and were able to phrase the question in a clear and concise manner that I presented earlier. Other agencies' responses were they were not sure and needed to discuss further. It is not that Corps/USFWS is abandoning LTRM data, but that Corps asked if we were happy with where we were at with the project design. The Service said no additional data was needed. State agencies are in the stage of determining feature adequacy and may want more data. It is not an abandonment of LTRM data, but maybe a miscommunication of data needs requests and responses perhaps.

NS: I appreciate that perspective and response. I think that there is some legitimate concern with Big Lake. It is one of the best areas on the upper river for *Vallisneria* and water quality is highly important. If you start with something good your risk of reducing that is higher than starting with degraded area. This implies it is very important to have clear objectives on monitoring. MN DNR was the agency that misunderstood or disagreed with how data was being used.

Shawn Giblin: Pool 4 specifically we need to realize with this project and assets we have. People like Steve DeLain (Minnesota DNR), have spent 20 years working in that pool. When assets like that are saying particularly things about the project we need to reflect and listen. People who haven't worked in LTRM pools aren't as acquainted and should take heed of what they are saying. If you've worked there for some time, they know about those dynamics, and project designers should listen to them and we are not sure they were taken seriously.

Steve Winter: The LTRM fish data has been used extensively in this project to ID habitat needs of lentic non-game species of concern. Lake City folks put a lot of effort into assisting with that and Jeff Janvrin and Nicole Ward helped as well. LTRM fish data has been used extensively since we started talking about non-game lentic SGCN. During the discussion of the vegetation data the group got down a wild celery rabbit hole. The planning group was operating under assumption that we would do something to benefit wild celery or at least not harm wild celery beds. Wild celery is everywhere in lower pool 4, except in the main channel of course. Where you have big beds of wild celery, like in lower pool 8 or 9, there are open big lake habitats, and where canvasbacks like to use it. It's a critical resource for canvasbacks. Service approached the Big Lake HREP with the requirement that the project cannot harm wild celery or canvasbacks. Some of the currently considered project features could reduce velocities in some locations which mean wild celery may be replaced by other submersed aquatic vegetation (SAV) species tolerant of lower velocities. But those are not the areas where canvasbacks are...in the middle of Big Lake. The group went down a path of misunderstanding. The Lake City field office said they would do whatever we need to with data to help inform the team. Spent time discussing wild celery but I would say we shouldn't have been so invested in the wild celery issue, because that's not the issue for the area where project features are.

Nicole Ward: Agree with Steve's presentation of miscommunication. Made headway in two meetings this week in having a better understanding of where folks are at. In my mind where we are having misunderstanding and we may have different views on what integration looks like and what stage data is incorporated. Several past projects are used to being done in areas without data. This project is in a data rich area and we have data and people have different perspectives on how to use that data. How to use data in the most powerful way to have learning objectives is a challenge. What would contribute to projects that help SGCN. I feel maybe it is part of the miscommunication but communication is hard as we have large calls with big groups.

SW: Nicole, this is your first project? I have been really appreciative of having you in there. You're not doing what I did early on which was to sit back and stay quiet but you're engaged and asking good questions. That's exceptional. Keep doing that. I'm glad that you're engaged with this project.

SW: SW: We need to ask what's feasible about the program and timelines involved. For the Service, HREP decisions are to the responsibility of the district manager, who oversees the portion of the refuge where the project is located. They are the decision maker in the project have to be certain that the Service and refuge can accept the project since they have to take ownership of it. Within the refuge, we have to make decisions that the regional office agrees with and can support. That can conflict with other entities' views. For instance, in the HREP program work cannot be done to develop recreational opportunities. It can't be used to build boat ramps, dredge channels to marina etc.... There are hard sideboards within the UMRR HREPs authorities. At the refuge, the district manager is the person who will decide what the refuge's hard sideboards are and what is allowable within refuge and service authorities. Also goes to the district manager's extent of experience with the site and will decide how that fits into the framework of the refuge's Habitat Management Plan. They ask the question of "what have I seen happen to sites over 20-30 years". Mary Stefanski knows how many islands have eroded and disappeared. She is happy with the layout of the current set of Big Lake HREP features, including restoration / construction of islands. Service says we'd like to restore islands and replace terrestrial habitats that used to be there. We don't need additional data to tell us what would happen there, but if other agencies think they do need more data they need to say that and which features are folks uncomfortable with.

