



Executive Board Meeting

January 30-31, 2024

Tennessee Aquarium Conservation Institute
 175 Baylor School Rd
 Chattanooga, TN 37405

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An option for remote participation was provided.

MEETING AGENDA

(All times are Eastern)

Tuesday, January 30, 8:30-5:00, Classroom

Call to Order / Welcome

- 1) Roll Call and Determination of Quorum (Brad Parsons)
- 2) Welcome to Tennessee Aquarium Conservation Institute (Bernie Kuhajda)

Approval of Agenda and Prior Meeting Minutes

- 3) Approval of February 2023 Executive Board Meeting Minutes (Parsons)
- 4) Approval of August 2023 Executive Board Meeting Minutes (Parsons)
- 5) Review of Action Items

Chairman and Coordinator Reports

- 6) Chairman's Report (Parsons)
- 7) Coordinator's Report (Conover)

Sub-basin Updates

- 8) Arkansas-Red-White Rivers (Ken Cunningham)
- 9) Lower Mississippi River (Vacant)

- 10) Missouri River (Kasey Whiteman)
- 11) Ohio River (Rich Zweifel)
- 12) Tennessee-Cumberland Rivers (Dave Dreves)
- 13) Upper Mississippi River (Kirk Hansen)

Federal Entity Updates

- 14) Federal entity updates

Policy Coordinator Update

- 15) Legislative, Policy, and Outreach Next Steps (Smith)
- 16) 2024 DC Fly-in preparation (Smith)

Afternoon Break

Committee Updates

- 17) Invasive Carp Advisory Committee (Rob Simmonds and Brian Schoenung)
- 18) Sub-basin Invasive Partnership Coordinators (Caleb Aldridge, Neal Jackson, and Rebecca Neeley)

Partner Updates

- 19) Wildlife Forever (Pat Conzemius)

Wednesday, January 31, 8:30-5:00, Classroom

Site Visit

- 20) Tour of Tennessee Aquarium Conservation Institute (Kuhajda)

Committee Updates

- 21) Paddlefish Sturgeon Committee (Sara Tripp)
- 22) Mississippi River Basin Panel on AIS (Rob Bourgeois)
- 23) Aquatic Invasive Species Committee (Rob Bourgeois)

Lunch

Old Business

- 24) Webpage Dashboard Demonstration (Rebecca Neeley and Ross Ruehmann)

- 25) Mississippi River Basin Fishery Commission Next Steps (Parsons)
- 26) USFWS Economic Value Report Update (Conover)
- 27) MICRA's 2024-2028 Priorities Document (Conover)
- 28) MICRA's Aquatic Habitat Action Plan (Conover)

Afternoon Break

Nominations and Installation of New Officers and Executive Board Members

- 29) Passing of the Gavel: Installation of MICRA Chairperson 2024-2025 (Parsons)
- 30) Nomination for MICRA Chair-elect 2024-2025 (Batten)
- 31) Nomination for Lower Mississippi River Sub-basin Representative (Batten)

New Business

- 32) 2024 Workplan Development (Batten)
- 33) Young Professionals Travel Stipend (Conover)
- 34) Interjurisdictional Fisheries Symposium Discussion (Batten)
- 35) Schedule Spring Conference Call and Summer Executive Board Meeting (Batten)
- 36) Other New Business / Parking Lot (Batten)

Adjourn



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DECISIONS AND ACTION ITEMS

Decisions

1. The Executive Board members agreed that only the meeting minutes need to be formally approved. Meeting notes will be considered final following a 30-day review period by the Executive Board members and requested revisions addressed.
2. The Executive Board approved the February 2023 Executive Board Meeting minutes as final.
3. The Executive Board approved the August 2023 Executive Board meeting and August 2023 MICRA Delegate meeting minutes as final.
4. The Executive Board requested USFWS and the sub-basin coordinators to continue building out the invasive carp data on the dashboard that La Crosse FWCO has begun developing.
5. A small workgroup was formed with Batten, Parsons, Zweifel, Gaikowski, and Conover to work on operationalizing the fishery commission between Executive Board meetings.
6. The Executive Board approved final revisions to the 2024-2028 MICRA Priorities Document.
7. MICRA Chair-elect, Ben Batten, was installed as MICRA Chair for the 2024-2025 term and Brad Parsons stepped-down as Chair and will serve as MICRA's Immediate Past Chair on the Executive Board for the 2024-2025 term.

8. A motion was made and approved to accept the nomination of Jason Henegar as the Lower Mississippi River sub-basin representative to the MICRA Executive Board.
9. The Executive Board approved a \$500 donation to the Tennessee Aquarium Conservation Institute for the use of their facility for the board's meeting.

Action Items

1. Conover will update the MICRA Executive Board membership and mail list to include Jason Henegar as the LMR sub-basin representative on the board.
2. Conover will let the sub-basin representatives know which states have not responded with a vote on the proposed By-Laws changes.
3. Executive Board members were requested to provide Gaikowski with input on how they see their agency interfacing with USGS as part of the technology transfer process for the various technologies that are currently in development.
4. Smith will send the Mississippi River Basin Fishery Commission draft legislation sign-on letter without any state agencies listed to Batten with a request for the states to seek approval for their agencies to be added to the letter and their agency's logo added to the coalition website.
5. Batten will send the Mississippi River Basin Fishery Commission draft legislation sign-on letter and request the state delegates to seek approval for their agency to be added to the sign-on letter and their agency's logo added to the coalition website.
6. Executive Board members were asked to send the Mississippi River Basin Fishery Commission draft legislation sign-on letter to any groups that might sign-on in support of the commission and approve their organization's logo being added to the coalition website.
7. Batten will share the 2024 DC fly-in talking points with the Executive Board members for review once a final draft is ready.
8. Executive Board members were requested to talk with their staff that have been involved in the sub-basin invasive carp partnership planning process to get their feedback and share it with the respective partnership coordinator.
9. Smith will send Zach Burnside the sign-on letter for the Mississippi River Basin Fishery Commission and the most recent version of the Mississippi River Restoration and Resiliency Initiative legislation.
10. Smith will share MICRA's Congressional talking points with Zach Burnside and Pat Conzemius at Wildlife Forever before MICRA's fly-in in March.

11. Executive Board members and the invasive carp coordinators (sub-basin partnerships and ICAC) will encourage agency staff to provide science-based content, pictures, and videos to Wildlife Forever for sharing with the public through their Citizen Carp Control platform.
12. Neeley will share the Excel table that was provided to Ruehmann with the UMR invasive carp project data with the other sub-basin invasive carp partnership coordinators to add new tabs with the respective data for the remaining sub-basins. Coordinators were also asked to provide a breakdown of project funding by state.
13. La Crosse FWCO was requested to make the following updates to the dashboard: 1) change the Tennessee River to the Tennessee-Cumberland; 2) change all sub-basin headings from 'Region' to 'Sub-Basin'; 3) add a data layer for the bigheaded carp distribution map that is used in the USFWS's Report to Congress; 4) add USEPA's impaired waters data layer; and 5) add data layers for MICRA's list of 6th order and larger IJ rivers including ceded territories, tribal lands, and federal nexus (once complete and provided by MICRA).
14. Conover will setup a call with Batten and Caudill to discuss MICRA's interest in an economic value estimate and to better understand Caudill's request for creel data from the basin states.
15. Conover will post the 2024-2028 MICRA Priorities Document on the MICRA web site.
16. Batten will email the 2024-2028 MICRA Priorities Document to the MICRA delegates.
17. Conover will check with Erves to see if the Hatchie River is included in her data files as having a federal nexus.
18. Conover will send the sub-basin maps and lists of 6th order and larger interjurisdictional rivers to the sub-basin representatives along with a description of how federal nexus was defined and determined.
19. Executive Board members will collaborate on final definitions of "interjurisdictional", "tribal nexus", and "federal nexus" for the identification of interjurisdictional rivers in the Mississippi River Basin.
20. Sub-basin representatives will review the sub-basin maps and lists of 6th order and larger interjurisdictional rivers and provide recommended additions, changes, and/or questions for Conover to address with Erves.
21. Parsons will follow-up with the Missouri River sub-basin delegates in an effort to recruit a chair-elect.

22. Sub-basin representatives will consider potential options for recruiting a chair-elect from their respective sub-basins.
23. Conover will send an email to the MICRA delegates to inform them that nominations remain open for the 2024 Young Professionals Travel Stipend.
24. Conover will inform the Paddlefish/Sturgeon Committee chair that the Executive Board has agreed to support a Mississippi River Basin focused interjurisdictional fisheries symposium at an upcoming national or regional meeting if the committee has interest and sees benefit in organizing a symposium.
25. Zweifel will explore meeting and fishing options in Ohio in late August and report back to Batten and Conover.
26. Batten and Conover will schedule a Spring conference call as needed after the MICRA DC Fly-in is complete.



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MEETING NOTES

* Meeting notes have been added to the briefing book using red font.

1) Roll Call and Determination of Quorum

MICRA Executive Board Members

Voting Members

Arkansas-Red-White Rivers	Ken Cunningham, ODWC	Present
Lower Mississippi River	Vacant	
Missouri River	Kasey Whiteman, MDC	Present ¹
Ohio River	Rich Zweifel, OH DNR	Present
Tennessee-Cumberland Rivers	Dave Dreves, KDFWR	Present
Upper Mississippi River	Kirk Hansen, IA DNR	Present ¹
USFWS	Aaron Woldt, USFWS	Present ¹
USGS	Mark Gaikowski, USGS	Present
MICRA Chairperson-Elect	Ben Batten, AGFC	Present

* A quorum six voting members was present for the meeting.

Non-voting members

MICRA Chairperson	Brad Parsons, MN DNR	Present
MICRA Past Chairman	Brian Schoenung, IL DNR	Present
MICRA Coordinator	Greg Conover, USFWS	Present

Committee Chairpersons

AIS Committee	Rob Bourgeois, LDFW	Present
Invasive Carp Advisory Committee	Rob Simmonds, USFWS	Present
MRBP - MICRA Liaison	Rob Bourgeois, LDFW	Present
Paddlefish/Sturgeon Committee	Sara Tripp, IL DNR	Present ¹

Introductions

Dave Smith, USACE-ERDC

Clint Jones, TVA

Lyn Williams, TVA

Rebecca Neeley, USFWS, UMR Invasive Carp Partnership Coordinator

Corey Oakley, NCWRC

Jason Henegar, TWRA

Bernie Kuhajda, Tennessee Aquarium Conservation Institute

Angie Rodgers, USFWS, LMRCC Coordinator

Caleb Aldridge, USFWS, LMR/ARW Invasive Carp Partnerships Coordinator

Neal Jackson, USFWS, OHR and TNCR Invasive Carp Partnerships Coordinator

Robby Maxwell, LDFW

Cole Harty, TWRA

Dan Carnahan, IN DNR¹

Ashlee Smith, Sequoya Strategies¹

¹ Remote attendee during a portion of the meeting

2) Welcome to Tennessee Aquarium Conservation Institute

Information Item:

Bernie Kuhajda will welcome the Executive Board and provide an overview of the Tennessee Aquarium Conservation Institute.

Notes:

Slides from Bernie's presentation are provided below.

Discussion:

What was the original source for the Lake Sturgeon reintroduction? Was it the Wolf River? Yes.

What goes on at that building down the newly paved road?



Bernie Kuhajda






To ensure the conservation of native aquatic animals and their habitats



Southeastern freshwater fishes

Southeastern Aquatic Animals

HUC 8 Priority Watersheds

1. Wheeler Lake
2. Pickwick Lake
3. Upper Clinch River
4. Lower Duck River
5. Canabie River
6. Caney Fork
7. Lake Cumberland
8. Middle Coosa River
9. Etowah River
10. South Fork Cumberland

Elkins et al. 2019

HUC 8 Priority Watersheds

> 400 fish species
Tenn, Mobile, Cumberland
 48% of fish diversity in U.S. & Canada
 1.4% of area

The Southeast in Crisis

- The largest extinction event in US history occurred in southeastern rivers - 26 species snails
- Southeastern animals in jeopardy include:
 - 75% of freshwater mussels
 - 63% of turtles
 - 47% of crayfishes
 - 45% of salamanders
 - 43% of snails
 - 30% of fishes
 - 30% of mammals
 - 18% of frogs

Aquatic Threats in the Southeast

- Factors jeopardizing southeastern fish include:
 - Alteration of waterways



Hanging culverts

Barrier to small fish movement upstream



Aquatic Threats in the Southeast

- Factors jeopardizing southeastern fish include:
 - Alteration of waterways
 - Nonpoint-source pollution



Point Source Pollution



Nonpoint Source Pollution - Dirt

- Sedimentation
- Poor forestry & agriculture practices, construction
- Vegetation buffer along a waterway can control sedimentation



Soddy Creek



Nonpoint Source Pollution

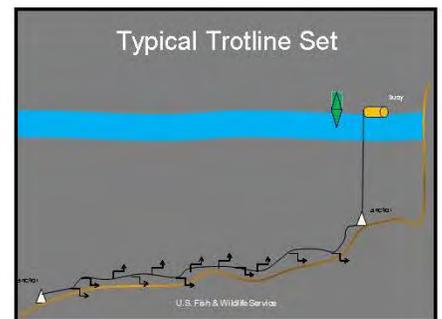
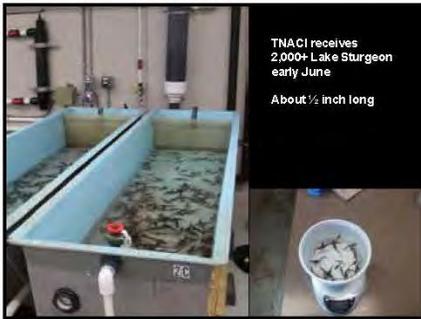
- Pollutants from impervious surfaces



Nonpoint Source Pollution

- Plastics







Southern Appalachian Brook Trout



Genetic Diversity

- Only use broodstock 2x
- At least 3 years of stocking
- Equalize family units – example 2023
 - 1,333 from 10 families
 - Culled a total of 400 to be stocked below barrier
 - 933 to be stocked in restored streams





Tangerine Darter
Percina aurantiaca



40 Tangerine Darter juveniles 2022
400 juveniles 2023

Cracking Pearlymussel



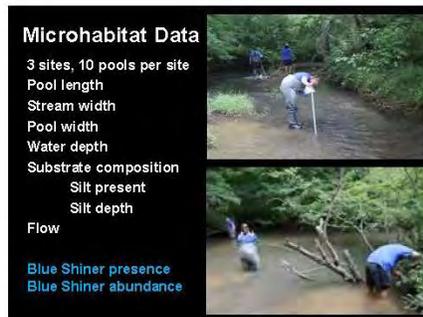
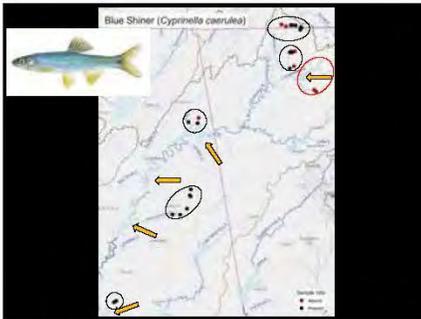
Blue Shiner
Cyprinella caerulea

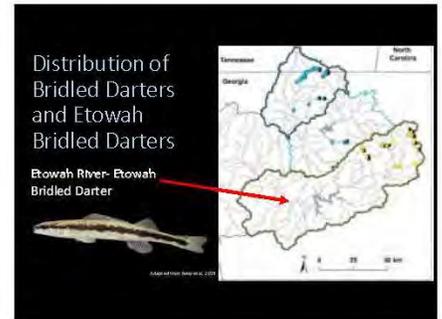
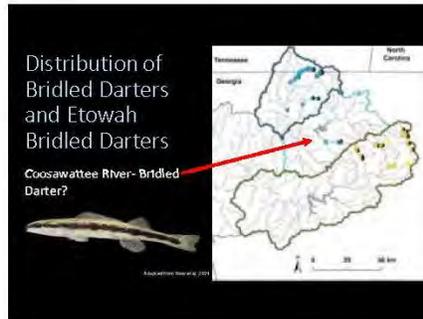
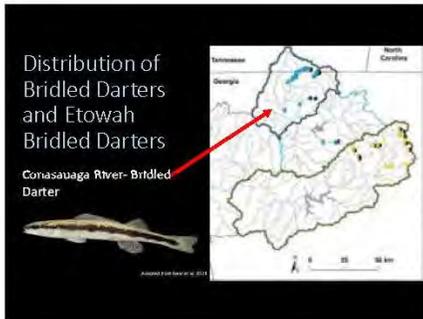
Federally threatened

Habitat fragmentation from reservoir construction

Sedimentation





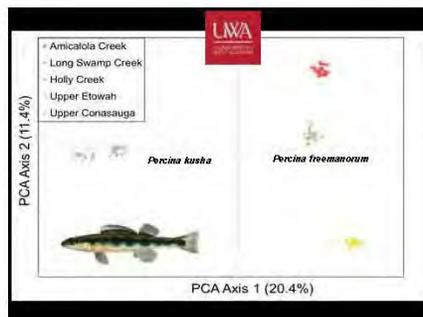
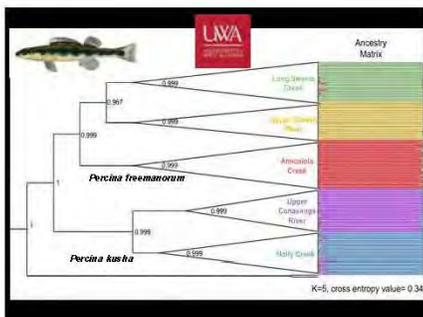


Methodology- Population Genetics

- 1). Identify a sampling location
- 2). Snorkel and search for Bridled Darters
- 3). Herd fish into the seine and lift

Methodology- Population Genetics

- 4). Fish measurements
- 5). Take fin clip
- 6). Insert VIE tag



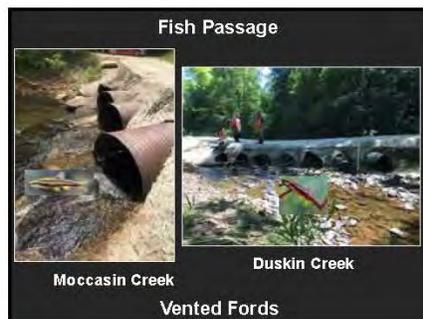
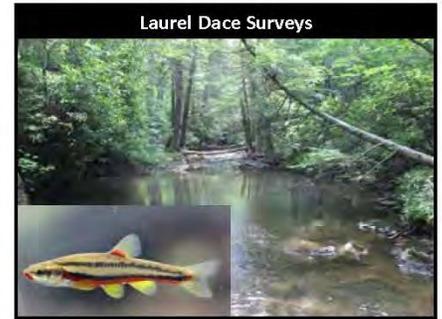
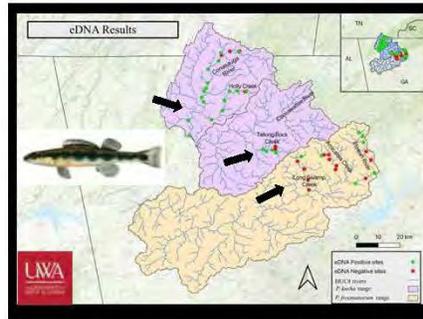
Environmental DNA (eDNA)

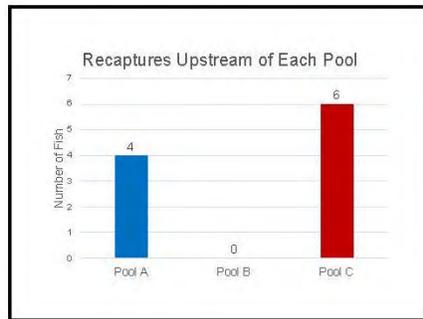
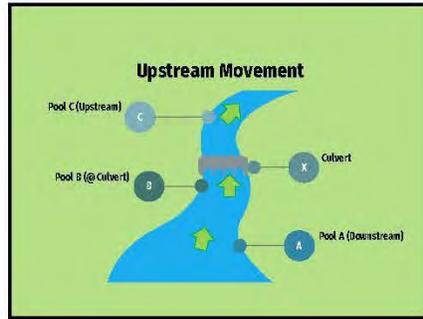
- Goal: to determine full range of Bridled Darters and Etowah Bridled Darters
- Why?
 - Determine presence when population is below detectable limits
 - Determine presence in difficult areas to sample

Methodology-eDNA Collection



1. Collect water quality data with YSI probe
- 2). Filter 1 liter of water from stream
- 3). Samples sent to UWA for analysis



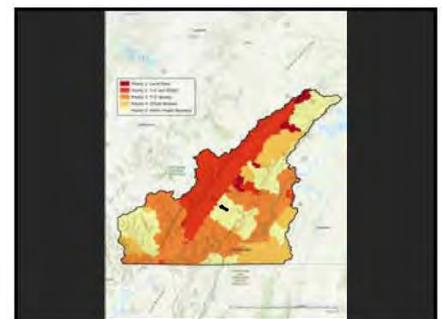
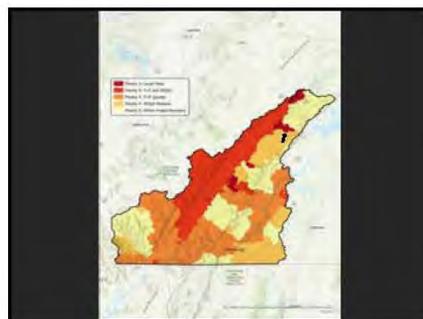


The Race to Save the Laurel Dace

Ridges to Rivers

Regional Conservation Partnership Program

Program with NRCS funded through the Farm Bill \$10 million





3) Approval of February 2023 Executive Board Meeting Minutes

Decision Item:

Executive Board members will be asked to approve both the February 2023 Executive Board Meeting Minutes and Notes as final. Meeting minutes are provided in [Appendix 1](#) and will be posted on the MICRA website once approved as final. Meeting notes can be accessed here: <http://micrarivers.org/executive-board-february-2023-meeting/>. No comments have been received on the minutes or notes. Do board members need additional time to review either document before approving as final?

Notes:

Conover stated that a link to the meeting notes was emailed to board members on January 19th. He asked if everyone was able to access the notes using the link without any problem and if the board members had sufficient time to review the notes or if additional time would be needed.

Conover reminded the board members that he was asked to prepare meeting minutes to be posted on the MICRA website and detailed meeting notes for Executive Board members reference only. Do the minutes and notes both need to be formally approved by the Executive Board?

- ! The Executive Board members agreed that only the meeting minutes need to be formally approved. Meeting notes will be considered final following a 30-day review period by the Executive Board members and requested revisions addressed.
- ! The Executive Board approved the February 2023 Executive Board Meeting minutes as final.

4) Approval of August 2023 Executive Board Meeting Minutes

Decision Item:

Executive Board members will be asked to approve both the August 2023 Executive Board Meeting Minutes and Notes as final. Meeting minutes are provided in [Appendix 2](#) and will be posted on the MICRA website once approved as final. Meeting notes can be accessed here: <http://micrarivers.org/executive-board-august-2023-meeting/>. No comments have been received on the minutes or notes. Do board members need additional time to review either document before approving as final?