Nicole Ward: That highlights that states are concerned about the process and less about the features. Some misunderstanding perhaps, perhaps we would like to have discussion in a smaller group. We can be more transparent in that type of setting.

NS: The USFWS don't have resources to manage and monitor fish populations here. As a manager outside of the UMRR program and LTRM, I am going to get a call if something happens to fisheries because of this project. The public will not notice pirate perch, but do notice we have a 50-year high in yellow perch populations. The DNR will get the blowback and answer to the public's displeasure if something goes wrong. We are willing to do that if we have good data behind these decisions. I haven't been in the meetings, but we need to understand the tradeoffs with all the decisions at hand. Our public will come to the DNR when issues arise and we also need to be comfortable with these decisions.

Steve Winter: When the Corps asked us if we need more data the Service said no on our behalf. The service didn't say no and other agencies didn't get a vote. Service said no, we're satisfied. Both Corps and Service have asked states what additional data may be needed. Fine those agencies said they needed to discuss further. But we are not hearing concrete suggestions of how to use data.

Nick Schlesser: What predicted outcomes do we have based on LTRM data?

SW: To determine if velocities change in immediate areas around where islands could be restored? It is really asking if you now like conditions in the past 15 years with eroded islands or the conditions of 50 years ago when islands were present. The Islands have eroded, do we want conditions with islands or conditions with islands eroded. LTRM data could help us predict. If agencies want to do that they need to say that. I think we can ask the Lake City crew to crunch that data. Service said we don't need it, but not that that is the end of the discussion.

NS: LTRM data can and should be integrated here and LTRM data could help advance design of HREP features and make it a learning event as we will continue monitoring in this pool for the foreseeable future. I am curious what Marshall thinks about this concern.

Marshall Plumley: I hear the concerns and I hear the things that are fixable. Communication is probably 90% of the things that vex us sometimes. To the extent we can, such as the 2019 HREP workshop we set out a path for integrating LTRM and HREP further. First I asked, like with Lower Pool 13, to embed LTRM folks in the project development process. I understand how projects get planned through feasibility. Lower Pool 13 was a good example of that. Still some additional learning needs to be done. Maybe that is part of what is contributing to issues. Using data to define problems and opportunities we're looking to address is one answer. Then, once identified, what are the measures and opportunities informed by

the data. Are we in the first phase of deciding which data to define problems and opportunities or at the stage where we're laying out features but how do we use data to drive what features are and look like?

SW: The Big Lake HREP team has already collectively identified a set of problems, opportunities, and objectives. Prior to that, the refuge had submitted a set of problems, opportunities, and objectives identified by the refuge, and the refuge asked the Big Lake HREP team to consider them as we moved forward in the planning. They were submitted as a way of identifying what refuge priorities are and how they relate to the project. They can be referenced by the HREP team as a way of understanding why the refuge is approaching certain aspects of the planning process in certain ways. The objective for aquatic vegetation submitted by the refuge was somewhat broad and vague in that it sought to maintain a balance of emergent floating leaved and submersed vegetation. It didn't specify increasing any component of aquatic vegetation

MP: I am willing to engage with Angela and the team on the project to see if there is further conversation that I can help with in sorting through this issue. I'd be happy to do that. My vision is first to integrate LTRM folks into PDTs so that opportunities exist to bring projects to bear. They can reflect on how project goals, objectives, measures are laid out. We have been clear and consistent on that. Regarding more details, I'd need to get up to speed on it. Right now, I don't want to contribute to communication issues around the topic. I can get up to speed on it and be part of that conversation.

SW: I will leave it to state agency leads and Angela if they want you to engage. I will ask you to speak with Sabrina Chandler regarding USFWS perspective.