Executive Board members will also be asked to approve both the August 2023 MICRA Delegate Meeting Minutes and Notes as final. Meeting minutes are provided in [Appendix 3](#) and will be posted on the MICRA website once approved as final. Meeting notes can be accessed here: <http://micrarivers.org/executive-board-august-2023-meeting/>. No comments have been received on the minutes or notes. Do board members need additional time to review either document before approving as final?

Notes:

- ! The Executive Board approved the August 2023 Executive Board meeting and August 2023 MICRA Delegate meeting minutes as final.

5) Review of Action Items

Discussion Item:

Executive Board members will review Decisions and the status of Action Items from the board's August 2023 meeting and discuss completion of outstanding action items. Outstanding Action Items from previous meetings are also included for consideration. Status of each action item is noted in green font if complete and red font if not completed.

Notes:

Discussion notes, when applicable, are included under the respective action item below.

August 2023Decisions

* A quorum of voting members was not present throughout the meeting. When necessary, decisions were approved by the Executive Board via email following the meeting.

1. MICRA will target National Invasive Species Awareness Week (NISAW) February 26 – March 1, 2024, for a DC Fly-in event.
2. The Executive Board agreed to target November 8, 2023, for Congressional briefings in Washington, DC.
3. The Executive Board agreed to provide the Aquatic Habitat Action Plan to the delegates once finalized rather than requesting another review of the document.
4. The Executive Board agreed to use 6th order and larger streams for the MICRA list of interjurisdictional rivers in the basin.
5. The Executive Board agreed to continue moving forward with a proposed increase in state member annual membership dues from \$1,500 to \$3,000 beginning in 2024.
6. The Executive Board agreed that rivers on federal lands, with federal authorities (e.g., navigable streams, National Wild and Scenic Rivers), and those within the Ceded Territories should be included MICRA's list of interjurisdictional rivers.
7. The Executive Board agreed to remove reservoirs from the list of interjurisdictional rivers for consistency across the sub-basins. A general statement about reservoirs could be added.
8. Executive Board members agreed to a 2-week review period of the draft meeting notes for the February 2023 Executive Board meeting once they are provided by Conover.
9. Conover will provide a final list of February 2023 decisions and action items to the Executive Board members along with the final draft meeting notes for the February 2023 meeting.
10. The Executive Board approved a draft letter from the Paddlefish Sturgeon Committee in support of the North American Sturgeon and Paddlefish Society's petition to establish October 27th as National Sturgeon Day.
11. The Executive Board agreed to seek nominations for the MICRA Chair-elect on a "loose" rotation among the following sub-basins: ARW&LMR, MOR, OHR&TNCR, and UMR.

12. The Executive Board tentatively scheduled a virtual meeting from 9am-11am Central on Friday, October 27th.
13. The Executive Board tentatively scheduled an in-person meeting January 29-30, 2024, in Chattanooga, Tennessee, prior to the Southern Division AFS meeting.

Action Items

27. JC Nelson will introduce MICRA to the Mississippi River Cities and Towns Initiative Executive Director, Colin Wellenkamp.

Complete

28. Ashlee Smith will attempt to find Congressional sponsors and confirm rooms for Congressional briefings (one Senate and one House) on November 8, 2023.

Complete

29. Ashlee Smith will provide a save-the-date email for Congressional briefing in Washington, DC, on November 8, 2023, to Conover for distribution to the MICRA member agencies and USACE.

Complete

30. Executive Board members will work to identify a representative from each sub-basin to participate in the proposed Congressional briefings in Washington, DC, on November 8, 2023.

Complete

31. Ashlee Smith will send a request for pictures to be used on social media and a Mississippi River Basin Fishery Commission coalition to Conover for distribution to the MICRA Delegates and sub-basin invasive carp partnerships.

Complete / Standing need

32. The Executive Board will attempt to recruit participation from more delegates for short 1- or 2-day visits during the 2024 DC Fly-in.

On-going: A list of key target offices is needed from Smith.

33. Ashlee Smith will request MICRA Delegates 1) to continue to speak with their agency director regarding the Mississippi River Fishery Commission and associated draft legislation, and 2) to notify her of opportunities to get Congressional staff out to observe field work and talk with delegates.

Complete / Standing need.

Discussion: Smith will reach out to delegates when there is a specific need. All members are important at this point. If there is a member that wants to get out, the states can find a field event that will work for them. Smith doesn't want to

single members out or fabricate events. Are there certain windows of time when DC staff are available? Yes. Did you get any feedback on the Vicksburg trip? Yes, lots of good positive feedback. DC team can discuss key members to target after DC fly-in and reach out to the respective states regarding upcoming opportunities.

34. Bourgeois will work with the AIS Committee members to provide any additional AIS priorities for the draft 2024-2028 Priorities document to the Executive Board by November 1.

Complete

35. Conover will provide a revised draft 2024-2028 Priorities document to the Executive Board in early November.

Complete

36. The Executive Board will review the revised draft 2024-2028 Priorities document and provide it to the MICRA Delegates for a final review by November 30 if there are substantial changes.

Complete: An additional review by the delegates was not needed.

37. The Executive Board will finalize the draft 2024-2028 Priorities document and post it on the MICRA website in December.

On-going: A final review of the 2024-2028 Priorities document is scheduled for the January 2024 meeting and will be posted on the website following the meeting.

38. Conover will include a discussion of next steps for aquatic habitat on the agenda for the board's next meeting.

Complete On the agenda for the board's January 2024 meeting.

39. Conover will include a discussion about an interjurisdictional fisheries symposium on the agenda for the board's next meeting, including a list of upcoming meeting dates and locations (e.g., AFS, Midwest, etc.).

Complete: On the agenda for the board's January 2024 meeting.

40. The Executive Board will develop a justification for a proposed increase in state agency annual membership dues from \$1,500 to \$3,000 to explain why the additional funding is needed, how it will be used, and the benefit it will provide back to the member agencies.

Complete

41. Conover will work with Parsons and Batten to send a follow up email to the MICRA Delegates to let them know the board's decision to propose a By-laws

amendment to increase the state agency member annual dues to \$3,000 beginning in 2024.

Complete

42. Batten and Smith will work with the sub-basin representatives to schedule sub-basin or 1-on-1 calls with MICRA delegates to discuss the fishery commission and draft legislation.

Not started: No calls were scheduled.

Discussion: The idea was to notify the delegates when the draft legislation was about to be dropped into committee. Sub-basin or 1-on-1 calls were identified as options for providing updates to the delegates. A short e-mail could be sent to the delegates that includes an offer to schedule a 1-on-1 call if desired to learn more about the draft legislation.

43. Neal Jackson will share the TNCR Phase 1 decision analysis results with the MICRA Executive Board once the process is complete and the results have been provided to USACE.

On-going: An update will be provided during the board's January 2024 meeting.

44. Smith will organize a call with the state members of the Executive Board within the next 2-weeks to continue discussing MICRA's 2024 WRDA priorities.

Complete

45. Conover will send Smith the additional coalition prospects that were identified by the Executive Board members during their August 2022 meeting.

Complete

46. Conover will work with Angela Erves to see if additional information on federal authorities, federal lands, and Ceded Territory can be added to the sub-basin tables of interjurisdictional rivers in the Mississippi River Basin.

Complete: An update will be provided during the board's January 2024 meeting.

47. Conover will follow-up with the respective sub-basin representatives to discuss sub-basin specific questions on the draft lists of 6th order and larger rivers.

On-going: More discussion is scheduled during the board's January 2024 meeting.

48. Conover will update the draft 2024-2028 Priorities document based on the board's review and discussion of the comments discussed during their August 2023 meeting.

Complete

49. Conover will update the 2019-2023 Priorities Accomplishment tracking at the end of the year and provide it to the Executive Board members for review.

Complete: A review of the updated 2019-2023 Priorities Accomplishment tracking is on the agenda for the board's January 2024 meeting.

50. The Executive Board will finalize the draft 2019-2023 Priorities accomplishment tracking after Conover provides a final draft at the end of the year.

On-going: A review of the updated 2019-2023 Priorities Accomplishment tracking is on the agenda for the board's January 2024 meeting.

51. Conover will provide the draft February 2023 Executive Board meeting notes for review prior to the October 27th meeting.

Complete: Provided prior to the board's January 2024 meeting.

52. The Executive Board will consider approval of the February 2023 Executive Board draft meeting notes during the October 27th meeting.

On-going: Approval of the February 2023 Executive Board draft meeting minutes and notes are on the agenda for the board's January 2024 meeting.

53. Executive Board members will review the Decisions and Action Items provided in the August 2023 meeting briefing book and provide updates to Conover as they are addressed.

Complete: No updates provided...

54. JC Nelson will provide Conover with the soon to be released USGS research priorities for paddlefish and sturgeon for dissemination and review by the Paddlefish Sturgeon Committee members.

On-going: Nelson checked on the status of the draft document and it is not available for review by the Paddlefish Sturgeon Committee yet.

55. The Executive Board will consider the information provided by the ICAC regarding the potential allocation of USFWS FY23 "plus-up" funding in FY24 and determine if any recommendation will be provided by MICRA to USFWS.

Complete

56. Conover will follow-up with the sub-basin invasive carp partnership coordinators to determine if sub-basin fact sheets can be provided prior to the Congressional briefing tentatively planned for November 8, 2023.

Incomplete: Sub-basin invasive carp partnership fact sheets have not been developed. This remains an unmet need.

57. Parsons and Smith will update the contractual agreement between MICRA and Ellis Smith Policy Solutions to reflect the 9-month extension that was approved by the Executive Board June 30, 2024.

Complete

58. Conover will make proposed updates to the MICRA By-laws and share with the MICRA Executive Board members for discussion during the October 27th meeting.

Complete

59. Rebecca Neeley will determine the possibility of the La Crosse FWCO developing a web-based dashboard tool for MICRA that includes MICRA sub-basin group boundaries, congressional districts, MICRA's 6th order and larger streams, and the characterization of relative abundance of bigheaded carps similar to the figure included in the USFWS-led Report to Congress.

On-going: The Executive Board has not finalized MICRA's revised list of 6th order and large streams to provide to Neeley. An update on the web-based dashboard is on the agenda for the board's January 2024 meeting.

60. The Executive Board will consider what a few top priority communications needs or maps might look like and the data layers that would be needed to develop them.

On-going: An update and discussion on the web-based dashboard is on the agenda for the board's January 2024 meeting.

61. Kasey Whiteman will seek a nomination for the MICRA Chair-elect 2024-2025 term from the Missouri River sub-basin delegates.

On-going: Whiteman has requested a nomination for the MICRA Chair-elect from the Missouri River sub-basin delegates, but no nomination has been received. A discussion about the MICRA Chair-elect is on the agenda for the board's January 2024 meeting.

62. The Executive Board will vote electronically to approve an additional \$5,000 travel budget for Ashlee Smith for the remainder of 2023.

Complete: Approved

63. The Executive Board will vote electronically to approve the proposed 2024 operational budget with the addition of \$1,000 to support ICAC and sub-basin invasive carp partnership meeting expenses.

Complete: Approved

October 2023 Conference Call

Decisions and Action Items

1. Parsons and Whiteman will both send an email to the Missouri River sub-basin fish chiefs requesting a nomination for MICRA chair-elect.

Complete

2. Conover was asked to share the draft legislation with all Executive Board members.

Complete: Parsons sent to delegates.

3. Parsons will forward the draft legislation to all MICRA delegates from the MICRA email account.

Complete

4. Sub-basin representatives were asked to provide two or three high level talking points on each topic for their respective sub-basin. What are key interjurisdictional actions, issues, or needs to highlight?

Complete (or too late)

5. Conover will share the letter sent to MICRA from General Peeples, President Mississippi River Commission, with the board members.

Complete

6. Parsons and Batten will participate on the call to be scheduled with General Peeples.

On-going: Call scheduled for February

7. Executive Board members will attend the meeting with General Peeples if they are available. Conover will share the meeting information with the Executive Board members once it is scheduled.

On-going: Calendar invite will be shared once received from USACE

8. Conover will propose early or mid-December to General Peeples' Executive Assistant as an initial window for scheduling a meeting.

Complete

9. A notice and justification for the 2024 membership dues increase should be provided to the delegates as soon as possible.

Complete

10. The notice and justification for the 2024 membership dues increase should also be provided with the 2024 membership dues invoices.

Not started: Dues invoices will be provided once the Delegates vote on the amended Constitution and By-Laws is complete in February.

11. The board members agreed that any additional priorities or revisions to the draft 2024-2028 priorities document will need to be provided to the Executive Board by November 30th to allow time for the document to be finalized and shared with the MICRA delegates before the end of the year.

Complete: An additional review by the delegates was not needed.

12. Based on SDAFS conference website (<https://units.fisheries.org/tn/sdafs2024chattanooga/>), the board members agreed to plan for Monday as a travel day with board meeting on Tuesday and Wednesday (1/29-1/31).

Decision item.

13. Conover will contact conference hotel to see if he can get a group rate for Sunday-Tuesday nights. SDAFS conference rates start on Wednesday.

Complete

February 2023 Meeting

Blue bullets are additions to the draft list of Decisions and Action Items provided in the August 2023 Briefing Book.

Decisions

1. The Executive Board requested detailed notes following Executive Board meetings for their reference and a meeting summary to be uploaded to the MICRA website rather than the detailed meeting notes.
2. The Executive Board approved a nomination for Duane Chapman to receive the MICRA River Champion Award.
3. The Executive Board approved the MRBP's request for the MICRA AIS Committee chair to also serve in the MRBP's newly created MICRA Liaison position.
4. The Executive Board will consider development of a "storyboard" for an interactive map housed on the MICRA website as a next step after the revision of MICRA's list of interjurisdictional rivers has been finalized.
5. The Executive Board approved the revised August 2022 Executive Board meeting notes as final.

6. The Executive Board, sub-basin invasive carp partnership coordinators, and ICAC will all continue to consider and discuss basinwide invasive carp communications needs.
7. The board agreed to provide written member updates for the Winter Executive Board meetings and verbal updates on news or issues from the delegates for the board's summer meetings.
8. The Executive Board decided to table the discussion about the MICRA Communications Plan.
9. The Executive Board will plan for an All-Delegate meeting in conjunction with the AFS annual meeting in Grand Rapids, Michigan, in August 2023.
10. The Executive Board will consider requests for speaker travel support to participate in the MICRA-sponsored Large Rivers Aquatic Habitat Restoration symposium during the August 2023 AFS annual meeting on an as needed basis.
11. The Executive Board approved posting the 2022 Invasive Carp Monitoring and Response Plan on the MICRA website and sharing the document with the Invasive Carp Advisory Committee.
12. The Executive Board decided to award the Young Professionals Travel Stipend to Patrick Padilla with the USFWS's Carterville Fish and Wildlife Conservation Office to present his thesis research into determining dam passage and inter-river movements of Black Carp via otolith microchemistry at the 2023 AFS annual meeting.
13. The Executive Board will plan to meet in conjunction with the AFS annual meeting in Grand Rapids, MI. Travel days will be Sunday, August 20th and Thursday, August 24th.
14. The Executive Board agreed to notify the delegates in the 2023 membership dues notices that they will be requesting the delegates to consider an increase in membership dues for the states to \$3,000 beginning in 2024.

Action Items

1. Gaikowski will contact USACE Rock Island District to determine if a letter of support from MICRA can still be included with the USACE's Upper Mississippi River Restoration Program 2022 Report to Congress, and if so, who the letter should be submitted to.
Complete: Letter submitted
2. Conover will work with Parsons to submit the UMRR letter of support pending the response from USACE Rock Island District.

Complete: Letter submitted

3. Bourgeois was requested to have the recently updated summary of state regulations for invasive carp posted on the MRBP's website.

Complete: posted on MRBP website

4. Conover will invite Duane Chapman to attend the MICRA Executive Board's Summer meeting to receive the MICRA River Champion Award.

Complete:

5. Conover will review the MICRA By-laws and research Robert's Rules of Order to determine if the MICRA Chair-elect is, or should be, a voting board member.

Complete: Discussed during the August 2023 meeting.

6. Conover will notify the ANS Task Force Executive Secretary that Rob Bourgeois will now serve as MICRA's primary representative to the ANS Task Force and the MICRA Chair will serve as the alternate voting representative.

Complete:

7. Hupfeld will send the paddlefish commercial workgroup report to the Paddlefish Sturgeon Committee membership along with a note that the committee is now working to develop a basinwide paddlefish management framework, including an invitation for participation.

Complete:

8. Parsons will send the paddlefish commercial workgroup report to the MICRA delegates along with a note that the committee is now working to develop a basinwide paddlefish management framework.

Complete:

9. Conover will contact Stephen McMurray to let him know that MICRA can provide up to \$1,000 in financial assistance to support the FMCS Biennial Symposium.

Complete:

10. Conover will contact Stephen McMurray regarding potential native mussel priorities for the next MICRA priorities document.

Complete (or too late)

11. Angela Erves will provide the Executive Board members with lists of 4th and 5th order and larger interjurisdictional rivers for each sub-basin by the end of February.

Complete:

12. Executive Board members will review the lists of interjurisdictional rivers provided by Angela Erves and provide a response within 2 weeks.

Complete:

13. Conover will create meeting minutes from the August 2022 Executive Board meeting notes that include the meeting agenda, participants, and decisions and action items to be uploaded to the MICRA website.

Complete:

14. Rob Simmonds will send an updated list of ICAC and technical workgroup representatives to Conover; Conover will send to the sub-basin representatives; and the sub-basin representatives will send to their respective sub-basin delegates for their information.

Complete

15. Conover will follow-up with Smith to determine what invasive carp maps she is interested in and for what purpose so that he can help her directly or coordinate as needed.

Complete:

16. Thurman will send an electronic version of the TWRA invasive carp fact sheet to Conover, and he will share it with the board members and invasive carp sub-basin partnership coordinators.

Complete:

17. Bourgeois will share the TWRA video from the Congressional field visit at Pickwick Dam in August 2021, along with the appropriate context, at the next AIS Committee meeting.

Complete:

18. Conover was requested to include a reminder about member updates (written or verbal) with Executive Board meeting announcements.

Complete: / Standing

19. Whiteman will share information on Missouri's 2015-2017 study on flatheads and blues in the Missouri and Mississippi rivers with Zweifel.

Unknown: Whiteman reported that this is complete

20. Neal Jackson will put Dave Smith in touch with USFWS staff regarding telemetry data for invasive carp passage at Ohio River dams.

Unknown: Jackson reported that this is complete

21. The ICAC was asked to provide the Executive Board with a list of questions to survey the basin states regarding limitations, challenges, and needs for increasing staff capacity to collaboratively work on invasive carp and how MICRA can potentially assist address these needs.

Incomplete: The ICAC co-chairs hope to come out of the upcoming ICAC meeting with questions. An ICAC update will be provided later during the meeting.

22. The ICAC was asked to develop a list of survey questions to gather baseline information from the basin states on current invasive carp removal efforts and potentially other needs to support the workgroups with the basinwide population assessment.

On-going: A Control Actions Workgroup was recently formed and will address this action item.

23. The Executive Board will survey the delegates (questions to be developed by the ICAC) regarding staffing or hiring challenges to increase capacity for invasive carp work, as well as asking separate questions regarding the likelihood that the states would use fishery commission funding to hire additional staff to work on collaborative interjurisdictional fisheries management through the commission.

Partially complete: Executive Board surveyed the delegates during the August All Delegate meeting regarding the likelihood that the states would use fishery commission funding to hire additional staff to work on collaborative interjurisdictional fisheries management through the commission. The ICAC has not developed and provided the Executive Board with a list of questions regarding staffing or hiring challenges to increase capacity for invasive carp work.

24. The Executive Board will survey the delegates (questions to be developed by the ICAC) regarding current invasive carp removal efforts.

Incomplete: This action item is awaiting a list of questions to be provided by the ICAC.

25. Conover will add updates from the sub-basin invasive carp partnerships and the ICAC co-chairs to the agenda for the Executive Board's summer meeting to continue the dialogue between these groups.

Complete

26. The MICRA Executive Board will continue to discuss Fishery Commission and Coalition next steps, including the topics to revisit identified during the February 2023 discussion.

Complete

27. Smith will schedule a virtual meeting for the Fishery Commission coalition in the next couple weeks.

Unknown: Delete, time sensitive and no longer relevant.

28. Smith will work with Gaikowski and Rodgers to put together a strategy for organizing Congressional field tours and site visits on the Mississippi River.

Complete

29. Smith will work with Gaikowski and Neeley to plan a Congressional field visit at Lock and Dam 19 the week of May 15th, 2023.

Complete

30. Smith will work with the partner organizations to identify target dates for an informational Congressional briefing and reception and then follow-up with the Executive Board.

Complete

31. Conover was asked to send periodic reminders to the MICRA Delegates requesting them to provide Ashlee Smith with opportunities in their states to get Congressional staffers out on the water.

Complete / Standing need: Delete, there is a similar action item included in the August 2023 action items.

32. Conover will send a calendar invite and the MICRA Fishery Commission talking points to the MICRA delegates for both February 14th and 16th at 9:00 am Central for a 1-hour briefing on MICRA's fishery commission outreach effort and upcoming DC fly-in. Delegates will be asked to attend one of the two Zoom meetings.

Complete

33. Executive Board members will review the draft accomplishment tracking for the 2019-2023 Priorities document and provide suggested additions or changes to Conover.

Complete

34. Whiteman will develop a few bullets on the status and needs of habitat restoration related to the authorization for the construction of 166,000 acres of habitat in the Missouri River as mitigation for the Bank Stabilization and Navigation Project.

Complete

35. Conover will provide the Executive Board with a draft 2024-2028 Priorities document by the end of March.

Complete

36. The Executive Board will meet in mid-April, approximately 2 weeks after receiving the draft 2024-2028 Priorities document, to discuss the draft and moving it forward to the delegates.

Complete

37. Parsons and Conover will schedule two All Delegate Zoom meetings to review MICRA's 2024-2028 Priorities document and request the delegates' input.

Complete

38. Conover will incorporate the Delegates comments and a revised draft 2024-2028 Priorities document will be provided to the Delegates for their review prior to the proposed All Delegate meeting in August.

Complete

39. Smith will provide Kim Lutz, AWI, with an updated version of MICRA's talking points for the 2023 DC fly-in.

Complete (or too late)

40. Executive Board members were requested to provide contact information to Rude and Janvrin within the next two weeks for a sub-basin volunteer to assist on a committee to plan the Large Rivers Aquatic Habitat Restoration symposium during the August 2023 AFS annual meeting.

Complete (or too late)

41. Conover will work with Neil Rude and Jeff Janvrin to identify opportunities and costs for a networking social following the MICRA-sponsored Large Rivers Aquatic Habitat Restoration symposium during the August 2023 AFS annual meeting.

Complete

42. Executive Board members were asked to provide Conover and Parsons with suggestions on the MICRA presentation for the USGS Science Forum and information that MICRA could provide to USGS in the pre- or post-forum surveys.

Complete

43. Conover will notify Patrick Padilla that the MICRA Executive Board has awarded him the Young Professionals Travel Stipend to present his thesis research into

determining dam passage and inter-river movements of Black Carp via otolith microchemistry at the 2023 AFS annual meeting.

Complete: Padilla did not request travel assistance

44. Parsons will include a note to the MICRA delegates with the 2023 membership dues notices that the Executive Board will be requesting the delegates to consider an increase in membership dues for the states to \$3,000 beginning in 2024.