SG- I get it, it can be hard to inject LTRM data as the collection was for trends and not always built for HREP uses. As chairperson I welcome entertaining a smaller group discussion within the A-team forum on how LTRM data could be used in HREPs. I could have an agenda item for the next meeting if folks wanted. **\*\*\*I will touch base with Nick before the next meeting and see if he wants to continue this discussion.** 

SW: I think A-Team can help bridge integration discussion and that could happen at the next or future meetings

Jeff Houser: The solution is not to have a discussion of how LTRM data could be used or extracted, but from a larger process of how HREPs are thought of or developed. The solution will not be solved on the side, but needs to be talked about among a group of people that represent all aspects of project flow. So things like when in the process LTRM data should first appear. What data is important. When is data useful or not useful? With us having LTRM conversation about this it would be not as effective as having additional folks who have experience on PDTs. Need to build an interactive community of folks around this topic if we are going to get traction. That is more important.

MP: echo that suggestion. Think those folks that can be brought to the table can help define the questions we are trying to answer with that data we have. Not just that we have data and want to use it. Some of that can be generally applicable to all HREPs and there may be specific types of questions we would want LTRM data to be answering. Having broader representation from the program would be more fruitful.

JH: If we're going to have that discussion as part of the meeting, Marshall and Karen could invite additional folks from Corps who are not normally involved and could be involved.

SG: **\*\*\*** I challenge you Marshall to bring up specific questions you think A-Team can help you with. Have a lot of experts and reps engaged in projects and monitoring programs. I myself sit on many PDT's, So if there are specific questions we can address here in this forum I am all ears and will get the discussion rolling on what I can affect... The A-team.

from Karen H Hagerty to everyone: 4:25 PM - i think we can pull some folks together

#### AS – raise issue to the UMRR CC next week. SG in his updates has a placeholder on the agenda.

#### from Steve Winter to everyone: 4:27 PM

I want to reiterate that LTRM fish data has been used extensively in the Big Lake HREP. Very extensively. Steve D. provided a lot of input and assistance early on but Jeff Janvrin has long had a particular interest in these things and took the lead and has been doing an incredible amount of work with the LTRM data. Kudos to Jeff because I think the work he's been doing with the LTRM data for this project is unprecedented in terms of the projects I've been involved with.

SG – Remember SGCN are not just fish, we also should be working with mudpuppy salamanders and other herptiles as well as the whole biological community that exists in the UMRR and can be positively impacted by HREP's.

JS: The turtle bycatch data aggregated into one dataset?

SG: wrote a paper on turtle bycatch data previously, think we could do that. LTRM has lots of turtle data.

New staff

Hired Sarah Sawicki LTRM WQ specialist at IRBS.

Molly Sobotka – LTMR Coordinator.

from dave herzog to everyone: 4:31 PM - Molly supervises:

from dave herzog to everyone: 4:31 PM - Luke Zuklic and Andrew Glen.

from Jim Lamer to everyone: 4:32 PM - Sara Sawicki will be starting as our new LTRM WQ specialist on August 16. Sara worked for the USGS Alaska Science Center and more recentely has been working for an environmental consulting firm in Colorado.

from dave herzog to everyone: 4:32 PM - I supervise the field unit staff, inlcuding Molly.

from Jim Lamer to everyone: 4:33 PM - Our current LTRM WQ specialist, Doyn Kellerhals, will be retiring on August 12 after 8 years with the program

from John Chick to everyone: 4:35 PM - David Weyers - new Fish Biologist at GRFS

MN DNR Team overview – Nicole Ward

[See slides]

Agency Updates

MN:

Neil Rude was hired permanently into the habitat coordinator position for DNR fisheries. In the process of hiring a river planner and that may be coming partially funded by NESP. We have in-house approval and are now waiting on HR.

Had a rash of invasive carp sightings in May but now seems to have died out with lower water levels.

WI:

LTRM data to set Nitrogen and TSS standards was found to be very useful.

Have emerging contaminants program study with EPA and look at water, sediment and mayfly tissues.

Dave Heath will be retiring in a few weeks.

Kraig Hoff is struggling with cancer. A Caring Bridge Site was created for Kraig: https://www.caringbridge.org/visit/kraighoff20 Site Name: kraighoff20

Please note: More information on the CaringBridge web site and how to contact Kraig is found in the Addendum and sent to Chairperson Gritters on October 5th by Shawn Giblin.

<u>IA-</u>

Iowa Mussel Blitz will be the week of August 15th, We usually have massive participation from agencies and volunteers, and will include a summary in the next A-team report.

Very few Asian Carp reports or sightings this year , maybe due to low water levels on the Mississippi River.

Research folks are doing some amazing work with Shovelnose Sturgeon on the Cedar River, checking spawning frequency, updating the age information and determining the transfer between the Mississippi and Inland River as they are also doing studies on the Des Moines River.

Staffs from Fairport and from Guttenberg are working on the environmental impact of two different train derailments involving spilling Coal into the River.

<u>IL:</u>

Matt O'Hara the IRBS had its 50th anniversary a few weeks ago. Cool to be at. Lots of celebration of Rip Sparks work.

Jim Lamer: It was great to hear from past staff.

Prairie Research Institute has a new Executive Director. INHS is one of 5 surveys under PRI which governs what we do. Seems to be field station friendly and science oriented.

John Chick had nothing to add except the IRBS event was well done and impressive to see all the people that came out of that.

<u>M0:</u>

New Deputy Director of resource management and had a transition of science branch leader to that role who is Jason Sumners.

#### USGS:

Jennie Sauer: Sad news as Scott Morlock passed away.

In other news the WQ lab was relocated to UW La Crosse. Mid 2023 hoped to be completed and the lab moved back.

#### UMRBA announcement:

UMRBA, NOAA, and the Institute on the Environment at the University of Minnesota (IonE), are launching a new project this fall to explore how to enhance climate resilience in communities along the Upper Mississippi River from Minnesota to Missouri.

NOAA and U of M scientists will be translating the most current climate models into predictions about river flows (floods and droughts) that vulnerable communities can use to anticipate and reduce their risk.

<u>UMRBA Launching a New Project: Building Knowledge to Support Climate Resilience | Upper Mississippi</u> <u>River Basin Association</u>

USFWS: (note: complete USFWS update in the Addendum and sent to chairperson on August 5th, 2022)

Tim Yager retired and we will not be able to fill as soon as hoped.

I worked with people at UMESC and Northern Prairie Research Center to develop a proposal to get aerial waterfowl survey data into a publicly available database.

#### Chairperson Scott Gritters adjourned the meeting

#### From WebEx Chat:

from Nick Schlesser to everyone: 1:09 PM

I'm open to either

from John Chick to everyone: 1:18 PM

I've reached the age when I can't remember anything, so the more notes the better.

from Upper Mississippi River Basin Association to everyone: 1:18 PM

I think keeping the activities highlighted would be useful.

from Jennie Sauer to everyone: 1:33 PM

We should receive hard copies on Monday for distribution

from John Chick to everyone: 1:38 PM

That was a very uplifting report! Thanks Marshall!

from Matt O'Hara to everyone: 1:39 PM Great news for the river Marshall. from Upper Mississippi River Basin Association to everyone: 1:48 PM https://umrba.org/event/umrr-coordinating-committee-quarterly-meeting/08-10-22 from John Chick to everyone: 1:56 PM Can we consider investmint to update/improve infrastructure? from Matt O'Hara to everyone: 1:59 PM Also may consider more outpool work to fill in data/information gaps? from Upper Mississippi River Basin Association to everyone: 1:59 PM Fine scale - Pool or smaller, Large (?) scale (multi-pool or system) from Karen H Hagerty to everyone: 1:59 PM Matt - yes! from Jeff Houser to everyone: 2:00 PM @Matt - yes, outpool sampling is part of the discussion from John Chick to everyone: 2:00 PM Can we take the money to Vegas and make a killing? from Matt O'Hara to everyone: 2:01 PM John I was thinking more in the lines of Peoria or Starved Rock Pool, but Vegas sounds good! from Karen H Hagerty to everyone: 2:01 PM @Jp from Karen H Hagerty to everyone: 2:01 PM @John hahahaha from Davi Michl to everyone: 2:03 PM You did! haha from Davi Michl to everyone: 2:06 PM Just don't show up on Sept 12 :-) from John Chick to everyone: 2:07 PM

On a serious note, I've heard several politicians discuss the possibility of diverting water from the Miss and other rivers west to help with doubts in California and other western states.