Complete

45. Smith will contact Pat Conzemius with Wildlife Forever to discuss MICRA's initiative for the authorization of a Mississippi River Basin Fishery Commission.

Complete

46. Parsons will contact Pat Conzemius via the MICRA email account and request the dates that he will be in St. Louis and Kentucky to initiate a line of communication between Wildlife Forever and MICRA.

Complete (Conover discussed with Conzemius)

47. The MICRA Executive Board and invasive carp committees will consider ways to engage with NGO's (e.g., Wildlife Forever) so they are more informed and aware of the collaborative inter-agency efforts to manage and control invasive carp throughout the basin.

On-going: On agenda to be discussed during the January 2024 meeting.

Outstanding Action Items

August 2022

9. The sub-basin partnership coordinators and ICAC co-chairs will provide examples of communications needs and barriers to the Executive Board.

Not started:

12. The sub-basin partnership coordinators will work with their respective sub-basin partnerships to identify sub-basin scale objectives to assist the ICAC and MICRA Executive Board with basinwide planning and communications.

On-going:

13. The sub-basin partnership coordinators and the ICAC co-chairs will continue to discuss how the sub-basin scale objectives should be consistently developed and will report back to the Executive Board when they have reached consensus.

On-going: ICAC approach to objectives is to push for each sub-basin to develop specific objectives that can focus efforts, as directed by MICRA, but we haven't been and didn't plan to push for them to be "consistently developed" in terms of the method each uses to develop objectives. A diversity of approaches has been applied to date, which Coordinators will share. Suggest we continue down the path we're on and close out this Action Item knowing that objectives are being developed and tracked via the previous Action Items.

16. Sub-basin partnership coordinators will share the FishTracks factsheet with their partners once it is updated and provided by USGS.

Unknown: There have been communications with, and updates provided to, the partnerships on FishTracks; a factsheet may or may not have been provided.

17. Sub-basin partnership coordinators will discuss the Executive Boards interest in basinwide platforms for data management and analysis with the sub-basin partnerships.

Unknown: USFWS and USGS are working to develop a basin-wide database platform that will be inclusive of FishTracks but much broader. The coordinators have not had detailed discussions about common databases and data sharing with the partnerships knowing that there are several discussions occurring that will likely inform these discussions (e.g., SAW, DAW, decision analysis).

18. Sub-basin partnership coordinators will work with USGS to schedule a webinar on FishTracks for the sub-basin partnerships.

Incomplete:

19. Sub-basin partnership coordinators follow-up with their partners to determine interest and concerns in a basinwide approach to collecting and storing telemetry data.

Unknown:

33. Conover will follow-up with Stephen McMurray about the Freshwater Mollusk Conservation Society referring to MICRA in their guidance documents and providing an annual update to the Executive Board.

On-going: Need to follow-up with new FMCS Chair.

34. Conover will follow-up with Stephen McMurray to discuss incorporating Freshwater Mollusk Conservation Society priorities into the next MICRA priorities document.

On-going: Need to follow-up with new FMCS Chair.

February 2022

14. Conover will work with Janvrin to finalize the draft action plan once the Executive Board approves a new MICRA list of interjurisdictional rivers in the Mississippi River Basin.

On-going:

August 2021

37. Conover will reach out to Bruce Reid to inform him about the Executive Board's interest in improving the MICRA's website and gauge his interest in discussing the website with the MICRA Executive Board.

Incomplete: Website action items have been tabled pending an outcome of the Fishery Commission initiative or a focused discussion on MICRA's communication needs and the possibility of developing a Communications Plan.

6) Chairman's Report

Information Item:

Brad Parsons will provide an update on the Chairman's activities since the board's August 2023 meeting.

Notes:

Brad Parsons and Chair-elect Ben Batten provided an update on activities to the board.

- The Executive Board approved a proposed increase in state agency member annual dues from \$1,500 to \$3,000.
- Proposed changes to the MICRA By-Laws, including the proposed increase in state agency member annual dues, have been sent out to the delegates for a vote.
 - Thus far, approximately 11 delegates have replied in favor of the changes. There have been several positive comments in addition to the favorable votes. No negative votes or comments have been received.
- A letter prepared by the ICAC regarding FY24 plus-up funding was sent to USFWS (see below).
- The August 2023 MICRA Delegate meeting notes were shared with the MICRA delegates.
- MICRA organized a multi-agency briefing in Washington DC on November 8, 2023. The briefing focused on MICRA, interjurisdictional fisheries management in the Mississippi River Basin, and why a Fishery Commission would be helpful.
- Regular planning calls are being held for the March 2024 DC Fly-in.
 - Monday, March 4th will be a travel day with meetings scheduled on the 5th-7th. Smith is working on getting the most critical visits scheduled first and then will fill in the rest of the schedule. Planning on more visits than 2022.
- Ben Batten briefed the SEAFWA Fishery Resources Committee and SEAFWA Directors Committee on the Mississippi River Basin Fishery Commission in October 2023.
- Batten and Conover visited with Doug Austen, Executive Director of the American Fisheries Society, about AFS support for the Fishery Commission.
 - A follow-up letter will be sent to Austen with a formal request for AFS support and participation in the coalition.

- A meeting with General Peeples has been scheduled for February as a follow-up discussion to the public comments that MICRA provided USACE and Conover presented the Mississippi River Commission on the Chair and Chair-elect's behalf.

Discussion:

Was it helpful to have a mix of administrators and field staff participate in the November 8 briefing? Yes, it helped to have different perspectives and experiences.

The briefing on November 8 was perhaps a quality visit rather than a quantity visit. While the room was not over-filled with members' staff, the MICRA representatives came together well. The participation of the federal representatives who don't get to participate in the DC fly-ins was appreciated.

In conjunction with the November 8 briefing, Smith was able to schedule a visit with the Senior Policy Coordinator for the Senate Environment and Public Works (EPW) Committee. EPW is a critical committee for MICRA and the Fishery Commission initiative. The meeting seemed well received.

Who is the team that will be participating in the March Fly-in? Parsons, Batten, Dave Dreves, Brian Schoenung, and Cole Harty are confirmed along with Smith. The team has been reaching out to add a Missouri River Basin representative.

MICRA . <micra@micrarivers.org>

12/1/2023 11:39 AM

USFWS FY24 invasive carp funding allocation recommendation

To Aaron Woldt <aaron_woldt@fws.gov> Copy ben.batten <ben.batten@agfc.ar.gov> • Dave.Dreves@ky.gov <dave.dreves@ky.gov> • kasey.whiteman <kasey.whiteman@mdc.mo.gov> • kenneth.cunningham <kenneth.cunningham@odwc.ok.gov> • kirk.hansen@dnr.iowa.gov <kirk.hansen@dnr.iowa.gov> • Mark Thurman <mark.thurman@tn.gov> • Nelson, John (JC) <jcnelson@usgs.gov> • richard.zweifel@dnr.state.oh.us <richard.zweifel@dnr.state.oh.us> • angeline_rodgers <angeline_rodgers@fws.gov> • bradford.parsons@state.mn.us <bradford.parsons@state.mn.us> • brian.schoenung@illinois.gov <brian.schoenung@illinois.gov> • Allan Brown <allan_brown@fws.gov> • Greg Conover <greg_conover@fws.gov> • Mark Galkowski <mgalkowski@usgs.gov> • rob_simmonds@fws.gov <rob_simmonds@fws.gov>

Aaron,

Please find attached a recommendation from the MICRA Executive Board regarding the allocation of USFWS FY24 invasive carp funding, specifically the approximate \$4.7 million "plus up" first received in FY23. As detailed in the attached document, the Invasive Carp Advisory Committee had extensive discussions regarding a different allocation methodology of the \$4.7 million plus up should it be realized again in FY24. I hope the USFWS finds value in the effort that the partnerships invested into considering the most effective way to meet the diversity of priorities across the partnerships.

I would like to bring two notes to your attention. First, a concern from Dave Dreves regarding the FY24 initial targets. While the attached recommendation is specific to the FY24 plus up funds, Dave expressed concern regarding the FY24 initial targets for the ORB and TNCR. As we go forward with collaborative planning and implementation of projects in support of the national invasive carp plan, the Executive Board is hopeful that USFWS will be open to considering recommended adjustments to the sub-basin target allocations that were first established for FY2020 funding.

I would also like to highlight the Executive Board's request at the end of the attached document for USFWS support with invasive carp communications needs in the Mississippi River Basin, within existing USFWS capacity and funding. The Executive Board would like to see a collaborative communication strategy developed and implement for our collective invasive carp efforts in the basin.

Please reach out if you have any questions or would like to discuss any of the requests communicated on behalf of the MICRA partnership and Executive Board.

Thank you,
Brad Parsons
MICRA Chair

-
- USFWS FY24 IC plus up funding recommendation.pdf (155 KB)



December 1, 2023

Since FY15, the U.S. Fish and Wildlife Service (USFWS) has received base funding to slow the spread of invasive carp in the Mississippi River Basin (Basin) as directed by Congress in the Water Resources Reform and Development Act of 2014 (WRRDA 2014), subsequent amendments, and annual appropriations bills. Beginning in FY15, the USFWS has allocated a portion of the agency's base invasive carp funding to State agencies in the Basin to support implementation of the highest priority collaborative project needs in each sub-basin. Each year, the USFWS provides target funding amounts to each of the six Mississippi River sub-basin invasive carp partnerships to inform development of annual project proposals.

In FY23, Congress unexpectedly increased USFWS invasive carp funding after target funding amounts had been provided to the sub-basin partnerships for project planning. This resulted in additional (or "plus up") funding being made available to the sub-basin partnerships after partnership priorities and project proposals for FY23 funding had been identified and vetted within the partnerships. The process by which the plus up funding was distributed among partnerships was based on initial unmet needs and additional needs gathered from the sub-basin partnerships. Due to the late availability of the plus up funds and the need to award grants quickly, the projects identified for plus up funding did not undergo the same rigorous partnership vetting process as those proposed for the initial target funding amounts. Many partners were not satisfied with the process that was used to allocate the FY23 plus up funding and expressed interest in the USFWS using a different process to allocate the plus up funds, should they be appropriated again in FY24.

For FY24, USFWS suggested sub-basin partnerships expect a similar total amount of funding as FY23, to include the plus up funding of ~\$4.7M for a total of ~\$18.7M. States were interested in providing input on how the funding targets for sub-basin partnerships were set for FY24, particularly for the ~\$4.7M plus up funding first provided to the states in FY23. The remainder of the document identifies the process ICAC used, needs identified, and ultimately ICAC's recommendation regarding the allocation of the plus up funding in FY24 for the board's consideration.

Process for generating ICAC recommendations to the MICRA Executive Board:

For considering the allocation of the ~\$4.7M plus up funding in FY24, State representatives on the ICAC sought input from the States within each sub-basin. Several needs were put forward to the ICAC, and the four needs below were discussed with the MICRA Executive Board during the board's August and October meetings. From those discussions, the ICAC was requested to provide a brief write-up for the board clarifying the specific recommendation and the impact it would have on the initial FY23 funding target amounts. The ICAC further discussed the identified needs and developed the recommendation below, specifically regarding the ~\$4.7M plus up funding first provided to the States in FY24.

Needs:

1. Basinwide/Multiple Sub-Basin Priorities to increase collaborative work across sub-basin partnerships to meet shared objectives and any basinwide objectives developed.

FY24 project planning is substantially underway, and no obvious basinwide/multiple sub-basin projects have been identified. If a widely supported need arises, sub-basin partnerships could elect to pool funds to address. In future fiscal years, a deliberate effort will be made to identify basinwide/multiple sub-basin needs early in the project planning process.

2. Continuation of FY23 Plus Up Projects to allow for completion of multi-year projects that received first year funding with the FY23 plus up.

For FY24, some sub-basin partnerships identified this as an unmet need, others addressed in their FY24 project planning process, and some had already fully funded multi-year needs in FY23. This was considered a one-time need for FY24.

3. Base Capacity Support for States that need some minimal amount of funding for salary, travel, equipment, etc. to facilitate participation in invasive carp management and control.

This was identified as a greater need in lower funded sub-basins where project funding to individual states is too low or uncertain to adequately address capacity needs. This need could be met at the sub-basin partnership level through a commitment among the partners to recommend a “coordination” project that is prioritized ahead of other project proposal. This would present some procedural challenges for States in multiple partnerships and is not ideal as the project would not link directly to work on the water.

4. Increase Funding to Lower Funded Sub-Basin Partnerships to provide a more substantial base for taking meaningful actions in these sub-basins.

This need did not have equal support across all sub-basins. As part of this discussion, there was a recognition that FY23 budget language from Congress continued to emphasize a need for increased effort in the Ohio River Basin with an emphasis on Kentucky and Barkley lakes.

Recommendation:

In reconsidering the four needs above, it became apparent that all were highly important but the degree of importance for each varied across partnerships. The ICAC concluded that the most effective way to meet the diversity of priorities across the sub-basin partnerships is to provide plus up funding evenly across them to allow flexibility within each sub-basin partnership to direct the additional funding according to their specific needs. While “dividing by 6” generally doesn’t sound strategic, in this instance, and after much deliberation, it is indeed the most effective way to strategically meet a diversity of needs across the basin. See table below for recommended FY24 target funding amounts.

	FY24 Initial	FY24 Plus Up	FY24 Targets
ARW	\$1,000,000	\$789,833	\$1,789,833
LMR	\$1,300,000	\$789,833	\$2,089,833
MRB	\$1,100,000	\$789,833	\$1,889,833
ORB	\$8,019,996	\$789,833	\$8,809,829
TNCR	\$1,000,000	\$789,833	\$1,789,833
UMR	\$1,500,000	\$789,833	\$2,289,833
Total	\$13,919,996	\$4,738,998	\$18,658,994

As previously discussed within the MICRA Executive Board, there is an additional need for USFWS communications support, within existing USFWS capacity and funding. This support would help disparate efforts across the basin to coalesce into a more cohesive and effective communications program. Assistance would include coordinating the development and implementation of a Mississippi River Basin invasive carp communications plan, including assistance developing and maintaining outreach materials that are message and audience appropriate.

7) Coordinator's Report

Notes:

Conover reviewed the written report that was provided in the briefing book. PA voted in favor of the By-Law changes after the report was prepared, increasing total responses to 11 states. There were no questions or discussion.

Financial

- Accountant, bank, and coordinator financial records all reconcile as of 12/31/2023
 - 12/31/2023 balance = \$225,673.55
 - MRBP balance = \$42,145.74
 - MICRA balance = \$183,527.81
 - MICRA has received notice that the accountant's monthly fee will increase from \$265 to \$300/month in April 2024.
 - This will put this expenditure \$315 over budget that was approved in August. No action is needed.
 - Last increase in monthly fees was December 2014.
- Status of 2023 membership dues (see table below)
 - All states except Wyoming paid membership dues in 2023
 - MDC provided \$10,000 additional dues for policy coordination.
 - Minnesota DNR provided \$5,000 additional for policy coordination.
- MRBP funding
 - FY24 FWS funding
 - No federal budget so no NOFO yet.
 - Funding level expected to remain at \$50,000.
 - MICRA projected to receive \$4,500 for indirect cost.
 - MICRA's System of Award Management (SAM) registration expired January 19
 - SAM implemented more stringent entity validation measures over the last year and will no longer validate as "Association".
 - SAM created a new entity registration for MICRA as "Agreement" because MICRA's Tax ID Letter and Bank Account are in the name 'Mississippi Interstate Cooperative Resource Agreement'.
 - MICRA's entity registration in CAGE, and financial assistance award from USFWS are all in the name "Mississippi Interstate Cooperative Resource Association".
 - I have made multiple attempts to add "Association" as a "Doing Business As" (DBA) name to the entity registration but legal documents (e.g., articles of incorporation, organization, or formation stamped by the filing authority; Secretary of State certificate of filing

- or good standing; IRS forms) are required to change an entity's name and both names must be on the documents add a DBA name.
- Next step will be to request a name change with USFWS for Notice of Award and then with CAGE.
 - May need to attempt registering with a Secretary of State under both names.
 - Active entity registration is required by Code of Federal Regulations for federal financial assistance agreements.
 - Not clear what this means for MICRA's current (FY23) grant to support MRBP.
 - Will not be able to apply for an FY24 grant until registration is renewed.
- MICRA provided \$6,000 approved in 2024 budget to USFWS as contributed funds to support the MICRA Coordinator in January 2024.
 - Excessive travel expenses in 2023 to attend MAFWA, SEAFWA, and North American to participate in briefings on MICRA fishery commission with agency Directors.
 - After paying travel costs through December 2023, available funding for 2024 is \$5,300.
 - Contributed funds used to cover MICRA related office expenses, monthly cell phone, and MICRA related travel.
 - January travel for ANSTF and MICRA Executive Board meetings will put balance at approximately \$3,000.
 - Additional funds to support coordinator travel through 2024 will likely be needed.
 - Projected travel for MICRA/MRBP includes:
 - UMRCC annual meeting (March) – on agenda to discuss MICRA's fishery commission initiative.
 - MRBP coordination meeting (April)
 - ANSTF and Panel Principals (April)
 - MICRA Fall meeting (TBD)
 - LMRCC meeting (TBD)
 - ANSTF and Panel Principals (November)
 - Additional travel for UMRBA, MRCTI, or other partner meetings or Congressional briefings is not currently planned.

Status of MICRA Constitution and By-Laws Amendment

- Amendments mailed to delegates on January 17, 2024; deadline is February 16

- Added Immediate Chair-person to clarification about a single vote if serving the dual role as a sub-basin representative
- A reminder email is scheduled to be sent out on Monday, February 5
- A $\frac{3}{4}$ supporting majority of the 31 voting delegates (n=24) is needed for adoption.
- As of 1/26, 10 delegates have responded. All in favor of all amendments.
 - AR, CO, GA, IL, IN, KY, MN, ND, TX, WV

8) Arkansas-Red-White Rivers Sub-Basin Update

The following written update was compiled and submitted by Ken Cunningham.

Notes:

Cunningham reported that updates were received from all ARW sub-basin states, except Missouri, as well as the USFWS. The update stands as submitted. There is a lot of interesting work happening in the basin ranging from mussels to paddlefish to invasive carp. Notably, there is a lot of collaborative work that is reported on.

ARKANSAS – *Submitted by Ben Battan*

- **Paddlefish Population Estimate for Arkansas River - Pool 13 in Arkansas** - AGFC biologists initiated a mark-recapture study to estimate the abundance of Paddlefish in Pool 13 of the Arkansas River. Staff tagged 328 Paddlefish in February 2023 and 222 in December. This baseline abundance estimate will be used to evaluate effects of the McClellan-Kerr Arkansas River Navigation System deepening project on this commercially important species, during and after dredging. Staff are also collecting data to assess size structure and demographic information for Pool 13 Paddlefish population.
- **Longnose Darter Species Status Assessment** – The AGFC Rivers and Streams Program sampled 150 sites on 20 rivers for the presence of Longnose Darters (*Percina nasuta*) to inform the ongoing USFWS Species Status Assessment. Sampling was focused on populations in the Arkansas and Upper White River drainages. AGFC staff observed 421 animals, greatly increasing the modern distributional records for the species. Genetic samples were also sent to Dr. Tom Near at Yale University to help resolve taxonomic confusion in the *Swainia* subgenus of darters.
- **2023 Federally Listed Mussel Stockings** – The Arkansas Game and Fish Commission Mussel Conservation Program reared and released populations of three federally listed mussel species in 2023. Staff augmented the Archey Fork Little Red River with 584 Speckled Pocketbook, an endangered species that is endemic to the Little Red River watershed. They also released 332 individuals of the endangered Snuffbox mussel at three locations in the Spring River, one of only two rivers in Arkansas where they are known to occur, and 750 threatened Arkansas Fatmucket mussel at eight locations in the Saline River.
- **Invasive Carp Control and Research** - The AGFC Invasive Carp removal program fished 37 days in the Arkansas-Red-White rivers sub-basin during 2023. Staff harvested 2,728 Invasive Carp, which weighed 46,588 pounds. Several invasive carp research projects were also completed in 2023. Auburn Cooperative Fish and Wildlife Research Unit completed a project titled

“Evaluating the spatial and temporal distribution and ecology of Bighead and Silver Carp and native fishes of the lower Red River basin”; Texas Tech University completed the project titled “Movement of Silver Carp and Bighead Carp in the Red River in Arkansas”; and the University of Arkansas at Pine Bluff completed the project “Population Characteristics, Movement, and Natal Origins of Silver Carp and Bighead Carp in the Arkansas and White Rivers”.

COLORADO – *Submitted by Matt Nicholl*

- Colorado Parks and Wildlife (CPW) has concluded a 2-year pilot watercraft inspection and decontamination (WID) program at Ports of Entry and other border areas. This pilot program proved to be effective and a viable supplement to CPW's existing WID Program. As a result, CPW, in collaboration with the Colorado State Patrol, will be implementing a full-time seasonal WID station at the Trinidad and Loma Ports of Entry in 2024 and will consider additional locations in future years.

KANSAS – *Submitted by Brian Sowards*

- Kansas Department of Wildlife and Parks (KDWP) has been working closely with Oklahoma Department of Wildlife Conservation (ODWC) on the Neosho River/Grand Lake carp projects funded within the Ark-Red-White Carp Partnerships.
- KDWP has also been conducting eDNA sampling throughout the Neosho River. Results are pending.

LOUISIANA - *Submitted by Kristi Butler*

- Giant Salvinia continues to be problematic on most of the Red River raft lakes and associated backwaters. The Louisiana Department of Wildlife and Fisheries (LDWF) is taking an aggressive integrated pest management strategy to control giant salvinia in state waters. The strategy involves a three-pronged approach including chemical, mechanical, and biological methods to manage continued growth of the invasive plant. LDWF continues to work with and fund research through other state and federal agencies to explore biological control.
- A LA Tech fishing team caught a 5-fish Largemouth bag weighing 48 lbs 6 oz in December in Caney Creek Reservoir. We believe this to be an “unofficial” state record in Louisiana as official bag weight records are not kept.
- LDWF is a member agency in the Louisiana Watershed Initiative (LWI), which is tasked with reducing flood risk to people and property throughout the state. As part of the Initiative, hydrological models are being constructed across the state

to aid in decision making and risk reduction. To bolster datasets and add real time monitoring capabilities, 34 new stream flow gauges have been placed in the Red River and Ouachita basins. LDWF is represented on multiple Technical Advisory Groups including Projects, Policy, Outreach, Data/Modeling, and Nature Based Solutions, and is advocating for fish and wildlife resource protection. Ideally, green infrastructure and “nature-based solutions” will be implemented, where possible.

- LDWF continues to monitor potential hydropower projects at the locks and dams on the Red River and discuss potential fisheries impacts. Currently, no construction is scheduled, but hydropower permits are in place for all structures. We are monitoring the proposed locks and dams above Shreveport.
- Louisiana experienced extreme drought across the state for most of the year, including the summer, which saw record-breaking temperatures. Fish kills were widespread and began to subside with cooler weather in the fall.
- The Red River experienced low water levels due to extreme drought across the region. This led to a request to pump unfiltered Red River water into the Cane River. A pump is in place with a filtering system that would eliminate invasive species such as zebra mussel veligers and invasive carps, but it has never been functional. The LDWF and FWS strongly oppose pumping the unfiltered water into the Cane River and are exploring solutions with the local authorities.
- LDWF continues to oversee research on invasive carps and potential control options in the Red River basin and across the state.