from Karen H Hagerty to everyone: 2:09 PM

the UMRBA discusses this at each of their quarterly meetings. as far as i know, it's just talk right now (and not very feasible)

from Nick Schlesser to everyone: 2:09 PM

I have been seeing a lot of John though my algorithm may have grabbed onto that and magnified it.

from Jeff Houser to everyone: 2:10 PM

I"m here

from Upper Mississippi River Basin Association to everyone: 2:10 PM

We are in a process to review and update the UMRBA Diversion Charter. If you have questions or would like additional information please send me an email.

from Karen H Hagerty to everyone: 2:12 PM

it might be useful to work on the focal areas and do some more work before the science meeting

from Jennie Sauer to everyone: 2:23 PM

https://pubs.er.usgs.gov/publication/ofr20221039

from Upper Mississippi River Basin Association to everyone: 2:23 PM

https://pubs.er.usgs.gov/publication/ofr20221039

from Jennie Sauer to everyone: 2:23 PM

Beat you Andrew! :-)

from Karen H Hagerty to everyone: 2:23 PM

i'm just too slow

from Upper Mississippi River Basin Association to everyone: 2:24 PM

Quick work Jennie!

from Karen H Hagerty to everyone: 2:24 PM

kudos to all who worked on the S&T report. it's a great accomplishment for our program!

from John Chick to everyone: 2:25 PM

agreed

from Kristen Bouska, USGS UMESC to everyone: 2:28 PM

university of missouri from Jennie Sauer to everyone: 2:29 PM Thanks to WDNR field Crew for the Show and Tell! from Karen H Hagerty to everyone: 2:30 PM can someone put the link into the chat please? from Upper Mississippi River Basin Association to everyone: 2:31 PM https://www.usgs.gov/publications/resisting-accepting-directing-ecosystem-management-guidedecological-resilience from Upper Mississippi River Basin Association to everyone: 2:32 PM https://experts.illinois.edu/en/publications/evidence-of-alternative-trophic-pathways-for-fishconsumers-in-afrom Upper Mississippi River Basin Association to everyone: 2:32 PM https://onlinelibrary.wiley.com/doi/10.1002/rra.3992 from Karen H Hagerty to everyone: 2:33 PM thanks! from Jennie Sauer to everyone: 2:36 PM https://doi.org/10.1007/s13157-022-01581-3 from Matt O'Hara to everyone: 2:37 PM Thanks Jeff lots of great work. from Jeff Houser to everyone: 2:38 PM Matt -- you bet. Lots of great work by lots of great people. from Upper Mississippi River Basin Association to everyone: 2:39 PM https://otterlyhuman.com/comic/mayfly/ from Jennie Sauer to everyone: 2:40 PM Another publication Molly Van Appledorn and others: What is a stand? Assessing the variability of composition and structure in floodplain forest ecosystems across spatial scales in the Upper Mississippi River from Jennie Sauer to everyone: 2:40 PM

DOI: 10.1016/j.foreco.2022.120385 from Dave Herzog to everyone: 3:10 PM Giblin? Paddlefish causing mayfly decline :) from John Chick to everyone: 3:27 PM From this day forward - his name is Sir Scott Full of Crap Gritters! from Jeff Houser to everyone: 3:33 PM Thanks for the interesting presentation, Scott. from Jeff Houser to everyone: 3:34 PM More direct link to floodplain forest paper that Jennie described above: https://doi.org/10.1016/j.foreco.2022.120385 from Karen H Hagerty to everyone: 3:48 PM the lower Pool 13 PDT struggled because there was so much data from Jeff Houser to everyone: 3:48 PM but they used it extensively from Upper Mississippi River Basin Association to everyone: 4:09 PM Unintended consequences of HREP design. from Nicole Ward - MN DNR she/her to everyone: 4:13 PM Steve, I would really like to make time to talk directly to you. I think we can reach mutual understanding in a direct conversation! from Davi Michl to everyone: 4:22 PM

I have to hop off now, but thank you everyone for the great work and discussion and thanks to Scotty for hosting!