OKLAHOMA – *Submitted by Ken Cunningham*

- ODWC sampled 36 lakes during Spring 2023 for zebra mussel veligers, and all came back negative.
- ODWC has had two new reports within the last year of zebra mussel populations, one in Lynn Lane Reservoir, a drinking water reservoir directly downstream of the infested Oologah Reservoir, and the Red River below Texoma, which is infested.
- ODWC has roughly 25 pet stores across Oklahoma that we are working with in our *Don't Let It Loose Program*. This summer we distributed education materials to these businesses along with bags to send fish home in. We intend to keep them stocked up on bags and any other materials they may need to help keep the messaging going.

- The Lake Carl Blackwell Yellow Floating Heart population has been greatly depleted thanks to chemical applications carried out by OSU. They have also been recently experimenting with drone chemical application.
- The University of Georgia is looking at a toxic cyanobacteria that has been found living in/on hydrilla. ODWC sent them hydrilla samples from a few of our reservoirs to have them analyzed to determine if cyanobacteria are detected. Results are pending.
- ODWC hired two full-time technicians in November 2023, focused on ANS and invasive carp research and management.
- In 2023 ODWC removed 76 bighead carp from the Grand Lake system. Ageing of these fish is still in progress but results to date suggest there are multiple age groups, some of which are over 20 years old. All viable samples sent in for ploidy testing came back diploid. Females were highly fecund (anywhere from 8-11 million eggs in the largest individual) and the males were flowing. The smallest fish was still a little over 40 lbs. and the largest was 119 lbs. Microchemistry and genetics evaluations are ongoing.
- ODWC is preparing to send out another letter to paddlefish guides on Grand Lake asking them to target and remove any bighead carp they may encounter this upcoming snagging season.
- ODWC will soon begin collecting eDNA samples throughout the 28 miles between the Robert S. Kerr Reservoir Lock and Dam and the Arkansas border.

U.S. Fish and Wildlife Service – Submitted by Brian Fillmore

Invasive Carp

- Monitoring continues for presence of larval bighead carp.
- Acoustic telemetry efforts have resulted in 58 implanted bighead carp being tracked via 12 receivers.

Paddlefish

- Broodstock collections from the Arkansas River system are currently being collected and will be transported to the Tishomingo National Fish Hatchery (TNFH), spawned, and then returned to Grand Lake once spawning and recovery is complete. Progeny will be grown to 8” inches before being tagged. KDWP will transport and reintroduce these fish into John Redmond and Elk City Reservoirs.
 - Broodstock collections from the Red River have been completed. TNFH currently has 9” Adult Paddlefish for spawning in March, and the progeny

will be grown to 12" before each will be tagged, transported and reintroduced into Caddo Lake, TX.

- A \$25,000 grant has been awarded to Oklahoma State University to survey the Deep Fork and Kiamichi rivers for potential paddlefish spawning habitat.

9) Lower Mississippi River Sub-Basin Update

The following written update was compiled and submitted by Angie Rodgers.

Notes:

Ben Batten reported that all LMR states and the USFWS provided updates and thanked everyone for their contributions. Batten highlighted that there is a lot of invasive carp removal work occurring in the sub-basin. LDFW had their first verifiable report of Northern Snakeheads in the state. A pair of snakeheads with fry was observed within the levees on the LA portion of the Mississippi River.

Mark Thurman had been serving as the LMR sub-basin representative on the MICRA Executive Board, but he left TWRA for a position with TNC. Ben Batten has been filling in as both Chair-elect and LMR sub-basin rep since Thurman's departure. Jason Henegar was serving as the acting TWRA fish chief until last week when he was officially appointed to that position. Henegar was asked about his interest in serving as the LMR rep and he graciously accepted.

Discussion:

Rodgers was asked if there is a process for Henegar to be approved by the LMRCC or if his acceptance of the position could be considered final. Rodgers said that the LMRCC Executive Committee would be notified and they will formalize Henegar as the LMRCC's representative to the MICRA Executive Board. Rodgers was thanked for the assistance that she provided to Batten while he served in the role of sub-basin representative.

- ! Conover will update the MICRA Executive Board membership and mail list to include Jason Henegar as the LMR sub-basin representative on the board.

Arkansas Game and Fish Commission

- **Mississippi River Catfish Sample Pilot Study** - The AGFC Large Rivers Biologist and District 4 Fisheries Management Biologists completed a pilot study to evaluate Blue and Flathead Catfish populations on the Mississippi River near Helena West-Helena, Arkansas. Sampling was completed in May, June, and September. Staff evaluated differences in catch rates using two electrofisher settings and obtained both spines and otoliths for age validation. Information from this pilot project will guide decision on the study design for a Mississippi River catfish study along the entire Arkansas border.

- **LMR Invasive Carp Control** - The AGFC Invasive Carp removal program fished 108 days in the Lower Mississippi River sub-basin during 2023. Staff harvested 6,928 Invasive Carp, which weighed 119,272 pounds.

Kentucky Department of Fish and Wildlife Resources

- KDFWR will continue its fish community electrofishing survey of the Mississippi River every other year. 2024 being the next year of sampling. Additionally, fish community surveys will continue to be conducted on some of our oxbow lakes located in our wildlife management areas.
- KDFWR sampled 9 shallow backwater sites for YOY invasive carp in 2023. None of these sites had black carp but 2 sites did have YOY silver carp. Several species of greatest conservation need were also collected during this effort. Including Blacktail shiner and Shoal shiner.
- Commercial harvest of invasive carp was reported to be 6943 pounds in 2023.
- 20 Paddlefish were reported harvested in the commercial fishery in 2023. Which was a decrease from the reports in 2022.
- As part of KDFWR's continued Alligator Gar restoration effort in the Four Rivers Basin Region of western Kentucky, 5,500 microwire tagged young-of-year were stocked in five Mississippi River floodplain lakes in Boatwright and Doug Travis Wildlife Management Areas, as well as lower Mayfield Creek, Obion Creek, and Bayou De Chien in August 2023.

Louisiana Department of Wildlife and Fisheries

- At Richard K Yancey WMA, habitat improvements including oversized culverts for fish passage and a weir to increase water levels during low-water events (when the Mississippi River disconnects from scar lakes) have been completed. Low-water summer fish kills were common in the Black Hawk Scar Lakes, and in the past two drought years, there were none reported thanks to the increased water levels and improved water quality.
- Louisiana experienced extreme drought across the state for the majority of the year, including the summer, which saw record-breaking temperatures. Fish kills were widespread, and began to subside with cooler weather in the fall.
- Mussel surveys were completed in SW LA for Louisiana Pigtoe *Pleurobema ridellii* and Texas Heelsplitter *Potamilus amphichaenus*. Louisiana Pigtoe were found in a number of sites in the Calcasieu drainage, expanding their known range within the system. Full community samples were also taken. The Louisiana Pigtoe was listed as Federally Threatened throughout its range in 2023.

- LDWF continues to oversee research on invasive carps and potential control options in the LMR and across the state.
- A pair of Northern Snakeheads *Channa argus* with fry was observed within the levees on the LA portion of the Mississippi. This is the first verifiable report of the species in the state.
- For the second major drought year in a row, Zebra Mussels have been observed surviving elevated temperatures and salinities at the Wax Lake Outlet, a distributary of the Atchafalaya River.
- Invasive aquatic weeds continue to present major problems across the LMR. The Louisiana Department of Wildlife and Fisheries is taking an aggressive integrated pest management strategy to control invasive weeds in state waters. The strategy involves a three-pronged approach including chemical, mechanical, and biological methods to manage continued growth of the invasive plant. LDWF continues to work with and fund research through other state and federal agencies to explore biological control.
- LDWF is a member agency in the Louisiana Watershed Initiative (LWI), which is tasked with reducing flood risk to people and property throughout the state. As part of the Initiative, hydrological models are being constructed across the state to aid in decision making and risk reduction. To bolster datasets and add real time monitoring capabilities, 47 new stream flow gages have been placed in the LMR watersheds. LDWF is represented on multiple Technical Advisory Groups including Projects, Policy, Outreach, Data/Modeling, and Nature Based Solutions, and is advocating for fish and wildlife resource protection. Ideally, green infrastructure and “nature based solutions” will be implemented, where possible.
- It was discovered that shredded tires are being spread in floodplains and sand bars under beneficial use permits after LDWF received complaints of tires in the Amite River. LDWF and USACE are working with LDEQ rewrite regulations and cease the practice.

Mississippi Department of Wildlife, Fisheries and Parks

- Staff administered five invasive carp research projects (Moon Lake movement, Eagle Lake movement, MS Alluvial Valley oxbow typology, MS Alluvial Valley Oxbow Distribution, LMR harvest removal) in the Delta Region.
- The Moon Lake invasive carp movement study revealed little immigration and emigration. Field tracking of 80 Silver Carp has concluded and the final report will be done once all the movement data are analyzed by Dr. Mike Colvin.
- The Eagle Lake carp movement project found that water control gates can prevent the passage of invasive carp. Field data collection is completed. The final report has been submitted and is currently being edited. .

- The MS Alluvial Valley oxbow typology project has been completed and we are awaiting the final report. The comprehensive first year report (over 100 pages) was submitted which mainly focuses on an analysis of the connectivity metrics, river discharges, and the spatial and temporal distribution of hydrologic connectivity in the oxbow lakes. Future work will develop alternative classification systems of connectivity relevant to invasive carp intrusion control and construct an online geospatial database with information on floodplain lake hydrologic connectivity.
- The MS Alluvial Valley Oxbow Distribution project organized and conducted interviews with 11 fisheries biologists from Mississippi, Louisiana, Kentucky, Illinois, Tennessee, Missouri, and Arkansas to collect carp presence data in randomly selected lakes. The student verified and compiled interview responses into a single file. The student gathered supplementary information about bigheaded carps in the LMAV including management plans, commercial fishing data, and creel survey data from fisheries biologists. The student performed a Permanova and ordination to determine if lakes surveyed for carp presences adequately represent the entire study area. The first annual report has been submitted and it is currently being edited.
- LMR harvest removal project: Since October 2021 we have had difficulty encouraging harvest of invasive carp from the MS River and Yazoo River Basin. Commercial fishermen were not interested in becoming contract workers to harvest these fish. We executed two contracts with carp processing firms in March and September 2021. MDWFP reimbursed one firm 18 cents per pound for invasive carp that were purchased by them for at least 25 cents per pound. From April – August 2021, a total of 80,584 pounds of invasive carp were harvested from the Mississippi River and the Yazoo River Basin by 3 commercial fishermen who fished for 52 days from March – August 2021. Silver carp comprised 91% of the harvest. One processor was reimbursed a total of \$14,505.12.
- Contracts with two more firms were signed in January 2023. The total amount of invasive carp purchased in CY2021-CY2022 was 105,570 pounds (92.87% Silver Carp). We spent \$19,002.60 to reimburse the firms for purchasing these fish. An additional 15,009 pounds of invasive carp (13,909 lbs. Silver Carp, 900 lbs. Bighead Carp and 200 pounds of Grass Carp) were purchased by one firm outside of their contract period so they were not reimbursed for these purchases.
- In August of 2022, MDWFP began advertising to hire two temporary employees to harvest invasive carp from the project area. This is an effort like what the AGFC has done. In 2022 we were not able to find two qualified job applicants and we submitted a no cost grant extension amendment to the USFWS to extend the period to May 2026. Since we were not able to find two people willing to

work as temporary employees, we again promoted fish processor reimbursement contract to four firms ---- Moon River Foods in MS; North American Caviar in TN, Ecoharvest/Impact Fisheries in MO, and INVERSA Leather in FL. All these firms signed January – June 2024 reimbursement contracts where MDWFP reimburses them either 18 cents per pound if they pay at least 25 cents per pound or 5 cents per pound if the firm supplies the boats, nets, fuel, and other equipment to the fishermen.

- MDWFP submitted a \$200,000 request to use the additional FY24 federal invasive carp funding to continue to provide reimbursement to invasive carp processing firms.
- Two of the firms have contacted a state and federal lobbying firm to get state appropriations to support their purchases of invasive carp.

Missouri Department of Conservation

Electrofishing data summary for evaluation of incentivized harvest in LMR.

To evaluate the effectiveness of incentivized harvest of Invasive Carp in the LMR, the MDC began a community sampling approach, similar to Long Term Resource Monitoring sampling in the UMR. During the fall of 2023, we completed ten standardized electrofishing sites within a relatively small stretch of river due to extremely low water. This effort produced a total of 770 fish from 33 unique species. Only five Invasive Carp were captured, all of which were Silver Carp (656 – 751 mm). Emerald Shiners and Gizzard Shad made up 62% of the total catch. We hope to continue this sampling to gather long term data evaluating the effects of Invasive Carp harvest on the fish community. Contact: Joshua.Abner@mdc.mo.gov

Invasive Carp Telemetry in mainstem LMR

The Mississippi River Science Unit has maintained a statewide telemetry array for over a decade now. In more recent years, the array has been expanded to help focus on Invasive Carp research. No new receivers or transmitters went into the LMR during 2023. Prior to the array expansion in 2021, there were 3 receivers in the LMR; currently, there are ten receivers. 100 acoustic transmitters were also implanted in Silver Carp from the LMR during 2021. Continued monitoring and maintenance of this array will assist in the management of our native species, as well as help focus on locations where Invasive Carp removal efforts could prove most beneficial.

Contact: Joshua.Abner@mdc.mo.gov

Missouri Incentivized Carp Harvest Program (MO-ICHP)

In October 2023, the MO-ICHP commenced as part of a large-scale, multi-agency effort to suppress carp populations, reduce their spread, and prevent/minimize further impacts

to native ecosystems. The Program offers 10¢ per pound for invasive carp (Silver, Bighead, Grass, and Black Carps) caught in designated waters of the Mississippi River and sold to a buyer for at least 7¢ per pound. Designated waters include Pools 20, 21, 22, 24, and 25 of the upper Mississippi River and Missouri's portion of the lower Mississippi River (LMR) from the Ohio River confluence to the Missouri-Arkansas border. Mississippi River efforts will provide experience and knowledge needed to be successful in new areas such as the Missouri River and improve/expand the program in the future. As of January 2024, 25 commercial fishers are enrolled in the Program and 224,829 lbs. of Silver Carp have been harvested (Pool 20: 63,084 lbs., Pool 22: 20,094 lbs., Pool 24: 17,384 lbs., LMR: 84,484 lbs.). Contact: Joe.McMullen@mdc.mo.gov

Big River Shovelnose Sturgeon Assessment

In Fall 2024, a multi-year assessment of Missouri and Mississippi river shovelnose sturgeon populations and fisheries will commence. The project is needed to determine the need for regulation changes in order to maintain healthy populations of shovelnose sturgeon and sustainable commercial fisheries on the upper Mississippi River. Given uncertainties associated with traditional, age-based methods of mortality estimation, the project will also seek to identify the most appropriate, alternative methods of estimating mortality (e.g., length, telemetry, mark-recapture). Ultimately, the project will seek to identify a commercial minimum length limit that will limit total annual mortality to <20 percent. Contact: Joe.McMullen@mdc.mo.gov

Black River Walleye

A walleye exploitation and movement study on the Lower Black River was continued during 2023. This study is providing angler exploitation rates which are critical for population modeling. The Black River basin (includes Black, Current, and Eleven Point rivers) supports a distinct walleye genetic strain (i.e., Black River Strain). Previous exploitation rate observed in 2009 and 2010, indicate that this walleye fishery could become over-exploited. External tags include a combination of high (\$75) and low (\$25) value reward tags. In 2023, a total of 358 walleye were captured of which 275 walleye were tagged. Additionally, we have implanted transmitters in 37 Walleye across the Black River basin. It looks like there are 3 movements groups that are starting to emerge. Some walleye are making a 200-mile run up the Black River to spawn in the early spring and then move back to the Current River for the rest of the year. More to come in spring 2024. Contact: Paul.Cieslewicz@mdc.mo.gov

St Francis River Inventory

The St. Francis River is a biologically rich aquatic ecosystem that is designated by MDC as a Stream Reach Conservation Opportunity Area. Approximately 105 fish species,

including 26 species of conservation concern (SOCC), have been documented in the St. Francis River below Wappapello Reservoir. Our objective is to conduct a standardized, drainage-wide survey of fish assemblages below Wappapello Reservoir. We stratified a 106-mile reach into 3 equal segments and completed a two-week sampling effort using daytime electrofishing and benthic trawling. Low water levels made access challenging. New fish species records for the basin and updated distributional information is being reviewed. Data and preserved fish specimens are being summarized for a survey report to be completed in July 2024. Contact: Dave.Knuth@mdc.mo.gov

Paddlefish exploitation and movement in lower Black and St Francis Rivers

Jaw band tagging and transmitter implanted paddlefish began as early as 1996. Initially it appeared exploitation and movement of paddlefish harvest is higher in the Black River than the St. Francis River. However, St. Francis River transmitter fish were harvested at comparable rates to the Black River estimates. The tagging study showed that the Black River paddlefish population had the highest harvest rates in the state. The recent regulation change to 32 inches is being evaluated in both systems. Within the St Francis River, size structure is good with fish up to 80 pound paddlefish being captured. Most notably is the capture of a CWT tagged paddlefish in the St Francis River that originated in the Black River. Some tagged paddlefish within these rivers have shown large scale movement into the main stem and throughout the MS River basin.

Contact: David.Ostendorf@mdc.mo.gov

Tennessee Wildlife Resources Agency

- TWRA continued work with the LMR Invasive Carp Subbasin Partnership to develop and implement projects
- Staff are establishing a component of the existing TCHIP program on the Mississippi River and anticipate removals/reimbursements to commence in early 2024.
- TWRA continued efforts to implant invasive carp with acoustic transmitters at Reelfoot Lake to document movement and spillway passage events.
- Paddlefish: Mississippi River (Densford Dike)
- Assess paddlefish/sturgeon usage at Densford Dike Notching project (FY24 and FY25)

Lower Mississippi River Conservation Committee

- **Hatchie-Loosahatchie Mississippi River Ecosystem Restoration Study**
The Lower Mississippi River Conservation Committee (LMRCC) serves as the non-federal cost-share partner for the feasibility study for Conservation Reach 2 – Hatchie River to Loosahatchie River. The Project Development Team finalized

the integrated feasibility report and environmental assessment in late December 2023 and submitted to Mississippi Valley Division. The Chief's Report is anticipated to be released in 3rd quarter of 2024. Additional information on the study can be found [here](#). Moving to the construction phase will require Congressional authorization and a non-federal sponsor(s). This is the first large-scale ecosystem restoration study on the Lower Mississippi River and the LMRCC is working with partners to advance additional conservation reaches identified within the Lower Mississippi River Resource Assessment.

- **Habitat Restoration**

LMRCC applied for 2023 National Fish and Wildlife Foundation Lower Mississippi Alluvial Valley Funds to increase flows in the Island 84 (RM 533) secondary channel, in addition to continuing installing woody debris traps in already restored secondary channels, based on the pilot project completed in January 2023 at Prairie Point secondary channel (RM 665) near Helena, Arkansas. Funding will also be used to continue floodplain restoration monitoring at the Loch Leven (MS) restoration site.

- **Annual Meeting**

The LMRCC held its annual meeting September 26-27, 2023 in Vicksburg, MS. The 2024 annual meeting is tentatively scheduled for this summer.

Lower Mississippi River Fish and Wildlife Conservation Office (LMRFWCO – USFWS)

- In Spring 2023, the LMRFWCO and several partner offices conducted an adult Alligator Gar *Atractosteus spatula* population assessment in Lake George. Lake George, Panther Swamp National Wildlife Refuge, Mississippi, supports one of the remnant populations of Alligator Gar in the Mississippi River Basin is one of the sources of gametes for the federal Alligator Gar brood program. In total, crews set 45 gills nets throughout Lake George and captured 23 adult Alligator Gar ranging from approximately 30-100 pounds. Fifteen of these individuals were brought back to Private John Allen National Fish Hatchery to produce fry for transfers to the following states: AR, LA, OK, IL, KY, GA
- LMRFWCO staff continue to assist with invasive carp coordination efforts for the LMR and ARW, including preliminary testing of a population model to assist the invasive carp partnership with planning and evaluation efforts. Related efforts include working with partners to improve the spatial grain within management scope, establishment of a problem statement, and SMART management objectives that can be used in decision analysis.

- The LMRFWCO initiated an invasive carp gear comparison project in backwater habitats of the LMR and ARW. This project aims to compare the feasibility, effectiveness, and efficiency of different gear types that have been used in other basins to target and capture invasive carps. Spring and fall 2023 sampling was conducted, with continued biannual sampling planned through 2025. Staff demonstrated sampling techniques with AGFC in Fall 2023 and have plans to demonstrate gear with LDWF in Spring 2024. These efforts are designed to dovetail with forthcoming recommendations from the Sampling Analysis Workgroup (SAW) to facilitate sharing of information on gear deployment in unique habitats of the basin.
- Lower Mississippi River FWCO staff finalized the third data update of the Acoustic Telemetry Lookup Tool (TLT). This version (V1.2023.09) contained data from 36 acoustic tracking projects throughout the Lower Mississippi River Basin, which included approximately 600 receiver deployments and 6000 acoustic tag IDs. After the third update, it is apparent the tool continues to grow with the addition of tags and receivers and is supported by partners within the basin. However, the current TLT, utilizing an HTML platform, is nearing maximum capacity. Therefore, to maintain this partnership need, the LMRFWCO will need to transition to a different platform, or prepare these data for entry into a more comprehensive tool.



USFWS Tag Lookup Tool V1.2023.09 partner receiver deployment locations throughout the Mississippi River Basin.

10) Missouri River Sub-Basin Update

Information Item:

A written update was not provided for the briefing book.

Notes:

Kasey Whiteman reviewed highlights from the following report.

Discussion:

Are Round Goby already present in the Missouri River sub-basin? The electric barrier in the Chicago Area Waterway System (CAWS) was originally installed as a demonstration project to stop Round Goby from moving out of the Great Lakes and into the Mississippi River Basin via the Illinois River. They have been moving down the Illinois River for years and have been collected in Pool 26 of the Mississippi River (pool with Illinois River confluence).

Do we know what impacts Round Goby will have in our large rivers?

Habitat

Missouri/Nebraska/Iowa/Kansas

- The Missouri River Recovery Implementation Committee (a congressionally authorized stakeholder advisory group to the USACE) sent a letter to USACE and USFWS leadership in support of the Missouri River Bank Stabilization and Navigation Project (BSNP) Mitigation program. This program has had little to no funding since 2011. The letter highlights specific support for habitats and land acquisition that are win-win scenarios for both lost habitat and flood risk reduction. The BSNP resulted in the loss of 500,000 acres of Missouri River basin habitat (in channel, wetlands, bottom land forests, wet prairie, etc) primarily in the lower 4 basin states. Multiple WRDA bills have since authorized the mitigation of 166,000 acres (~30%) of the lost habitat. Over the last several decades, only ~60,000 acres have been mitigated. Habitat construction in or along the Missouri River is a highly contentious issue and this is a step towards getting habitat back on the river.

Invasive Species

Kansas

- In 2023, KDWP staff removed a total of 11,769 kg of invasive carps from the Kansas River between the Bowersock Dam and WaterOne Weir. Of the 11,769

kg of removed carp, 8,440 kg were via gill nets and 3,329 kg were from electrofishing. KDWP deployed two different types of gill nets (floating and sinking) in 2023. The sinking nets accounted for 4,919 kg and the floating nets caught 3,521 kg of the total 8,440 kg removed using gill nets. KDWP had the most success in the early spring and late fall of 2023, particularly the months of February and November

- Comparisons of invasive carp demographic data between three different locations revealed that there are some differences between the removal/fished location's silver carp population (Kansas River above WaterOne Weir) and unfished populations (Kansas River below WaterOne Weir and Missouri River at Atchison, KS). Fifty (50%) of sampled carp in the fished population were >718 mm in length compared to 654mm (Kansas River below WaterOne Weir) and 624 mm (Missouri River at Atchison). Size structure of the fished population is shifted toward larger fish than the two unfished populations. At 650 mm, the fished population had an expected weight of 3285 g. The unfished locations had lower expected weights, which were 3043 g (Kansas River below WaterOne Weir) and 2677 g (Missouri River at Atchison). Expected weight at length is slightly higher in the fished population than the two unfished populations. The maximum observed age in the fished population was 11 years. Both unfished locations had a maximum age of 13 years. Median length at age-4 in the fished population was 670 mm. The median length at age-4 in the unfished populations was 613 mm (Kansas River below WaterOne Weir) and 580 mm (Missouri River at Atchison). The fished population demonstrated higher age at length and faster growth than the two unfished populations. Overall, the silver carp collected from the fished location are larger and have faster growth than the carp collected from the two unfished locations. The differences in demographics may be attributed to the KDWP removal program, however without historical data for comparison, it is unknown if the demographic differences are due to removal or other factors. KDWP intends to continue monitoring the three different locations to look for consistent changes in the treatment population that could be potentially attributed to the removal effort.

Missouri

- Missouri Dept of Conservation staff continued to partner with USFWS, Kansas Parks and Wildlife, and a local commercial fisherman (FKF Fisheries) to research removal techniques in a localized stretch of the Grand River in central Missouri. Various active gears (paupier trawl, dozer trawl, standard electrofishing) and passive gears (gill nets) were used in combination to remove carp. Removal success will be determined based on a Leslie depletion model and hydroacoustic assessments of carp density pre/during/post effort. Data analysis is currently

ongoing. Telemetry sweeps were done throughout the effort to monitor carp movement. Anecdotally, most tagged carp moved very little during the two week effort, not leaving the tributary. However, no tagged carp were physically captured during the effort. This year's 2 week effort resulted in the removal of 38,700lbs of invasive carp. Silver carp was the dominant species with handfuls of bighead and grass carp also removed. No black carp were sampled. Carp were taken by the commercial fisherman for processing into various baits.

- Missouri Dept of Conservation was successful in implementing its first invasive carp subsidy program utilizing Tetra Tech. This program was initially started for sections of the Mississippi River but has been expanded to the Missouri River for this year. Commercial fishermen are just now getting signed up for the portion of the program on the Missouri River.
- Missouri Dept of Conservation staff detected the first Round Goby in the Mississippi River at RM 82 (~30 miles north of Cape Girardeau). The previous record was near Alton, IL in Pool 26. This detection marks a distributional extension of over 100 miles.
- A silver carp female tagged in Pool 17 near MS RM458 traveled through 9 locks and dams (LD17 – LD26) to Cape Girardeau MS RM53, back up to Alton, IL MS RM202 and then up the Missouri River to the mouth of the Kansas River MO RM367 and then back to Alton, IL. This fish was detected on telemetry arrays from multiple projects (not all focused on invasive carp) and highlights the need for collaborative data sharing and management efforts.

Pallid Sturgeon

USACE

- USACE and USFWS have entered into a limited reconsultation on lower Missouri River pallid sturgeon. The USACE has been unable to follow through on some of the agreed upon actions due to political constraints and lack of funding. A Biological Assessment will come out in April based on the results of the reconsultation.
- USACE and USFWS conducted a larval pallid sturgeon drift study in the Missouri River by stocking 1 and 5 day post hatch larvae near the Big Sioux River confluence MO RM734. USACE staff sampled one of these 1 dph larval pallid sturgeon several months later 505 miles downstream when it was 34mm in length.

Montana

After several years of planning, working with stakeholder groups, and waiting for the right river conditions, the USACE will be looking to attempt a test flow out of Fort Peck reservoir this spring. This manipulation of flows will be to test the ability to illicit a response from pallid sturgeon to migrate further up the Missouri River and spawn. This is hypothesized to allow enough drift distance for larval survival. Crews will be monitoring fish movement and spawning during the test flow.

11) Ohio River Sub-Basin Update

Information Item:

A written update was not provided for the briefing book.

Notes:

Rich Zweifel reported that the Ohio River Fisheries Management Team (ORFMT) met the week prior to the MICRA Executive Board. Technical committee met on day 1 and administrators met with them on day 2.

- The committee discussed a river-wide creel survey that was done in 2022. Data analysis for the creel survey is being finished up. Preparing for an evaluation of the zander regulations that went on in 2019-2020. The daily bag was dropped from 10 to 6, and a 14-inch minimum length limit was added for the lower portion of the river.
 - There is a lot of catfish work in the Ohio River that was discussed. There has been a lot of age and growth work over the last two years. Age samples have been collected from flathead, blue, and channel catfish from every pool in the Ohio River. That project is wrapping up.
 - A genetics project sponsored by OH DNR is getting started to look at population structure of flathead catfish throughout the entire Ohio River. Researchers at Ohio State University have samples in hand and should have some results in the next year or so.
 - KDFWR updated the ORFMT on catfish regulation changes to tighten up the commercial fishing zones in Kentucky.
 - There was also a lot of discussion about black bass, particularly Florida and Alabama bass. Alabama bass are knocking on the door to the Ohio River; none have been documented in the Ohio River proper yet. The states are being vigilant in looking for Alabama bass. There are legislative pressures from various directions within some states about stocking Florida bass or F1 hybrids.
 - Zweifel updated the ORFMT on the Mississippi River Basin Fishery Commission, the proposed membership dues increase for the MICRA member state agencies, and MICRA's upcoming DC visits. There were no protests, and it appears that all the sub-basin states are good with the proposed increase.
 - There will be some follow-up regarding border states' reciprocal fishing agreements. KY is working with states across the river. OH has been in discussions with WV for about 5 years to resolve an issue.
- ! Conover will let the sub-basin representatives know which states have not responded with a vote on the proposed By-Laws changes.

Discussion:

Were there any questions or discussion when the ORFMT was briefed on the fishery commission initiative? Not really. It was mostly discussed for the awareness of states that have new administrations. We discussed the rough timeline for the draft legislation. No specific questions related to implementation or operational in nature.

What was the range of the creel survey? The original intent was riverwide. There was some trouble hiring creel clerks in the lower end of the river. Illinois was not able to hire anyone, so they attempted to contract with SIU to cover Smithland Pool. KY was unable to find anyone willing to work for what they were willing to pay. The states had a very difficult time in general hiring creel clerks. Indiana was able to get Newburg Pool and further upriver.

Is there an angler attitude component associated with the creel survey? There were some satisfaction questions as part of the interview. There may be some component of creel survey and angler attitudes included as a metric in the invasive carp considerations.

This was the third year for the creel survey. The states have been conducting them every 5 years beginning in 2012. The scope has been expanded each time, but they want to keep standardized to be able to detect spatial and temporal trends. There was some discussion about including an on-line survey to compliment the work that was completed in 2022. An on-line survey would allow for some quicker follow-up than waiting until the next basin-wide survey planned for 2027.

Is there an economic impact associated with the survey? There is not. OH DNR has completed a couple studies looking at economic impact.

12) Tennessee-Cumberland Rivers Sub-Basin Update

The following written update was compiled and submitted by Dave Dreves.

Notes:

Dave Dreves highlighted a few items from the report that was provided in the briefing book.

- Kentucky expects to be over 13 million pounds of invasive carp harvested statewide in 2023 and 11.6 million from just the TNCR within the state. By the end of 2023, Kentucky will be approaching 60 million pounds of carp harvested through Kentucky's incentives program by Kentucky commercial fishers.
- The experimental phase of the BAFF project at Lake Barkley ended in October 2023 and has been transitioned to continuous operation. It was alternated on and off for the experimental phase. The BAFF is leased, and the agencies are trying to find away to keep it in place.
- The decision-making process for identifying priority locations for deterrents within the TNCR is on-going.
- KDFWR has an Alligator Gar restoration program in western Kentucky, which includes tributaries to both the Ohio River and TNCR.
- KDFWR also participates in a Lake Sturgeon restoration program in the upper portion of the Cumberland River. There is an active trotline sampling program to monitor this effort. All age classes were represented in the most recent monitoring in the locations where fish are being stocked.
- KDFWR recently increased the subsidy for invasive carp in Kentucky Lake and Lake Barkely from 8 cents to 10 cents per pound. There are 32 commercial fishers that have signed on to the program.
- Kentucky has results from an on-going black bass genetics study. Data have been collected from 26 reservoirs across the states, some in the TNCR. The study was evaluating Florida bass introgression into Largemouth Bass and Alabama Bass introgression into Spotted Bass and Smallmouth Bass. No Alabama Bass introgression was detected but these results are just a snapshot in time. The state doesn't know if there are Alabama Bass introductions into the systems. They have found anywhere from 0-15% Florida bass introgression in Largemouth Bass from reservoirs across the state. There are 3 or 4 smaller reservoirs in eastern Kentucky with much higher levels of introgression.

Jason Henegar provided some highlights for TWRA's work in the TNCR.

- The states conduct standardized sampling in the fall. This year's results included some records in the sizes of fish collected. Several fish over 50# were collected. The largest was 64# and was from the 2006 yearclass. There will be continued monitoring near the dams and in some tributaries for spawning activity.
- TWRA is resuming some Paddlefish age and growth work in the TNCR to evaluate how the populations are rebounding from commercial overexploitation. Some of the populations are picking up in the commercial catch in Kentucky and Barkley reservoirs. Age and growth work will be conducted this year and next year.
- TWRA is concerned about the movement of Alabama Bass, particularly in the Tennessee River. They have initiated a large genetics study to look at the distribution of Alabama Bass in the Tennessee River. The baseline Smallmouth Bass data is showing a lot of problems with hybridization with Alabama Bass.

Corey Oakley provided some highlights for North Carolina's work in the TNCR.

- North Carolina is currently working on a project in the French Broad River to complete landscape scale habitat restoration. The river was highly channelized around the turn of the century. The state has been able to construct a couple oxbow lakes. These are big habitat projects for the state.
- North Carolina has stocked muskies in the French Broad River for 50 years, but they have never documented spawning. The habitat improvements are intended to provide spawning habitat for musky.
- The state has also been working to restore Gizzard Shad and Lake Sturgeon in the French Broad.
- Alabama Bass are a problem in North Carolina. They are losing Smallmouth Bass populations in the mountains due to hybridization. Largemouth Bass are also being impacted statewide except for the coast. But they are starting to be found in the coastal plains streams.

Neal Jackson provided an update on the decision analysis work for deterrents in the TNCR and Tombigbee Waterway. The TNCR invasive carp partnership has been working on a decision analysis project for the past 6 months. One of the outputs of this project is informing the USACE authority in WRDA 2020, Section 509, to implement an invasive carp deterrents program in the TNCR. That authority was expanded in WRDA 2022 to include at least one deterrent project in the Tennessee-Tombigbee Waterway (TTW). The decision analysis is informing more than just deterrents priorities for the TNCR invasive carp partnership. The project, going on now, is being completed in two phases.

The first phase is intended to inform USACE project planning under Section 509 and considers the sideboards of that legislation. The decision analysis includes four states that manage these waters: Kentucky, Tennessee, Mississippi, and Alabama. There are three additional states in the sub-basin that do not participate in the partnership because they do not have invasive carp in their waters (Georgia, North Carolina, and Virginia). The partnership has identified a list of priority locations for deterrents in the TNCR and TTW.

1. Barkley Lock and Dam (Cumberland River)
2. Kentucky Lock and Dam (Tennessee River)
3. Jamie Whitton Lock and Dam (TTW)
4. Wilson Lock and Dam or Pickwick Lock and Dam (Tennessee River)
5. Cheatham Lock and Dam (Cumberland River)
6. G.V. Sonny Montgomery Lock and Dam (TTW)

The partnership has requested MICRA to communicate these priority locations to USACE on behalf of the partnership and sub-basin. A draft letter with the priority locations has been shared with the MICRA TNCR sub-basin delegates for approval. Once all TNCR sub-basin delegates have approved the letter, the MICRA Chair will then be able to submit the letter on the partnership's behalf.

In the process of developing this list of priority locations in phase 1, the main objectives that the partnership focused on were distribution and abundance of invasive carps. There are constraints in the legislation that were included in the process: there must be enough invasive carp present at the location to be able to evaluate its effectiveness; and at least one location must be in the TTW (even though there are not enough carp present to be able to evaluate).

Through the process, a decision model was developed that gives you a list of locations and how they would perform based on the objectives and constraints that you have identified. All these locations were in the high end of the list, but they were not necessarily in this order. The partnership considered some things that were not just the model output in creating this list. One of those additional considerations is that Barkley and Kentucky Lakes are connected by shipping canal, so it does not make sense to put a deterrent in just one of those locations. Because of this, the group was interested in pairing Barkley and Kentucky locks and dams. Barkley is included at the top of the list because there is a deterrent in place now and it makes financial sense to keep it in place to the extent that we can. Pickwick Lock and Dam was not in the top 6 of the model output but it was still very high on the list. The partnership discussed the results

and determined that non-federal sponsorship is another important consideration in finalizing the list for USACE. USACE has effectively message that, probably, one of the first locations to get construction dollars will be one that has a non-federal sponsor. None of the locations in the top six of the model output are in Tennessee and Tennessee might have interest in being a non-federal sponsor for a deterrent project. With that in mind, Pickwick Lock and Dam was added as an alternative to Wilson Lock and Dam. The final two locations on the list rounded out to two locations in each system.

USACE has message that this list will be the beginning of the next conversation. There is nothing concrete in the list that the partnership has developed. USACE is developing a Programmatic Environmental Assessment (EA) for the overall project. There will also need to be site specific EAs completed for the individual locations. The next step will include more intensive conversations with the states (or others) about non-federal sponsorship.

USACE wanted to include a constraint that one deterrent would be constructed every 4 years. That timing affected the order of the recommended locations.

There is a lot of uncertainty around some of the metrics that go into the model that gives us the list. Anyone could pick at the model and the output. In the end, there are similar patterns between what came out of the TVA analysis and what came out of this analysis. The model is saying what makes sense given what we know about the population and the system which is keep them from coming in on the low end and cap them off at the upper end of their distribution to contain them.

The model also assumes that removal programs remain in place with the construction of deterrents.

Discussion:

Was the small lake in eastern Kentucky stocked with Florida bass by anglers? It was not stocked by the department. KDFWR has been consistently against Florida bass over the decades. It is an old stripmine lake. It appears that several of the stocking events occurred several years ago and were not recent events.

Is there invasive carp recruitment in the Tennessee system? There is no evidence of it.

Does this sort of authority exist any where else in the Mississippi River Basin? No. There are other parts of the basin that deterrents are of interest.

Is the USACE's estimated 4-year timeline to construct an individual deterrent for the Nashville District or is that nationally? This has only been considered for the Nashville District. This was communicated as a worst-case scenario, but they wanted to include this as a consideration. The partnership letter communicates that ideally all six deterrents would be constructed as soon as possible, and preferably concurrently. The order of the priority list becomes more important if construction is slowed.

The UMR partnership is interested in deterrents. There is an experimental underwater acoustic deterrent system (uADS) at Lock and Dam 19 on the Mississippi River. The group was told that it would take an earmark by Congress for construction of a permanent deterrent.

There are more funding considerations with this list than the potential 24-year timeline. The funding authority is \$25 million, that will not be enough to construct 6 deterrents. The funding also must cover Operation and Maintenance (O&M) costs once constructed which takes away from the remaining funding available to construct additional deterrents. The legislation also authorizes pilot projects, not permanent projects. There is also an element of evaluation that must accompany each project.

O&M seems to be the biggest point of contention within USACE. Their O&M budget was not increased for these additional projects and will impact USACE on a national scale. If O&M comes out of the national budget and not out of the 509 appropriations, USACE may choose to eliminate O&M for boat ramps or campgrounds in the TNCR to come up with the necessary funding.

In the late 1970s or early 1980s, USACE built a fish barrier at J. Strom Thurmond Lake. It was a combined acoustic and light deterrent system to keep Gizzard Shad from being pulled through pump back operations. O&M for the project was not funded. Once it was installed, there was no O&M because there was no funding for it. It is important to consider O&M when planning for these projects and discussing appropriations.

Talking points for previous DC fly-ins have included a recommendation for a basinwide feasibility study for deterrents to prevent implementation on a sub-basin by sub-basin approach. There have also been discussions at previous meetings about recommending that USACE authority for operating locks and dams in the MRB be expanded to include prevention and/or control of AIS.

If Barkley Lake were to be chosen by USACE for the first deterrents project and the BAFF were to remain in place, how would the 25% non-federal cost-share work? It is probably most clear to think about this as two separate projects. The first project did not

require a non-federal cost-share. If the decision is made to move forward with a 509 pilot project, then there will be a non-federal cost-share requirement. The BAFF has been leased and depreciating over time. The actual cost to purchase the BAFF by then may be in the neighborhood of \$700,000.

Kentucky needs to know as soon as possible when the non-federal match would be needed and approximately how much. The BAFF at Barkley Lock will be substantially less than a deterrent at the Kentucky Locks. Kentucky will have to discuss the project and non-federal match requirement with the Commission and state legislature. Kentucky operates on a biennial budget cycle, so it will be important to know in advance when the non-federal match will be needed (and how much). It is early in the USACE process, so there is no decision on the location, technology, or timing. The hope is that the BAFF, since it is number one on the list developed by the partnership, will be selected and “constructed” within the next two years.

KDFWR does not get general fund monies appropriated from the state legislature. It would probably be easier if the funding wasn't coming to the agency.

LMRCC served as the non-federal sponsor for the LMR feasibility study, but the funds for the non-federal match have come from the state agencies within LMRCC. The cost share agreement can include multiple entities. It worked well to move the funding from the states to the LMRCC rather than directly to USACE. Could something similar be done using MICRA as the non-federal sponsor for the BAFF? Yes, that is something that the board can consider. It can also be helpful to move funding to an organization like LMRCC or MICRA that does not have time constraints on the funding or can accept funding that is available before payment is required and hold it for a longer period of time. Another example is Illinois would be the only non-federal project sponsor for the Brandon Road project (if they agree to sign the PPA), but there are multiple states that will be paying towards the match requirement.

O&M will be a critical conversation. The authority does not include a clear project end date. Funding O&M into perpetuity out of the \$25 million authorization could limit construction to a single project. Is there a requirement that at least one deterrent is constructed on the TNCR and one on the TTW? The only requirement is at least one on the TTW, otherwise the project area is all three systems. No project sunset is a sticky point on the Brandon Road project because the state will be stuck with O&M into perpetuity without any idea what that cost looks like in the future.

Is the deadline in the 509 authority a concern? USACE is communicating with Congress and anticipates an extension.

Alabama Wildlife & Freshwater Fisheries Division

Chris Greene responded and had nothing new to share.

Kentucky Department of Fish and Wildlife Resources (Report provided by Josh Tompkins)

- KDFWR continues to promote the harvest of invasive carp from Kentucky waters through routine contact with commercial fishers and fish processors. There are currently four companies in Kentucky that purchase Invasive carp from commercial fishers. KDFWR employees conduct ride-alongs with commercial fishers who are participating in the Invasive Carp Harvest Program (ICHP), which allows commercial access to closed waters for the purpose of Invasive carp harvest. Most of the commercial effort for invasive carp is on the Cumberland River and its associated reservoir, Lake Barkley. Additional commercial effort occurs on the Mississippi, Ohio, and Tennessee Rivers as well. In 2023 commercial harvest of invasive carp from the TNCR exceeded 11.6 million pounds with over 9 million pounds harvested from Barkley reservoir, 1.6 million pounds from Kentucky reservoir and 855,000 pounds from the Cumberland River (mostly from the Barkley tailwaters).
- KDFWR continues to conduct standardized sampling with gill nets for Invasive carp in the Kentucky and Barkley reservoirs of the Tennessee and Cumberland rivers respectively. Data collected from fish captured through this sampling is used to monitor population demographics of Invasive carp in each reservoir. The efficacy of this method is being evaluated for replacement by more standard methods throughout the TNCR.
- KDFWR remains actively engaged as a partner with the USFWS to test the Bio-Acoustic Fish Fence (BAFF) at Lake Barkley Lock. In 2023 KDFWR continued to provide weekly onsite maintenance of the BAFF, monthly telemetry system offloads/service through October, and coordinated fish tagging efforts in the spring. In 2023 KDFWR facilitated tagging of 733 fish in 7 days for the BAFF and telemetry studies. The following is a breakdown of the tagged fish: 200 HTI silver carp, Barkley translocated; 240 HTI silver carp, Barkley TW; 20 Vemco smallmouth buffalo, Barkley TW; 20 Vemco freshwater drum, Barkley TW; 28 Vemco paddlefish, Barkley TW; 3 Vemco lake sturgeon, Barkley TW; 13 Vemco blue suckers, Barkley TW; 40 grass carp, Barkley TW; 54 Vemco silver carp, Barkley reservoir; 50 Vemco silver carp, Kentucky reservoir; 30 Vemco silver carp, Kentucky TW; 35 Vemco silver carp, Kentucky translocated. In October of 2023 the Barkley BAFF project initial experimental study period ended and the system was transitioned to a full-on state.
- KDFWR continues to maintain an extensive telemetry monitoring array in the Ohio River basin. Information gathered is shared with partners and receiver location and

active tag information is available through the USFWS telemetry look up tool. The Murray Kentucky staff maintain over 70 data collection receivers.