from Karen H Hagerty to everyone: 4:25 PM

i think we can pull some folks together

from Jeff Houser to everyone: 4:25 PM

Andrew has had his hand up for a long time now.

from Steve Winter to everyone: 4:27 PM

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from Karen H Hagerty to everyone: 4:30 PM

w

from Karen H Hagerty to everyone: 4:30 PM

Leo Keller, MVR HREP project manager

from Karen H Hagerty to everyone: 4:31 PM

Please put all the new staff names and positions in the chat

from dave herzog to everyone: 4:31 PM

Molly supervises:

from dave herzog to everyone: 4:31 PM

Luke Zuklic and Andrew Glen.

from Jim Lamer to everyone: 4:32 PM

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from John Chick to everyone: 4:35 PM

David Weyers - new Fish Biologist at GRFS

from Karen H Hagerty to everyone: 4:43 PM

it's an amazing partnership!

from Jennie Sauer to everyone: 4:48 PM

A CaringBridge Site was created for Kraig: https://www.caringbridge.org/visit/kraighoff20

Site Name: kraighoff20

from Upper Mississippi River Basin Association to everyone: 4:58 PM

UMRBA Launching a New Project: Building Knowledge to Support Climate Resilience | Upper Mississippi River Basin Association

from John Chick to everyone: 4:58 PM

I've got another meeting starting. So long everyone!

from Upper Mississippi River Basin Association to everyone: 4:59 PM

https://umrba.org/news/umrba-launching-new-project-building-knowledge-support-climate-resilience

from Jennie Sauer to everyone: 5:00 PM

Addendum:

Sent by Jim Fisher and Shawn Giblin concerning Kraig Hoff condition...

Hello DNR Colleagues,

Words are hard to find for this, but with Kraig's backing, I wanted to share some important news regarding his health.

With the help of two surgeries, radiation, and chemotherapy, Kraig successfully beat-back brain cancer for the past 17 years. Earlier this year a routine MRI revealed that it had returned, but unfortunately this time it was inoperable. Kraig underwent 20 days of radiation treatment and just finished his first round of chemo, but has more ahead of him. His strength has declined and he's experiencing some other effects of either the cancer or treatments.

For those who know Kraig, you already understand that he's not the kind of person to seek attention – rather, he's the unassuming one in the background, quietly supporting everyone else and anticipating their needs before they even realize they have one. While cancer hasn't changed that about him, he is fine with me sharing this update and I know he would appreciate having his DNR family with him on this journey.

A CaringBridge Site was created for Kraig: <u>https://www.caringbridge.org/visit/kraighoff20</u> Site Name: kraighoff20

If you wish to send him greetings by mail (<u>no visitors please</u>), his home address is 111 Rosewood Ln S, West Salem, WI 54669. It's ok to share with others that I may have missed.

We're working on other ways for people to help, so stay tuned. I'll share more as it becomes available.

I'm always impressed by the way our DNR family rallies for each other in times of need, so I thank you in advance for supporting Kraig and his family.

Warm Regards,

Jim

#### We are committed to service excellence.

Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

Jim Fischer Chief, Mississippi River Unit UMRR LTRM Field Station Supervisor Office of Great Waters – *Great Lakes & Mississippi River* 

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Agency update from Steve Winter for USFWS:

Agency Updates for the August 2<sup>ed</sup>, 2022, Fish and Wildlife Working Group meeting and August 4<sup>th</sup> A-team meeting

Upper Mississippi River National Wildlife and Fish Refuge, Driftless Area National Wildlife Refuge

<u>UMRNWFR La Crosse District</u> Biology:

- Black Tern surveys: Blue Lake, Lawrence Lake Pool 8: still ongoing. Good number of birds, nesting was late this year.
- Bat Detectors out on the La Crosse District collecting data
- Flowering Rush Surveys
- Brittle Niad survey
- Invasives Treatments: Woody invasive treated on Brice Prairie, Mid-Way Prairie, Upper Halfway Creek, Mathy Tract.
  - Japanese Hops treatment: Root River Tract
  - Spotted knapweed treatment Ryder Tract
  - Flowering Rush Treatments planned. Some issues with this. Pool 8 has had an explosion over the last two years.
  - Brittle Niad: looking at options for treatment, we think it is contained in WI Islands Close Area.
- Rx Fire Accomplished this Spring 90 acres Brice Prairie
- Mussel Relocation Partnership activity: Goose Island cultural resource protection project. 6954 individual mussels and 26 spp.
- Forest Inventory ongoing
- Tree planting on old ag field on the newly acquired Ryder tract.