- KDFWR participated in the TNCR-TTW Deterrent Decision Analysis led by the USGS. KDFWR provided data and perspective from our agency for the modeling to develop deterrent location recommendations for the TNCR-TTW.
- KDFWR maintained the community sampling conducted in the tailwaters of Kentucky and Barkley Dams on the Tennessee and Cumberland rivers respectively, throughout 2023. Data collected through this long-term sampling is being analyzed to determine impacts Invasive carp may be having on native fish communities in these areas. However, due to the unnatural nature of the tailwater areas, no direct negative impacts on sportfish have been correlated to Invasive carp thus far. In 2023, KDFWR conducted a creel survey on Kentucky reservoir to monitor impacts of Invasive carp populations on anglers fishing in the tailwaters. Creel data is still being analyzed at this time. This survey is on a three-year rotation and will be surveying Barkley reservoir in 2024.
- KDFWR sampled 22 sites on the lower Tennessee and Cumberland rivers for YOY invasive carp. None were found in 2023.
- KDFWR partnered with the USFWS Columbia office to conduct paupier sampling in Kentucky reservoir in 2023. This effort continues to add valuable information regarding the silver carp population trends in the reservoir. It also is producing useful information about the gears efficacy in large reservoir systems.
- The industrial ice machine maintained by KDFWR was not fully operational for the majority of 2023.
- KDFWR commercial fishing workgroup worked to monitor statewide commercial fishing policies and activities in 2023. A commercial fishing guidebook was drafted in 2023 and is anticipated to be completed in 2024.
- 539 Paddlefish were reported harvested in the commercial fishery in 2023. Which was a decrease from reports in 2022.
- As part of KDFWR's continued Alligator Gar restoration effort in the Four Rivers Basin Region of western Kentucky, 3,243 microwire tagged young-of-year were stocked at two locations in the Clarks River (lower Tennessee River drainage) in August 2023. In addition, two Age-3 (30+ inch) individuals were surgically implanted with ultrasonic tags and fitted with external satellite tags; these fish were released into the lower Clarks River and their movements are being monitored.
- KDFWR continued its Lake Sturgeon restoration effort in the upper Cumberland River drainage during 2023 through stocking young-of-year followed by mark-recapture sampling using baited trotlines. A total of 10,528 young-of-year were stocked in the Cumberland River (7,161) and Big South Fork (3,367) between July and October. In December, trotline sampling produced 150 individuals (CPUE=6.3 fish/line) in the Cumberland River and 10 individuals (CPUE=0.8 fish/line). Mean

fork-length at age of capture indicates growth of stocked fish appears to be good. On average individuals exceeded 20 in. by Age-3 and were nearly 40 in. by Age-12.

Mississippi Dept. of Wildlife, Fisheries, and Parks (Report provided by Jerry Brown)

Report from Dustin Rodgers; NE Region Fisheries Biologist:

We are maintaining the current receiver array, downloading, and sending data to USGS monthly. Joint sampling efforts by biologists in MDWFP's Northeast Region and the USFWS Lower Mississippi River Fish and Wildlife Conservation Office occurred in the upper pools of the Tennessee-Tombigbee Waterway (Locks E and D) in the spring and fall of 2023. In 2023, 80 sites were sampled with two gear types. An additional sampling took place in June of 2023 with crews from Alabama Department of Conservation and Natural Resources and the US Fish and Wildlife Service providing additional electrofishing boats. In each pool from pools A-E, three boats pushed two sites (dam and channel). Eight embayments in Bay Springs Lake were also sampled using three electrofishing boats.

No invasive carp were observed or captured during these events, suggesting carp densities likely remain low in the upper pools of the Tennessee Tombigbee Waterway (TTW). Monitoring will continue in these pools and additional sampling methods will be utilized, as resources allow, to increase confidence that lack of observation represents true absence. To date, no invasive carp have been detected (seen while on the Tennessee Tombigbee Waterway, through our fall sampling, or through specific carp sampling) or positively identified on the TTW. In 2023, targeted sampling for invasive carp occurred in March and October. Spring and fall sampling consisted of electrofishing and dozer trawling for ten sites each for Pools D and E.

Report from Dennis Riecke; Fisheries Coordinator:

We are participating in the USACE Nashville District WRDA meetings concerning barrier locations on the TTW and the Tennessee Wildlife Federation invasive carp calls.

The Mississippi State University grant funded project titled "*TNCR DATA MANAGEMENT APPLICATION*" for TNCR is complete and the final report has been submitted.

The second project under the TNCR data management application grant project was to literature review titled. "*impacts of invasive carps on native fish and their habitats, and options for addressing these impacts in the Tennessee and Cumberland rivers*". The final report for this was submitted and it is being edited.

Since we were not successful in getting any contract fishers or processors to harvest fish from Pickwick Lake we got a change of scope approved for that grant to do a project through Mississippi State University titled *INVASIVE BIGHEADED CARP DISTRIBUTION PATTERNS IN OXBOW LAKES OF THE LOWER MISSISSIPPI ALLUVIAL VALLEY*. The first annual report for that project has been submitted and it is being edited.

North Carolina Wildlife Resources Commission (Report provided by Corey Oakley)

Project Title: French Broad River Revival,

Partners: US Fish and Wildlife Service, Tennessee Wildlife Resources Agency

Need: From its headwaters in North Carolina to where it joins the Holston River to create the Tennessee River in East Tennessee, the French Broad River is home to an exceptionally high aquatic biodiversity. The recent publication, *An Annotated Atlas of Freshwater Fishes of North Carolina* (Tracy et al. 2020), documented ~76 indigenous fish species from historical and recent collection data from the North Carolina sections of the French Broad River Basin. However, anthropogenic alteration over the last few centuries in the French Broad River and its tributaries have led to extirpations and population declines for many of its known and unknown historical species. Since Congress passed the Clean Water Act in 1972, the water quality of the French Broad River has drastically improved, but barriers to expansion (e.g. dams) limit the potential recovery of many historical fish species without stocking or translocation.

Summary of Activities: In 2023, NC Wildlife Resource Commission (NCWRC) biologists stocked Lake Sturgeon, Gizzard Shad, Smallmouth Buffalo, Black Buffalo, Smallmouth Redhorse, and Freshwater Drum in the French Broad River (Table 1). Lake Sturgeon were stocked in the French Broad River in Madison County, downstream of the mainstem dams. Smallmouth Buffalo, Black Buffalo, and Smallmouth Redhorse were collected in the lower French Broad River downstream of the dams and were translocated upstream of the dams in the upper French Broad River between the two completed slough projects. Gizzard Shad and Freshwater Drum were collected by Tennessee Wildlife Resources Agency near Douglas Lake on the French Broad and Nolichucky rivers and translocated by NCWRC to the upper French Broad River between the two slough projects.

Recaptures and Evidence of Success:

All species other than Lake Sturgeon were detected through stationary PIT antennas located in the sloughs, boat electrofishing monitoring efforts or angler reports (Table 2). The most promising observation, a young of the year Gizzard Shad, was collected in the

Mud Creek Slough. This encouraging observation suggests immediate reproduction following 2023 stocking efforts.

Table 1. Summary of 2023 stocking efforts.

Common Name	Scientific Name	2023 Summary	Year of 1st Stocking
Lake Sturgeon	<i>Acipenser fulvescens</i>	1572	2015
Gizzard Shad	<i>Dorosoma cepedianum</i>	71	2023
Smallmouth Buffalo	<i>Ictiobus bubalus</i>	53	2022
Black Buffalo	<i>Ictiobus niger</i>	14	2022
Smallmouth Redhorse	<i>Moxostoma breviceps</i>	171	2022
Freshwater Drum	<i>Aplodinotus grunniens</i>	106	2023

Table 2. Summary of 2023 reintroduced species detections.

Common Name	PIT Antenna Detection	Electrofishing Detection	Angler Report
Gizzard Shad	Both Sloughs	X	
Smallmouth Buffalo	Mud Creek Slough		
Black Buffalo	Pleasant Grove Slough		
Smallmouth Redhorse	No detection	X	
Freshwater Drum	Pleasant Grove Slough		X

Magazine Article

NCWRC staff also wrote an article for May/June 2023 issue of their department magazine that continued their efforts to sound the alarm of the hazards of the illegal introduction of Alabama Bass to North Carolina waters.



UNWELCOME VISITORS

The introduction of invasive species in North Carolina threatens many native species and could forever change our natural landscape

WRITTEN BY COMMISSION STAFF

Invasive species come in all shapes and sizes and vary in types of animals and plants. They can be small, like the emerald ash borer (a beetle that has devastated ash trees across the country and in North Carolina) and zebra mussel (a fingernail-sized mollusk that can clog water filtration pipelines and alter water quality). Invasive species can be large, like flathead and blue catfish (which have outcompeted native catfish species in North Carolina waters) and tree of heaven (a fast-growing plant that can overwhelm and displace native species).

Invasive species are introduced to an area outside of its original range, sometimes through natural migration but more commonly through human activities, like freight shipping, pet trade and accidental release. Once established, they can be difficult to control and have a dramatic impact on humans, wildlife and the environment. Approximately 42 percent of Threatened and Endangered species in the United States are at risk due to invasive species.

In this article, we highlight three of the many invasive species that are a concern in North Carolina: Alabama bass, feral swine and red-swamp crayfish. Although this article focuses on these three species, many of the lessons learned and tips for limiting their spread can relate to many other invasive species, from avoiding releasing or relocating to learning how to identify species.

To learn more about our native species and what can be done to help protect them, visit ncwildlife.org/learning.

MAY • JUNE 2023 WINC 43



Commission biologists use a shocking boat on Lake James to study smallmouth bass and Alabama bass. Opposite: Biologists Doug Basler (left) and Chris Wood (right) take fin clippings as part of genetic testing to determine the extent of hybridization between smallmouth bass and Alabama bass.

MELISSA MCGAW/HCWIC

A BASS OF MISTAKEN IDENTITY Since the 1970s, Alabama bass (*Micropterus henshalli*) have been moved and become established outside their native range of the Mobile River Basin in central Alabama, northwestern Georgia, eastern-central Mississippi and the southeastern corner of Tennessee. Unauthorized angler introductions represent most Alabama bass translocations across the Southeast, including many confirmed introductions in North Carolina.

Alabama bass were mistakenly identified as spotted bass (*Micropterus punctulatus*) for over 30 years due to their similarity of appearance. Around 2008, confirmation that these two bass are different species was accepted among university researchers and resource agencies when identification of these two species was verified with detailed anatomical counts and measurements and confirmed with genetic testing.

To date, N.C. Wildlife Resources Commission fisheries staff have genetically tested and confirmed Alabama bass are established in 30 waterbodies in the Tar Heel state, mostly in the Mountains and Piedmont. Sadly, this invasive, non-native bass is likely making its way eastward with recent reported occurrences in the Roanoke and Tar rivers.

History of Alabama Bass in North Carolina

The first known occurrence of Alabama bass in North Carolina was in the early 1980s along the North Carolina-Georgia border in Lake Chatuge. In the two decades that followed, Alabama bass were illegally moved by anglers into many nearby impoundments in western North Carolina (e.g., Apalachia, Fontana, Glenville, Hiwassee,

Julian, Nantahala, Santeetlah), with Lake Chatuge and the upper Savannah River Basin impoundments (Jocassee, Keowee, Hartwell) in South Carolina as the likely sources.

By 2001, Alabama bass introductions were documented in the Piedmont in Lake Norman. Alabama bass then were transported to other Catawba River lakes (e.g., James, Rhodhiss, Hickory, Lookout Shoals) upstream of Lake Norman in the early-to-mid 2000s, before being spread into central Piedmont impoundments in recent years.

Irreversible Consequences

Smallmouth bass (*Micropterus dolomieu*) and spotted bass are native to drainages in western North Carolina that flow into the Mississippi River Basin. In every reservoir or river system where Alabama bass have been spread, native smallmouth bass and spotted bass populations have been dramatically impacted.

Commission staff have learned through genetic testing that Alabama bass rapidly hybridize with smallmouth bass and spotted bass. The rate of hybridization is alarming. Within 10 to 15 years after Alabama bass become established, hybridization occurrence with smallmouth bass and spotted bass is 50–60%; 20 to 30 years out from the initial introductions, hybridization rates increase to 80–90%. Over time, the proportion of Alabama bass genes swamp out smallmouth bass and spotted bass genes, and the two native species are irreversibly replaced.

Largemouth bass (*Micropterus salmoides*), also native to North Carolina, are impacted by Alabama bass differently. Although hybridization between Alabama bass and largemouth bass does occur, the

ALABAMA BASS



MELISSA M-GAW/HOKWIC



Alabama Bass



Spotted Bass



Largemouth Bass



Smallmouth Bass

ILLUSTRATIONS BY JOSEPH R. TOWELLER

rate of hybridization is low. The primary impact to largemouth bass is through resource competition. Largemouth bass are efficient at what they do, but Alabama bass have a wider range of habitat and feeding tolerances and operate more successfully in the margins that are limiting to largemouth bass (e.g., deeper water, open water, low productivity zones, etc.). Therefore, largemouth bass are impacted by direct competition for available resources, which ultimately lowers their abundance over time. The outcome is that largemouth bass will be replaced to varying degrees by smaller, less-desirable Alabama bass.

What Can Be Done?

It is illegal to move or stock fish into public waters without a stocking permit from the Commission. If you observe or have knowledge of illegal Alabama bass stockings, report it by calling 800-662-7137.

If you catch an Alabama bass in a waterbody where they have not been previously documented, take photographs and report it at PublicInquiry-FishWildlife@ncwildlife.org.

It is not possible to eradicate Alabama bass where they become established, but reducing their numbers as much as possible will minimize their impacts on native species. There is no size or creel limit for Alabama bass, and anglers are encouraged to harvest unlimited numbers of them of any size.

Publicity and angler education efforts are ongoing, so be on the look out for the updated black bass webpage, news stories and informational signage to be posted at public fishing and boating access areas.

—David Goodfred, District 8 Fisheries Biologist
 —Kin Hodges, District 7 Fisheries Biologist
 —Scott Loftis, Mountain Aquatic Habitat Coordinator

Tennessee Wildlife Resources Agency (Report provided by Jason Henegar)**MICRA TNCR ANS UPDATE**

- TWRA continued work with the TNCR Invasive Carp Subbasin Partnership to develop and implement projects and represented the TNCR on the ICAC
 - Larval carp sampling, initiated in 2016, continued for Kentucky and Barkley reservoirs; no evidence of successful recruitment by invasive carp has been detected.
 - TWRA worked with state (AL, MS, KY) and federal (USGS, USFWS, TVA) partners to implant acoustic transmitters in Silver Carp at Cheatham and Pickwick reservoirs; these efforts are informing our understanding of lock and dam passage and carp movement triggers/patterns.
 - TWRA continued surveillance efforts in the Upper TN River; no Silver Carp have been detected since this effort was initiated in response to the angler reported Silver Carp from 2019. In 2023, staff conducted 43 hours of electrofishing effort as part of this surveillance.
 - TWRA's Tennessee Carp Harvest Incentive Program has subsidized the harvest of nearly 29,000,000 lbs of invasive carp as of Dec 31, 2023 (since the beginning of the program in Sept. 2018).
 - TWRA continued work with state and federal partners, utilizing structured decision-making processes to prioritize locations for invasive carp deterrents.

MICRA PADDLEFISH MANAGEMENT UPDATE

- TN River Paddlefish Project (Kentucky Lake)
 - Assessing the paddlefish stock for Kentucky Reservoir (FY24, FY25 and FY 26).
 - Assess growth, mortality, and recruitment of current paddlefish stocks from prior research (Hoffnagle and Timmons 1989 and Scholten and Bettoli 2005).

13) Upper Mississippi River Sub-Basin Update

Information Item:

A written update was not provided for the briefing book.

Notes:

Kirk Hansen provided the following report.

The UMRCC is planning its annual meeting for late March in Rock Island, Illinois. The UMRCC Fish Tech Section plans to develop an Upper Mississippi River (UMR) lake sturgeon management plan. Missouri has been successfully reintroducing lake sturgeon into the lower portion of the UMR for more than 20 years. There is renewed interest in expanding this effort northward. The states agreed to do this in a unified manner through the UMRCC.

The UMRCC Fish Tech Section is interested in conducting a UMR creel survey. Any reports from the Ohio River sub-basin creel survey would be appreciated.

There has been some really good work completed in the UMR in partnership with the USACE Sustainable Rivers Program. USACE was able to model and modify the outflows at Lock and Dam 26 to create the correct spawning velocities for lake sturgeon to spawn below the dam. That effort has been expanded to model other locks and dams on the UMR.

The Sustainable Rivers Program has also been working on the Lower De Moines River. This is a regulated river that is regulated out of Red Rock Reservoir in central Iowa. There has been some work in the reservoir for waterfowl and shorebird habitat but also managing for spring flood pulses below the dam to increase spawning of riverine fishes. Shovelnose sturgeon spawning has been documented with every spring flood pulse. Telemetry data are showing a lot of lake sturgeon running up the river during the flood pulse. While lake sturgeon may also be spawning as a result of the spring flood pulses, larval trawling has probably not been conducted early enough to confirm this.

USACE has a new initiative in the UMR to achieve 70% beneficial use of dredge material by 2030. They hosted a workshop in St. Paul, MN, last week to discuss different beneficial use techniques and new ideas, as well as agency implementation ideas, constraints, and concerns for beneficial use. This is a good opportunity to expand ecosystem restoration efforts with the dredging program.

Recent WRDA legislation redefined how the Federal standard is calculated. USACE now needs to consider environmental, social, and economic benefits or impacts. This could lead to more opportunities for beneficial use of dredge material for ecosystem restoration efforts.

The Navigation and Ecosystem Sustainability Program (NESP) was authorized in the 2000s, was dormant for a while, and was resurrected and funded with construction authorization. It is a dual-purpose authority that integrates navigation with ecosystem restoration. The first 15-year increment involves the expansion of 5 locks and mitigation of environmental and cultural impacts for the long-term operation and maintenance of the Upper Mississippi River System and Illinois Waterway. Initial efforts have been to expand the lock at LD25, creating a fish passage structure at LD22, mooring cells and other navigation improvements, and a number of restoration projects and initiatives such as systemic forest stewardship and water level management throughout the system.

There are several new bold and exciting new initiatives in the UMR, but it has created a lot of work for the states. The states are working with USACE on to best integrate and coordinate in the most meaningful and efficient manner. There are a lot of new people involved and there is some work to make sure everyone is moving in the same direction.

14) Federal Entity Updates

USFWS

A written update was not submitted.

Notes:

Aaron Woldt provided the following update.

An FY2024 Federal budget has not been approved. The Federal government remains under a laddered Continuing Resolution (CR) that runs through March 8 for the Department of Interior (DOI).

In FY2023, the USFWS's overall invasive carp budget was \$31 million. That was up from \$25.2 million in FY2022. The FY2024 budget remains unknown, but we anticipate the \$5.8 million plus-up will remain and the overall invasive carp budget to remain \$31 million. The House version of the FY2024 budget has the USFWS's invasive carp budget at \$29 million and the Senate version is at \$31.5 million. Usually, the budget lands somewhere in the middle.

All the sub-basin partnerships and coordinators have done a great job pulling together proposal packages. We appreciate what the members of the ICAC are doing to work with the sub-basin partnerships to foster basinwide thinking and collaboration.

We appreciate the support of the TNCR sub-basin partnership for their willingness to consider the on-going support of the BAFF at Lake Barkley. The bottom-line is that USFWS cannot continue to fund the BAFF at the same level as they have in the past. The TNCR partners have been willing to help keep the deterrent running until we are able to find a more permanent solution to fund continued operations.

The USFWS has been hearing support from across the basin for a national invasive carp meeting, possibly as soon as this summer. There will be more discussion about this during the ICAC update. USFWS will do all that we can to work with the partners to pull that meeting together.

USGS

- Significant progress has been made on the document "Sturgeon and Paddlefish Research in the US Geological Survey - Past Activities and Future Directions", a comprehensive science summary document cooperatively developed by the USGS Sturgeon and Paddlefish Workgroup, a diverse team of 45 science staff from 19 USGS center and program areas.
- The document is a comprehensive report on sturgeon and paddlefish research in North America, with the current draft form presented in five sections.
 - Part I introduces the executive summary, document overview, purpose, and intended use, emphasizing the need for research in this field. It also highlights USGS' interdisciplinary roles, capacities, scientists' expertise, and science centers related to sturgeon and paddlefish research.
 - Part II provides an overview of North American acipenseriformes, presenting a list of species with threats and conservation status. Each species, including Alabama Sturgeon, American Paddlefish, and others, is detailed with distribution, life histories, status, threats, and research notes.
 - Part III outlines USGS' strategic science vision for sturgeon and paddlefish research, categorizing research themes such as life history, ecology, threats, and stressors. Each theme includes topics, summaries of past efforts, and future research directions.
 - Part IV emphasizes USGS' relevancy to the public, government, and research collaborators, showcasing examples of projects and efforts.
 - Part V addresses data and information needs for sturgeon and paddlefish research, proposing the creation of a national USGS data and research network.
 - Part VI of the document includes a comprehensive appendix compiling all USGS research products on sturgeon and paddlefish to date and also identifies USG contact information for ongoing research.
- Anticipate USGS asking for agency/partner input and comment sometime in mid-summer.
- Current target completion (publication) date is by end of calendar year 2024.

Notes:

Mark Gaikowski provided the following update in addition to the written update that was provided on the paddlefish and sturgeon plan that is in progress.

USGS continues to make progress on filling several Center Director vacancies. Gaikowski recently accepted a new position as the Deputy Regional Director for the Midcontinent Region. His former position at UMESC has been advertised and is now

closed. They hope to complete interviews and have someone in that position by the end of Spring. Work continues to fill the vacant Center Director position at CERC.

In addition to the paddlefish science vision that is being developed, USGS released a native mussel science vision in September 2023. Hard copies were provided.

USGS hosted a Mississippi River Science Forum last year. The report from the forum is close to being published. It is awaiting final review before it is sent to the publisher and gets disseminated.

USGS continues to work with Federal and state agency partners to make progress on winged maple leaf restoration in the UMR. Approximately 12,000 juveniles were released in the Chippewa River. More juvenile mussels have been produced in partnership with Minnesota DNR. Approximately 100 channel catfish that were inoculated with winged maple leaf glochidia are over-wintering in ponds La Crosse for startup production in 2024.

USGS completed a science meeting for the Upper Mississippi River Restoration Program two weeks ago. More than 100 people from 3 federal agencies, 5 state agencies, and several universities attended the meeting to discuss floodplain forest; plan different modeling efforts; seek a better understanding of geomorphic and vegetation control on sedimentation and nutrient dynamics; seek a better understanding of changes in temperature, in ice phenology, and ice cover change in the UMR; and a better understanding of how ecosystem respond restoration projects.

USGS continues to work on antimycin license, production, and registration for invasive species and nuisance species controls.

USGS is preparing to initiate a grass carp bait attractant study in Pool 19. There will be several weeks of tagging grass carp beginning March 1.

USGS has completed mapping of the grass carp transcriptome. The transcriptome is basically how the genome tells the machinery of the cell what to do. They have identified different gene targets to use for RNA inhibition. The RNA inhibition constructs were tested using cell lines from several fish species. Two constructs have been selected for scaling up for in-fish testing in 2024.

2024 will be the last year for testing the underwater acoustic deterrents system (uADS) at LD19. Pending other actions, removal of uADS will be in January – March 2025.

USGS has initiated work with the Bureau of Reclamation and USACE to assess the minimum copper dose to manage Dreissenid mussels in water distribution systems within dams to reduce copper treatment concentrations in the discharges. The work is proposed to start in the Missouri River in South Dakota.

USGS is working with other Federal agency partners to move the Early Detection and Rapid Response Framework forward with Bipartisan Infrastructure Law funding.

Recently met with staff at the USGS Earth Resources Observation and Science (EROS) Center about the Landsat Next project which is the next generation of LandSat satellites that will be launched in 2030. This project will expand the data available to better understand water quality and how water quality is changing. It may be possible to coordinate a briefing on this if anyone is interested.

Input was requested from board members on the role of USGS in technology transfer. There are number of technologies that are being developed. How do you see interfacing with USGS as part of the technology transfer process?

- ! Executive Board members were requested to provide Gaikowski with input on how they see their agency interfacing with USGS as part of the technology transfer process for the various technologies that are currently in development.

An update on “FishTracks” from Marybeth Brey is provided below. Contact Marybeth if you are interested in being added to the mail list to receive updates on “FishTracks”. USGS will no longer be able to call the database “FishTracks” as FishTrack is a trademarked name. Fish movement maps can be produced with a couple weeks’ notice.

Discussion:

The invasive carp partnerships tend to focus on specific projects or process. Only occasionally do they consider 5, 10, 20 years down the road to think about big picture things like what are the limiting factors to having long-term success. The TNCR structured decision-making models are showing that in 20 years carp will be throughout the system with the tools we are using now. That is with a lot of carp being harvested from the TNCR. We need to be thinking about additional tools can be developed and used.

Subject: FishTracks update

Good morning, everyone!

I'm trying a new method of contacting people, so I hope this works. If you reply to this message, you will send to the whole group, so please remove the "fishtracks" email if you do not wish to do that. This should send an email to everyone that has access to the FishTracks SharePoint site. We do have some USACE members that cannot access the site, so I've cc'd them.

If you are no longer the fish telemetry contact for your group or you would like to be removed from the group, please let us know. This communication list is a work in progress, so please be patient! Below is a very brief update. I plan to provide additional details later this spring. For now, please reach out with any questions, concerns, or ideas!

"FishTracks" development updates:

- We have a full team! It has taken a while to assemble a development team, but we are getting there!
 - o Matthew Walker, data scientist - lead developer
 - o Danila Fedorenko, data scientist - developer
 - o Sierra Schuster, geographer - front end developer
 - o Doug Appel - QAQC (and data guru), partner communications
 - o Sean Bailey - QAQC
 - o Marybeth Brey - I'm just here to make sure everyone gets paid, and make sure we don't drive this bus off a cliff. 😊
 - o Plus, a number of others making sure what we are trying to do makes sense (and to keep me on track!), including Andrea Fritts, Jessica Stanton, Ryan Jackson, Aaron Murphy, Jennifer Dieck, Mark Fritts, Jason Ross, and Ben Schlifer (sorry if I missed anyone).
- Transitioning to Ocean Tracking Network framework
 - o Transitioning is going well, and I'm told we are still on track to have the "new" data from the SharePoint site in a database this spring.
 - o A "minimum viable product" for testing (with a tag lookup tool) should follow.
- Data policy
 - o We are drafting the data policy that should be ready for some feedback in March. While we work on that, you can also familiarize yourself with the OTN data policy and let us know if you have any questions about that. Don't worry. We do not plan share "your" data with OTN without your consent.
- New name 😞
 - o Unfortunately, "FishTrack" is a trademarked name. We could try to ask permission to use it, but it could be a long road that may cost money, so... we need to come up with a new name. Suggestions are welcome!

Data submissions:

- You can continue to **submit any new data** that you have to the SharePoint site (at any time). There is no need to wait for a data call. Please upload when it is convenient for you. Here is the link, [Data uploads](#). Please let us know if you are unable to access your group's folder at this location.
- When you upload new data, **please send an email to this group:** mbrey@usgs.gov, dsappel@usgs.gov, sbailey@usgs.gov, and mwalker@usgs.gov. We will make sure someone is assigned to review your uploads.
- **New members:** please reach out to me (mbrey@usgs.gov), Matthew (mwalker@usgs.gov), and Doug (dsappel@usgs.gov) to coordinate data submissions. This would include all interested groups in the Ohio River, TN-Cumberland River, Lower Miss, Missouri R., etc... (or new projects in the UMR and ILR) that wish to submit data to the database but do not currently have access to SharePoint. We'll get you started!

Detection data:

- We are working to get the new database functional as soon as possible. In the interim, we will do our best to send you detections of your tagged fish from other group's receivers as requested, but there will likely be some delays with that. Reach out if you have questions.

Innovasea discount!

- You can receive a discount on Innovasea products. Just mention that you are a FishTracks member when you order.

- 8.5% discount on non-sensor transmitters and receivers and a 5% on sensor tags

Thank you all for being patient. The crew is working really hard to deliver a useful product this year.

Regards,

Marybeth and the rest of the (fka) FishTracks crew,

Marybeth K. Brey, PhD

Research Fish Biologist

USGS Upper Midwest Environmental Sciences Center

2630 Fanta Reed Rd.

La Crosse, WI 54603

Telework Cell: (608)304-5135



The use of acoustic transmitters for tracking riverine fishes has increased dramatically over the last decade. Scientists and resource managers across the Mississippi River Basin and associated tributaries use acoustic telemetry data to track the movements of invasive bighead, silver, black, and grass carp to inform control and management strategies and native fish species to evaluate fish passage among river pools. With the increase in the number of transmitters and receivers in the rivers comes an increase in data and the need for coordinated data organization. The FishTracks Acoustic Telemetry Database (<https://umesc-gisdb03.er.usgs.gov/Fishtracks>), is managed by the U.S. Geological Survey Upper Midwest Environmental Sciences Center and provides a web-based repository to access and archive 69 kHz acoustic telemetry data from rivers. The database also provides a platform for enhancing collaborations across states and river basins.

Data types:

- **Fish and transmitters:** Includes all information on the transmitter type used, demographic data (e.g., length, weight, species) of the fish, and location information (i.e., where the fish was tagged). The database can handle any species of fish that contains a transmitter, not just invasive carps.
- **Acoustic receivers:** Includes all deployment and removal information linked to each acoustic telemetry receiver (e.g., deploying agency; dates deployed, downloaded, or removed; deployment location and GPS coordinates; receiver type and serial number).
- **Detection histories:** Includes time-corrected data from each download of VR2-type acoustic telemetry receivers
- Data templates are supplied to partners for data formatting, and R code is available to facilitate data formatting.

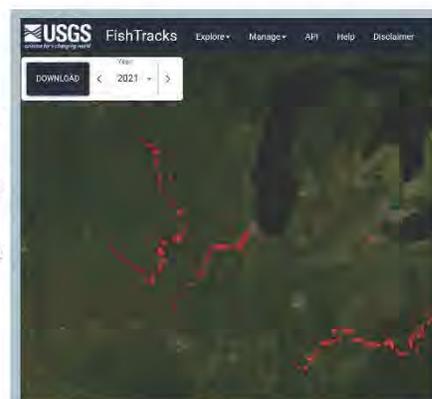


Figure 1. FishTracks website showing the distribution of telemetry receivers collecting data on tagged fish.

Access and functionality:

- Currently, a management tool and not a "public" resource. This may change in the future.
- Each user creates an on-line account to access FishTracks and can view maps of all receiver locations.
- Agencies/groups (i.e., "partners") have access to any detections from their transmitters submitted to FishTracks on any network receiver.
- Access to data from fish tagged by partners can occur by asking permission from the partner. Access will then be given access via the FishTracks website).



Figure 2. USGS Scientist inserts an acoustic transmitter (tag) into a fish.

Benefits:

- Data standardization, quality assurance, and archiving
- Tag lookup tool. Look up any tag number in the database with the agency contact information.
- Allows researchers to utilize a large river telemetry array extending across state and federal jurisdictions.
- Encourages multi-partner communication and coordination.
- Data summary tools for management or project planning.
- Further development of data visualizations and data analysis tools is planned for the future.

Contact: Marybeth Brey, Upper Midwest Environmental Sciences Center, mbrey@usgs.gov, 608-781-6243



Invasive Carp Data Systems



Marybeth K. Brey¹, Mark Fritts², Andrea K. Fritts², Matthew Walker¹, Aaron Murphy¹, Danila Fedorenko¹

¹US Geological Survey, Upper Midwest Environmental Sciences Center, La Crosse, WI; ²U.S. Fish and Wildlife Service, Midwest Fisheries Center, Onalaska, WI

Mississippi Interstate Telemetry System

Goal: Create a collaborative and web-based, centralized location to access, archive, and visualize fish, including invasive carp, acoustic telemetry data for the Mississippi River Basin



Benefits and Highlights

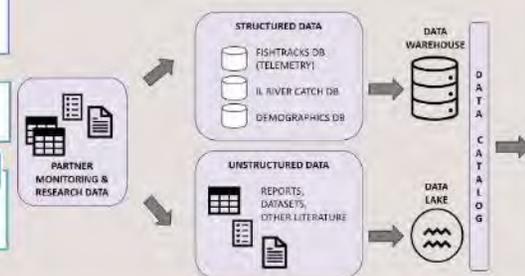
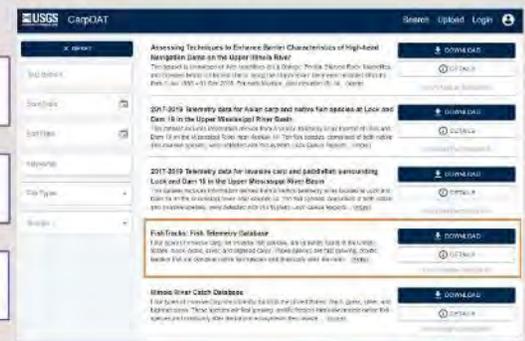
- Data standardization, QA/QC, and archiving
- Tag lookup tool. Look up any tag number in the database with the agency contact.
- Allows researchers to utilize a large river telemetry array extending across state and federal jurisdictions (example at left)
- Encourages multi-partner communication and coordination
- Data summary tools for management or project planning
- Access to cross-reference of tags and receivers within the Ocean Tracking Network and the Great Lakes Acoustic Telemetry Observation System

Example of a fish tagged near Lock and Dam 22. The extent of this fish's movement was only realized because it was detected on receivers deployed and shared by the USFWS/USACE, USGS, ISU, and MDC

Carp Data, Analysis, and Tools

Goal: Create a comprehensive and centralized hub for invasive carp products, data, and metadata

- Phase 1 (2020): System Requirements**
 - What are the features of a useful data management system?
- Phase 2 (2021-22): Design**
 - How do we build a useful data management system?
- Phase 3 (2022-24): Development**
 - Construction of a test (beta) data management system
- Phase 4 (2024): Testing**
 - Learning on the go by working out the bugs
- Phase 5 (2024-25): Deployment**
 - Partners try new system and offer feedback
- Phase 6 (2026+): Review and Refine**
 - Regular intervals of partner feedback drive the continual innovation of the system



Data
Abundance, but currently in data islands. Data management systems are in development.

Vision
Requires long-term planning (5 – 10-year cycles)

Partnerships
Remain the focus for CarpDAT and MITS development

Costs
High front-end cost, may decrease after development. Consistent funding essential.

TVA

Dennis Baxter provided the following update for TVA.

Notes:

Dennis fills TVA's recently created a full-time AIS coordinator position. TVA is committed to working with their multiple partners. Reach out to Dennis if you are aware of gaps in coordination that TVA needs to be aware of.

TVA is working with USACE Nashville District regarding an inter-agency agreement for WRDA 509 implementation.

TVA has more than 30 years of reservoir and streams monitoring data from throughout the Tennessee River Valley. They are in the process of scheduling Spring 2024 sampling.

They are participating in the TNCR invasive carp partnership and the SDM project.

They appreciate being included in the various communications.

15) Legislative, Policy, and Outreach Next Steps

Discussion Item:

Ashlee Smith will provide an update and lead this discussion with the Executive Board.

Notes:

Federal legislation:

The Continuing Resolution extension passed by Congress moved the new date to March 8 which means the offices will likely be very focused on the funding bills the week that MICRA will doing its Fly-in.

The Senate Interior appropriations bill increased funding for invasive carp by \$500,000 but the House decreased invasive carp funding by \$2,000,000 so the actual amount will be determined in conference.

The Senate also provided \$4,400,000 for implementation of State Aquatic Nuisance Species management plans (under NISA) to help control the spread of invasive carp. This language is confusing but the House language for State Aquatic Nuisance Species management plans is even more confusing. MICRA may need to touch on this during the fly-in to clarify that these are two different funding pots for two different purposes if the budgets have not been passed.

Smith has not heard if any offices have set FY25 deadlines. MICRA will need to remain flexible with their talking points for the DC Fly-in, particularly related to appropriations. MICRA's 2023 DC Fly-in talking points are provided below the Federal Legislation and Federal Appropriations updates below.

There have been some conservation bills that have been introduced and are moving. MRRRI will be reintroduced. The changes do not appear major, and she does not believe they are substantial enough to gain a lot of support for the bill. It is still mainstem only and run through EPA. In-kind cost-share was a good change. There is only a House version and Democrat sponsors. Nothing in MRRRI hurts the fishery commission and Rep. McCollum has been a strong supporter for invasive carp. MICRA needs to remain supportive but keep it at arm's length so not to get couple with that bill.

There are a couple bills that wouldn't hurt for the fishery commission to be coupled with. The EXPLORE Act and the LAKES Act are bills that have been introduced by Representative Westerman (AR-R), Chairman of the House Natural Resources Committee. Smith also briefly touched on the Coastal Habitat Conservation Act and

American Wildlife Habitat Conservation Act included in her update. There is not much movement on the Senate version of RAWA.

It would potentially be okay if MICRA is approached about including the fishery commission in a package of conservation bills, particularly those sponsored by Rep. Westerman. The fishery commission legislation could potentially go through as part of a package on the House side and as a standalone bill on the Senate side. Smith would like the board members to let her know if they have any concerns with the conservation bills that she has discussed.

Mississippi River Basin Fishery Commission Act:

Senator Wicker's (MS-R) has not heard from Senator Duckworth's office (IL-D). Smith reached out to Senator Duckworth's staff on Monday, and they have not replied to her. Schoenung has been very helpful in facilitating support from partners. They are working to get stakeholders to reach out to Senator Duckworth's office urging her to sign on as a co-sponsor of the bill.

Smith reached out to Senator Wicker's office to see if there is a specific date that they are planning to introduce the bill. They responded that they really want to identify a Democrat co-sponsor before introducing the bill. They want to discuss a Plan B if Senator Duckworth does not sign on. Schoenung assisted Smith with making contacts in Michigan. Smith has proposed working on Senators Stabenow (MI-D), Carper (DE-D), and Fetterman (PA-D). Smith is working on scheduling calls with all these offices in an attempt to get one or more to sign on as co-sponsor before MICRA's DC Fly-in.

Smith showed the board members a Beta version of a website that has been developed for the fishery commission (mrbfcommission.com). The main problem that she discussed is the scrolling deck of pictures. She would like more pictures of people and less of habitat. There are some formatting issues with picture and font sizes. After a few changes are made, Smith plans to share the website link with the Executive Board members for their review. The Tennessee Wildlife Federation is working on approval to add all the state wildlife federations under the NWF. NWF recently passed a resolution supporting the formation of the MRBFC. She wants to add partner logos to the website.

DC Fly-in:

A team has been pulled together for the March Fly-in. There is not a representative from the Missouri River sub-basin. Kim Bogenschutz (IA DNR) is not available that week, but she recommended reaching out to Chris Steffen in Kansas. Smith has not identified Kansas as one of the important states for MICRA to target for visits. (Members are not on the key committees and subcommittees that MICRA is targeting.) Nebraska and

Oklahoma are neighboring states (to Kansas) that are on Smith's target list. Missouri is not on the list.

Smith is starting to work on scheduling. She is beginning with AFWA and professional staff (majority and minority) for the House Natural Resources and the Senate EPW committees. She will begin filling the calendar once those meetings are scheduled. She may want to reach out if there is an important office that it would be helpful to have the MICRA delegate fly-in for the day. She hopes to know in a week or two if more delegates will be needed.

Following is additional information provided by Smith in written summaries on Federal Legislation and Federal Appropriations.

Federal Legislative Prepared Summary

1. EXPLORE Act

The Expanding Public Lands Outdoor Recreation Experiences (EXPLORE) Act last week passed out of the House Natural Resources Committee (Jan 17th) by unanimous consent and will head to the House floor for a full vote.

[Text - H.R.6492 - 118th Congress \(2023-2024\): EXPLORE Act | Congress.gov | Library of Congress](#)

This action is said to underscore the momentum the Outdoor Recreation Roundtable (ORR) and industry partners have built over the past few years to advance bipartisan policies that improve access and transform outdoor recreation opportunities. The EXPLORE Act is a wide-reaching piece of legislation that will improve the lives of outdoorsmen and women while also expanding access to America's public lands and waters. The legislation will:

- Improve public land access for sportsmen and women
- Modernize technology to improve visitor experiences, like increasing broadband connectivity and creating digital passes
- Streamline the permitting process and reduce fees for small businesses that depend on public land access
- Protect rock climbing in iconic places and create new long-distance bike trails
- Restore campgrounds and modernize infrastructure
- Support gateway communities by addressing housing shortages and outdated infrastructure

The bill will also improve accessibility for military service members, veterans, individuals with disabilities and kids. This language will require the U.S. Forest Service (USFS) and Bureau of Land Management (BLM) to have a minimum of one free and public target shooting range in each of the respective districts. By providing dedicated, established target ranges, this legislation will improve opportunities to recycle spent ammunition and mitigate waste and pollution at non-designated ranges on USFS and BLM lands. Furthermore, this legislation includes language that will help improve future federal land agency planning decisions and would enhance user planning efforts for the general public. Specifically, the Improved Recreation Visitation Data section directs certain federal land management agencies to capture various recreation visitation data. This section also establishes a real-time data pilot program to make available to the public real-time or predictive visitation data for federal lands, helping sportsmen and women with their trip planning efforts.

2. LAKES Act

Reps. Bruce Westerman (R-AR-04), Jared Huffman (D-CA-02), and Steve Womack (R-AR-03), introduced [H.R. 6906](#), the Lake Access Keeping Economies Strong (LAKES) Act to expand opportunities to improve and develop outdoor recreation facilities at U.S. Army Corps of Engineers (USACE) managed areas.

“Outdoor recreation is among one of the top economic drivers in the U.S., especially in states like Arkansas. Because of discrepancies in current federal law, managers of some of our favorite outdoor recreation sites have to jump through bureaucratic hoops to maintain and manage the sites. The LAKES Act will correct the discrepancies, cut out the burdensome federal red tape, and make it easier for the Corps to manage their sites for generations to enjoy for years to come,” Rep. Westerman said.

“This legislation prioritizes the maintenance and upkeep of high-use recreation infrastructure and facilities enjoyed by millions of Americans. By providing the Army Corps of Engineers with the ability to reinvest recreation fees into the operations and maintenance of recreation access points, the LAKES Act helps support the outdoor recreation economy, which contributes more than \$1 trillion to our country’s economy and represents a significant pastime for millions of Americans.”

Background:

- Under current law, U.S. Army Corps of Engineers (USACE) recreation facilities cannot retain recreation fee revenues collected onsite, an authority afforded to the U.S. Forest Service, Bureau of Land Management, and National Park Service.

- The Challenge Cost Sharing Cooperative Management Program was created for participating agencies to split operation and management expenses with outside groups. However, despite interest from private and nonprofit organizations, USACE is limited to partnering with non-federal public entities.
- The USACE is one of the nation’s largest federal outdoor recreation providers, managing nearly 257,000 facilities across 43 states.
- U.S. Senators Kevin Cramer (R-ND), Martin Heinrich (D-NM), Alex Padilla (D-CA), John Boozman (R-AR), Jon Tester (D-MT), and Steve Daines (R-MT) are cosponsors of the Senate companion LAKES Act.

The LAKES Act would:

- Allow USACE to retain 80% of recreation fees collected onsite for operation and management expenses at that location.
- Amend the Challenge Cost Sharing Cooperative Management Agreement authority to enable nonprofit entities to enter into cooperative agreements to operate and maintain recreation facilities under USACE jurisdiction.
- Keep resources and decision-making related to the operation and maintenance of recreation facilities under USACE jurisdiction in the hands of local managers rather than federal officials.

3. Coastal Habitat Conservation Act

The [Coastal Habitat Conservation Act of 2023 \(H.R. 2950\)](#), led by CSC Member Rep. Jared Huffman, would authorize the U.S. Fish and Wildlife Service’s Coastal Program and would increase authorized discretionary appropriations from \$20 million in Fiscal Year 2024 to \$25 million in 2028 for coastal protection, restoration, and enhancement efforts around the nation and in the Great Lakes. This program has proven to be a highly successful public-private partnership for restoring and protecting fish and wildlife habitat on public and privately-owned lands.

4. MRRRI – MS River Restoration and Resilience Initiative

Rep Betty McCollum (D-MN) plans to reintroduce MRRRI on February 7th. Based on feedback from a diversity of stakeholders over the course of the 117th Congress and during 2023, the McCollum team incorporated several changes into the bill, summarized below:

- **Compatibility:** MRRRI projects and activities must be compatible with maintaining navigation and the structural integrity and effectiveness of disaster risk reduction infrastructure.

- Consultation: Adds the Secretary of Agriculture and Army Corps Chief of Engineers to the list of entities that the MRRRI Director must consult with when developing and updating MRRRI actional goals and plans. The MRRRI Director also must consult with the Mississippi River States, Tribal governments, and Secretary of the Interior.
- Tribes: Adds explicit requirements for consultation and engagement with Tribal governments and Tribal organizations on MRRRI plans and projects. Requires a Tribal Liaison within the MRRRI Program Office to enhance interagency support, communication, and coordination with Tribal organizations and stakeholders. Directs that 5% of MRRRI funds are to be transferred to the Bureau of Indian Affairs to be passed through to Tribal governments or Tribal organizations for MRRRI projects or activities.
- Non-Federal Cost Share: Allows the use of in-kind contributions to cover the non-Federal cost share of a MRRRI project or activity.
- Invasive Plants: Adds protections against using plant species that pose an elevated risk of becoming invasive species in MRRRI projects.
- Science Plan: Clarifies that MRRRI science plan(s) will be subject to a formal public notice and comment period.
- Appropriations: Deletes the provision establishing a fixed level of appropriations for MRRRI.
- Definitions: Clarifies (but does not change) certain definitions in the bill.

The current draft of the bill is available at [23.1122 MCCOLL MRRRI Act DRAFT xml.pdf - Google Drive](#)

5. American Wildlife Habitat Conservation Act

Rep. Bruce Westerman (AR) plans to introduce the bill soon. In his words, the bill would be structured similarly to the farm bill — requiring reauthorization every five years and depending on appropriations annually. “It’s not permanent, it’s not mandatory spending, and I think it will be more strategically focused on habitat, which is the best thing we can do for wildlife, including endangered species,” he said. It would be a much smaller version of RAWA.

6. Approps/Budget Update

On Thursday, Jan. 18, the House and Senate both [passed a third continuing resolution \(CR\)](#) for fiscal year 2024 to avoid a partial government shutdown at midnight on Friday, Jan. 19. The President [signed the CR](#) on Jan. 19. The new measure would extend the

"laddered" approach from the [previous CR](#), with the first set of appropriations bills expiring on Friday, March 1: Agriculture, Energy-Water, Military Construction-VA, and Transportation-HUD (these were previously set to expire Jan. 19).

The second set of appropriations bills would expire a week later, on Friday, March 8: Commerce-Justice-Science, Defense, Financial Services-General Government, Homeland Security, Interior-Environment, Labor-HHS-Education, Legislative Branch, and State-Foreign Operations bills (these were previously set to expire Feb. 2).