Admin:

- Root River Levee and new Niebeling Tract: Hydrology survey past spring helped develop management strategy, repairing the levee and enhancing floodplain wetlands.
- Homeless Camps on the Refuge/River, LE dealing with long term camping issues, abandoned boats/camps/resource damage etc around the La Crosse Area.
- Bowfishing Tournaments: Restricted Areas working with WIDNR.
- Trespass Structures and boundary encroachments

#### UMRNWFR McGregor District

• HREP projects: Conway Lake, Harpers Slough - complete; McGregor Lake – construction; Reno - adaptive management plan; Lower Pool 10 - feasibility complete

• New office construction at Lester Heights property in Iowa: old buildings torn down, approximately 25% through design

• Biology: breeding bird surveys complete, mapping invasives at Driftless Area NWR complete, bee surveys currently being done

· Maintenance: will begin posting closed areas in August

#### UMR NWFR Savanna District

The four colonial nesting islands in Pool 13 of the Savanna District are impacted by HPAI. It is estimated over 1,000 American white pelicans and hundreds of double-crested cormorants are dead. HPAI is confirmed in the mortalities of American white pelicans and is highly suspected but not confirmed in the deaths of double-crested cormorants. A comprehensive mortality count after fledging is planned.

An ornate box turtle mortality event was discovered during the July 13<sup>th</sup> Refuge wide staff meeting turtle blitz. A total of 14 turtle mortalities are documented to date. Tests for ranavirus are negative. Additional tests are being conducted in attempt to determine cause of death. It is possible aerial pesticide application on adjacent lands may be a factor in the mortality event and is being looked into at this time.

Nate Williams, Wildlife Refuge Specialist at the Savanna District, has recently left for a new job at Sand Lake National Wildlife Refuge.

#### UMRNWFR HQ office

Current HREP projects HQ staff are involved with:

- Bass Ponds at Minnesota Valley NWR: construction nearly complete
- Big Lake in Pool 4: planning
- Reno Bottoms in Pool 9: TSP approved

- Conway Lake in Pool 9: construction nearly completed -- waiting to ensure adequate willow growth
- Harper's Slough Repair in Pool 9: construction nearly completed -- waiting to ensure adequate turf and willow growth
- McGregor Lake Stage 1 in Pool 10: Construction underway
- McGregor Lake Stage 2 in Pool 10: Bid opening July 28
- Lower Pool 10 Stage 1: Design to begin soon

The refuge and the National Audubon Society are finalizing a 3-year cooperative agreement to co-fund the Audubon Forest Ecologist position based in the refuge's La Crosse District office.

The refuge has obtained or is in the process of obtaining MN and WI permits for the use of aquatic formulations of several chemicals (diquat, glyphosate, Imazapyr) to treat aquatic invasive plant species such as flowering rush and invasive Phragmites.

Inventory and monitoring plans for each of the four refuge districts as well as Trempealeau National Wildlife Refuge are awaiting approval/signatures from regional office staff, the final step of the process. The IMP for Driftless Area National Wildlife Refuge is incorporated into the McGregor District IMP.

Steve Winter, HQ office Wildlife Biologist, will assist the La Crosse District with some biology program activities while their Wildlife Biologist position is vacant.

The refuge, with USGS colleagues from the Northern Prairie Wildlife Research Center and the USGS Upper Midwest Environmental Science Center, submitted a proposal seeking funds for the project "Construction and analyses of a spatially and temporally explicit database of Upper Mississippi River aerial waterfowl survey data".

Several positions across the UMR NWFR are being held open indefinitely due to budget issues including the Deputy District Manager at the Winona District, the Wildlife Biologist at the La Crosse District, the Deputy District Manager and Wildlife Refuge Specialist at the Savanna District, and the Deputy Refuge Manager at the UMR NWFR HQ office.