Congressional leaders [announced a deal on topline appropriations levels](#) for fiscal year 2024 on Sunday, Jan. 7, which could pave the way for completion of appropriations in the coming weeks, but some opposition remains. The [agreement](#) provides for a total of \$773 billion in nondefense discretionary spending, including \$704 billion in base nondefense spending and \$69 billion in side deals, and \$886 billion in defense spending.

The new fiscal year began on October 1, and Congress struggled to enact a CR by the end of September to avoid a government shutdown. The House initially considered a CR with border security provisions attached, but it [failed to pass](#). Lawmakers ultimately enacted a [CR through Nov. 17](#) that lacked the supplemental funding for Ukraine favored by Senate leaders. However, Ukraine funding, supplemental funding for Israel, border security, and supplemental funding for certain domestic priorities are likely to be considered as appropriations for FY 2024 are completed.

The Biden administration has released supplemental funding requests of [\\$106 billion for national security priorities](#) and [\\$56 billion for domestic programs](#). The Senate Appropriations Committee released a [\\$110.5 billion national security supplemental](#) that included funding for Ukraine, Israel, and U.S. border security in early December, but it failed to advance on a procedural vote.

With the enactment of the [Fiscal Responsibility Act](#) (FRA), appropriations bills were marked up in the House and Senate in June and July. The FRA caps total base discretionary spending at \$1.590 trillion for FY 2024, with base defense spending capped at \$886 billion (a 3 percent increase from FY 2023) and base nondefense spending capped at \$704 billion (up to a 9 percent decrease from FY 2023, depending on how it is measured).

*Federal Approps Prepared Summary:***Senate:**

Invasive Carp.—The Committee recognizes the importance of the work conducted by the Service to combat the serious threat of invasive carp and recommends \$31,500,000 for invasive carp activities, \$500,000 above the enacted level across invasive carp and Contract Fishing subaccounts. Overall, this funding is aimed at protecting and enhancing activities in the Great Lakes to prevent invasive carp from entering and establishing in the Great Lakes. Funding provided should also be used to control invasive carp in the Mississippi River and its Sub-basins, including the Upper Mississippi River Sub-basin; Missouri River Sub-basin; Arkansas-RedWhite River Sub-basin; Lower Mississippi River Sub-basin; Tennessee Cumberland Sub-basin; and Ohio River Sub-basin, including in Kentucky Lake, Lake Barkley, and the Ohio River. The Service should consider the utility of creating a dedicated funding source to increase the intensity and geographic scope of efforts to prevent entry into the Great Lakes and control in areas where invasive carp are currently located. The Service is directed to continue to work with those States with existing cooperative agreements, including non-profits, to develop and implement innovative solutions to reduce invasive carp populations. The Committee encourages the Service to focus on invasive species removal as it relates to the eradication efforts for invasive Carp. While the Committee recognizes the importance of studying and understanding invasive carp patterns, the Service is encouraged to take action on a strategy that increases the focus on biomass removal.

Additionally, \$4,400,000 is provided for implementation of State Aquatic Nuisance Species management plans to help control the spread of invasive carp.

House:

The Committee continues to support the Service in working to prevent invasive carp from entering the Great Lakes, and to control and eradicate them from the Mississippi River, its six sub-basins, the Upper Mississippi River, Missouri River, Arkansas-Red White River, Lower Mississippi River, Tennessee Cumberland River, and Ohio River, and Kentucky Lake, and Lake Barkley. This recommendation includes \$29,000,000 for invasive carp, of which \$4,000,000 is for contract fishing and no less than \$500,000 is for a new university collaboration, \$3,500,000 is to prevent the spread of quagga and zebra mussels in the West, of which \$1,250,000 is for National Invasive Species Act State and Interstate plan. The Service is encouraged to pursue technologies to aid in the elimination, mitigation, or control of aquatic nuisance species and invasive species that do not result in the addition of chemical agents to the ecosystem that can lead to harmful by-products such as algal blooms.

The \$4,000,000 provided for contract fishing will advance efforts to combat invasive carp by expanding and perfecting the combined use of contract fishing, including on the Chicago Area Waterways VerDate Sep 11 2014 06:54 Jul 25, 2023 Jkt 052959 PO 00000 Frm 00022 Fmt 6659 Sfmt 6602 E:\HR\OC\HR155.XXX HR155 dmwilson on DSKJMOX7X2PROD with REPORT 23 system, and deterrents to extirpate invasive carp, including grass carp, where already established, pursuant to individual State laws and regulations and as called for in management plans. Contract fishing has proven to be an extremely effective management tool and it is not meant to develop a sustainable commercial fishery. The Department should make every effort to make public announcements regarding contract fishing. The Committee recognizes the importance of understanding the current economic situation as it relates to the removal and available uses of invasive carp. The Committee directs the Service to review how invasive carp that are removed through contract fishing or by other means are being utilized. To ensure best practices, the Committee directs the Service to collaborate with State Departments of Natural Resources to survey the current and potential uses, including human consumption, and shall report their findings to Congress within 120 days of enactment of this Act. With the \$500,000 provided for a new university collaboration, the Service shall establish a Conservation Research Unit (CRU) at a land-grant institution within a State that does not currently have a Wildlife CRU. Priority should be given to funding a CRU that can serve the diverse array of terrestrial ecosystems that encompass those located within the Tennessee River Basin, from the Appalachian Mountains to the Mississippi Delta.

Discussion:

Federal legislation:

What makes the mini-RAWA (i.e., American Wildlife Habitat Conservation Act) “mini”? Much, much less money. Maybe as low as 20% of the RAWA funding levels. There is not a lot of information available yet.

Mississippi River Basin Fishery Commission Act:

Smith was asked to make sure that the fishery commission website references ‘Mississippi River Basin Fishery Commission’ and that there are no abbreviations to ‘Mississippi River Commission’.

The sign-on letter on the website lists MICRA and then each of the state member agencies. Do the states need to get approval for their agency to be listed on the letters? Not all 28 MICRA member state has indicated support of the fishery commission. We would need to get approval from each individual agency before listing them on the sign-

on letter. What is the best way to do that? Send the letter and a request to the MICRArivers email account and Ben can push it out to the delegates. Isn't that already addressed if the state signed the Joint Strategic Plan? No, we deliberately communicated to the delegates that signing the Joint Strategic Plan does not equate to signing onto the Commission. Those will be two different sign-on efforts. This is a sign-on to the legislation authorizing the commission.

Smith is assuming that she is not adding individual state logos to the coalition website. She would like to get approval from all MICRA member states to add their agency's logo.

- ! Smith will send the Mississippi River Basin Fishery Commission draft legislation sign-on letter without any state agencies listed to Batten with a request for the states to seek approval for their agencies to be added to the letter and their agency's logo added to the coalition website.
- ! Batten will send the Mississippi River Basin Fishery Commission draft legislation sign-on letter and request the state delegates to seek approval for their agency to be added to the sign-on letter and their agency's logo added to the coalition website.

Smith is planning to hold a coalition call at 10:00 am on February 7th if either Parsons or Batten is available to participate. Smith plans to begin holding coalition calls every few weeks. She will send the invites to all Executive Board members so they can participate if interested. Parsons and Batten both are available to participate on the call.

Smith requested all Executive Board members to send the sign-on letter to anyone in their state that might sign on. The more names and logos, the better. She would like to have any groups tied to conservation or science included on the sign-on letter; it should not be limited to just groups pertaining to fish. She encouraged board members to think outside the box, e.g., an economic group that builds houses along the river. This is at the top of her priority list.

- ! Executive Board members were asked to send the Mississippi River Basin Fishery Commission draft legislation sign-on letter to any groups that might sign-on in support of the commission and approve their organization's logo being added to the coalition website.

There have been a couple groups that have suggested edits to the Fishery Commission bill to include a carveout for invasive carp harvest. They have suggested increasing the commission's funding to \$50 million to make room for the invasive carp carveout. These

groups are loud and have a lot of Congressional support behind them. Smith asked the board their thoughts on making changes to gain the support of these groups.

It would be better for these groups to try to increase the USFWS invasive carp budget for more invasive carp harvest rather than muddling the fishery commission legislation with earmarks for invasive carp. We do not want the fishery commission legislation to be prescriptive. We need as much flexibility as possible. There are many large funding needs other than invasive carp that the states would like to address through the commission. There is another avenue for directing more funding to invasive carp removal. Let's keep the two separated as much as possible.

Is there an answer if there is a question about the split between the non-competitive and competitive grants? The board has discussed developing guidance after the commission is formed that will include a formula for allocating the non-competitive grant funds to the member states. The board has also discussed that the non-competitive grants and support to the states is the priority for commission funding. Once those needs are addressed, additional funding would be used for competitive grants. Isn't the MICRA Executive Board the governance body? Anything that the MICRA Executive Board were to develop with respect to governance or a formula for funding allocation would need to be approved by the Commissioners once the commission is formed. The existing group will not make decisions regarding governance of the commission.

Has there been any progress on a pay-for the commission? That is the question we have received most often. By suggesting a pay-for, we are recommending a cut to someone else and making enemies. Smith's preference and recommendation is to let them find the pay-for if they are supporting the commission. It would most likely be taken from somewhere in Interior.

Before the Executive Board had discussed Agenda Item 15, Batten asked Smith for her take on where things stand with the authorizing legislation. The following notes were captured and are included here.

Smith feels good about the people that are supporting the legislation but stressed the importance of landing a Democrat co-sponsor. It shouldn't be hard outside the EPW committee, but she's not sure how important it is that they are on the EPW committee. The Democratic co-sponsor was not an issue 6 months ago. Smith is not sure what has changed. There is a lot of Democratic support, the issue is finding one that is willing to co-sponsor. She hopes that the bill is dropped into committee for MICRA's fly-in. There is a lot of support, a lot of partners, and the rest of the year to get this across the finish line.

Congress is pre-occupied with the FY24 budget and multiple conflicts overseas. MICRA's message needs to focus on the fishery commission. There will not be an appetite for discussing the FY25 budget.

Are you concerned about authorization of the fishery commission that includes the large funding authorizations? No, they just will not want to talk about budget numbers for FY25. They will want to focus on things that Congress can agree on which is just general pieces of authorization legislation.

DC Fly-in:

Is there an important Missouri River sub-basin state for MICRA's DC Fly-in that we should be requesting participation from? Montana would be helpful, but they have not signed the Joint Strategic Plan. If Kansas is not the right fit, let us know if there is another state to consider. It is always good to have someone from each sub-basin that is familiar with what is going on.

Are the state fact sheets ready to go? A revised 2-sided fact sheet will be shared with the board members tomorrow. Once they have reviewed and approved, a revised template will be sent to the state AIS coordinators to work on updating for the March fly-in. Smith will be able to participate in the review of the revised 2-sided fact sheet.

Are there regularly scheduled calls set-up with the DC Fly-in team? There were no calls scheduled after last week because we'd all be together here for the Executive Board meeting. A call is needed next week.

Smith highlighted and discussed text in the Senate appropriations bill report related to invasive carp (see written update below for highlighted text). No one seems to know where this language came from or what the intent is. It could be related to the non-structural removal efforts associated with the Brandon Road Lock and Dam project.

The \$4.4 million for implementation of State ANS management and control plans now has language related to invasive carp. There was a lot of confusion what the addition of the invasive carp language means. The states do not want the ANS management plan funding limited to invasive carp.

Smith highlighted and discussed text in the House appropriations bill report related to invasive carp and state ANS management and control plan implementation (see written update below for highlighted text). There are many different line items in the federal budget that are all discussed together in a single paragraph.

Smith suggested that the Senate language is less confusing but the line about the \$4.4 million for implementation of state ANS management and control plans should not include “to help control the spread of invasive carp”. She may call and discuss with professional staff before MICRA’s fly-in.

Should MICRA recommend maintaining the invasive carp funding at \$31 million or recommend increasing to \$35 million? What do the states need? Is there work that is not getting funded? Is asking for more for invasive carp counterproductive to the initiative to authorize and fund the fishery commission? Not if we are clear in our message.

63% (\$13,900,000) of the USFWS’s invasive carp budget was passed through to the states in FY23. There are internal operational needs to collaborate with the states to implement management and control actions, and specific things that Congress has directed USFWS to do. USFWS has communicated and followed through on providing higher percentages of funding to states as Congress appropriates increases in the agency’s invasive carp funding.

The \$4,000,000 for commercial funding is not taken out of the \$31,000,000; it is part of the funding that goes out to the states. USFWS reports to Congress on how many states use the funding for removal and how much of the annual funding goes to removal. In FY23, 13 states used \$9.1 million in USFWS invasive carp funding to support removal.

The states are not able to say how much funding they need for invasive carp work yet. We are working in that direction, but we are not there yet. Haven’t the Arkansas-Red-White (ARW) and Missouri River (MOR) sub-basins expressed a need for more invasive carp funding? We don’t want to see the other sub-basins funding levels reduced to increase the ARW and MOR sub-basins.

MICRA recommended \$35 million for invasive carp funding in FY24. (See MICRA’s 2023 DC fly-in talking points at the end of this agenda topic.) The board members agreed that MICRA should recommend \$35 million for invasive carp funding in FY25. The group agreed not to recommend a level of funding specified for removal to provide as much flexibility for the partnerships as possible.

What are the other talking points for MICRA’s March Fly-in? The fishery commission will be the focus. We have already discussed continued and increased funding for invasive carp work (at the same level recommended for FY23). We will also have the talking

point from last year recommending \$4,500,000 for implementation of state ANS management and control plans – with no reference to supporting invasive carp. There are currently 45 approved plans and New Jersey has submitted a plan for approval at the next ANS Task Force meeting.

MICRA should continue discussing the WRDA talking points from 2023. The TNCR states would like to focus on reducing the non-federal sponsor cost-share requirement from 25% to 10%. We talked about matching the language coming out of the Great Lakes Governors and Premieres related to O&M of deterrents projects. The Governors sent a letter requesting 100% federal funding for Brandon Road. Was there something else related to OMR&R?

Bullet #5 (TNCR deterrents) will need to be updated with the recommendations developed by the TNCR invasive carp partnership’s decision analysis.

What does ‘Fund WRDA Section 509 (1958) the Aquatic Plant Control Program (amended in 2014 to include all Aquatic Invasive Species) for Research and Development in the Mississippi River Basin’? Those funds are managed by USACE, and a lot of the funds are directed to research and development. A demonstration project could potentially be constructed under this program. NEPA is still a requirement for projects funded through this mechanism.

How does the timing of our meeting in March align with WRDA requests? Are we late? No. Some WRDA requests were submitted before the end of the year. Smith does not know where they are in the process of the bill, but she will try to find out.

What affect do the continuing resolutions have that end on either side of MICRA’s fly-in? Is the worst case they are shut down and we have no meetings? They will not be shut down. March 8th is the deadline for several of the agencies, including Interior. They may not be ready to engage, or we could be sent to other people. We may have to follow-up later regarding the FY25 budget. Smith has spoken with several other partners and other government affairs specialists, and everyone is going through the regular motions. She recommended not delaying the fly-in. The FY25 budget may move very fast if they get FY24 resolved by March 8th.

Batten reviewed notes from a DC planning call a couple weeks ago that Smith was not able to participate on. Specific to WRDA, the group wanted to:

- keep the GLMRIS 2-way transfer bullet;
- request 100% federal funding of 509 deterrents but be willing to accept 90:10;

- keep the bullet for a basin-wide feasibility study for deterrents;
- add a bullet for LMR feasibility study for the different habitat reaches;
- add a bullet for PPA reform;
- keep the bullet for the Aquatic Plant Control Program

Smith suggested that MICRA communicate support for the PPA reform but not add it as a priority for MICRA because they have too many talking points already. A lot of other groups are carrying that one, so MICRA can just plan to be supportive.

The LMR feasibility study is different from the Hatchie-Loosahatchie construction authorization request. There is WRDA 2018 authorization for feasibility studies of 8 conservation reaches. The LMR Hatchie-Loosahatchie was the first feasibility study completed. The states now want to bundle the rest rather than going through the entire process 7 more times. USACE has informed that a new authorization to bundle the remaining conservation reaches is not needed. The main support that LMR is requesting MICRA to carry is funding authorization for Hatchie-Loosahatchie. LMR recently sent a letter to several Congressional offices communicating this request. Henegar will provide a copy of the letter to Batten for the DC team to review.

Smith would like some further clarification on the Hatchie-Loosahatchie talking point. She is concerned about diluting MICRA's highest priority needs.

- ! Batten will share the 2024 DC fly-in talking points with the Executive Board members for review once a final draft is ready.



MICRA is a partnership of 28 state natural resources management agencies with fisheries management jurisdiction in the Mississippi River Basin, organized to improve cooperative management of interjurisdictional fish and other aquatic resources in the basin.

Department of Interior/United States Fish and Wildlife Service (USFWS)

1. Authorize and fund the Mississippi River Basin Fishery Commission

- The Commission is needed to provide a formal structure and mechanism for dedicated, stable funding for the responsible state and federal management agencies to provide increased interagency, interstate, and interbasin coordination and collaboration to:
 - Cooperatively manage sustainable recreational and commercial fisheries in the Basin
 - Control invasive carp and other aquatic invasive species,
 - Conserve, restore, and manage native interjurisdictional fisheries and their habitats, and
 - Conduct critical research necessary to support fisheries management.
- Commission would be hosted by the Department of Interior, with membership available on a voluntary basis to all states within the Mississippi Basin, as well as the USFWS, USGS, USACE, TVA, and tribal authorities.
- The delegates to the commission for each member state will be that state’s Chief of Fisheries or their designee, thereby keeping the commission authority grounded in science.
- Funding from the commission will be administered through a non-competitive (to the states) and competitive grant program (available to states, NGOs, and other qualifying entities)
- Authorize and fund the commission at \$ 1 million for year 1, \$30 million for years 2025-2029, and \$50 million per year for 2030-2035

Aquatic Invasive Species Budget Line 1336

2. Authorize and fund \$35M USFWS Base Invasive Carp funding for National Management and Control

- Limit administrative costs for activities and programs carried out with grants to 5% - USFWS currently provides financial assistance to states using the Fish and Wildlife Coordination Act (FWCA), which does **not** limit administrative costs of grant recipients

3. Fund \$4.5M for NISA State/Interstate Aquatic Invasive Species Management Plans

- There are 45 approved ANS plans; each state would receive \$100,000 for implementation
- Supports states comprehensive aquatic invasive species (AIS) management programs
- \$4.5 million needs to be appropriated *for state/interstate management plans*
 - **2023 Approps included: \$2,834,000 for state/interstate management plans; \$1,566,000 for NISA implementation; \$3,500,000 to prevent the spread of quagga and zebra mussels; \$1,500,000 for research on hydrilla, eel, and milfoil invasive grasses; and \$1,011,000 for Great Lakes Sea Lamprey administration costs all authorized by the National Invasive Species Act.**



MICRA is a partnership of 28 state natural resources management agencies with fisheries management jurisdiction in the Mississippi River Basin, organized to improve cooperative management of interjurisdictional fish and other aquatic resources in the basin.

US Army Corps of Engineers / WRDA

Great Lakes and Mississippi River Interbasin Study (GLMRIS)

4. **Fund \$500k for the Corps of Engineers to initiate a feasibility study to prevent the two-way transfer of AIS in conjunction with the Brandon Road Lock and Dam Project – which has already been authorized**
 - \$500,000 is needed for USACE to initiate the scoping phase for a feasibility study to prevent the two-way transfer, a/k/a Aquatic Transfer of Other Species (ATOS)
 - Brandon Road project only addresses the upriver movement of AIS into the Great Lakes
 - Compliments the GLMRIS Brandon Road project
 - Despite the repeated occurrence of AIS transfer from the Great Lakes to the Mississippi River Basin and considerable economic damage demonstrated, there are no control actions in place to stop the downstream movement of AIS
 - This is the next step for the GLMRIS project; there has been no progress on preventing downstream transfer (ATOS) since the GLMRIS report was completed in 2014

WRDA 509(a)

5. **\$50M for Corps of Engineers Pilot Program in Tennessee-Cumberland Watershed**
 - The estimated construction cost for deterrent barriers is approximately \$10M per project
 - Partners have identified an urgent need for four barriers in the Tennessee River System and one in the Tennessee-Tombigbee Waterway
 - TVA has completed a Programmatic Environmental Assessment for barriers on the Tennessee River
 - Projects should be selected in consultation with the USFWS-led multi-agency invasive carp coordination efforts (per WRRDA 2014) and the MICRA Tennessee-Cumberland River Invasive Carp Sub-Basin Partnership

6. **Fund WRDA Section 509 (1958) the Aquatic Plant Control Program (amended in 2014 to include all Aquatic Invasive Species) for Research and Development in the Mississippi River Basin**
 - \$25 million is requested (of the \$130 million authorization level) to be used by USACE under the Aquatic Plant Control Program, in coordination with the states, for research and development to prevent and control the spread of Aquatic Invasive Species in the MS River Basin.

16) 2024 DC Fly-in Preparation

Discussion Item:

Ashlee Smith will provide an update and lead this discussion with the Executive Board.

Notes:

This discussion was combined with Agenda Item 15. Notes are provided above.

17) Invasive Carp Advisory Committee Update

Discussion Item:

Rob Simmonds, USFWS, and Brian Schoenung, IL DNR, will provide the Executive Board with an update on the Invasive Carp Advisory Committee.

Notes:

Simmonds and Schoenung walked through the slides provided below.

Discussion:

Simmonds requested what the Executive Board would like to receive from the ICAC with regards to a recommendation on a basinwide suite of projects for USFWS funding consideration. MICRA's chair will need the full funding package to provide to the USFWS.

There is no need to provide MICRA with what is being reviewed by the ICAC because we do not have a federal budget. The final funding package and summary tables will be pulled together once there is a federal budget and the sub-basin partnerships receive their funding targets.

The Executive Board will not review the entire funding package but would like to see summary tables of projects by sub-basin, type of project, and funding level. A brief 2-3 sentence description of each project would be helpful. The Executive Board is not looking to make extra work to provide the summary tables, but that type of high-level information could help the Executive Board provide guidance to everyone in the future. We should be looking at FY24 to decide if this is the direction we want to see things going in FY25.

The sub-basin partnership coordinators already pull together summary tables for the USFWS's internal review. Those tables can be provided to the Executive Board without creating any additional work. The only new information would be developing the brief 2-3 sentence project descriptions. Those may not be necessary. We can have a discussion once the board members have reviewed the summary tables to determine if there is different or additional information that would be helpful.

Schoenung stated that the goal of the ICAC review is primarily informational on the part of the ICAC members with the understanding that the project proposals have been through review at the sub-basin partnership level. There was no guidance provided to the partnerships before they began developing the proposals. The purpose is for the

ICAC members to get a feel for the scope and breadth of projects that are taking place across the entirety of the basin, not to approve or reject individual proposals.

Any guidance needs to be provided to the partnerships on the frontend of the planning cycle. There is value in keeping an eye towards the major themes occurring throughout each of the sub-basins. Do you anticipate recommendations for next year to tie some things together? Perhaps along the lines of AFWA's multi-state grants where several states come together to request funding to address a common problem. Are you starting to see somethings that could be pulled together? Standby until the ICAC completes their review. The SAW, DAW, and CAW are all focused on basinwide needs. Common research needs are an area that we really need to look at. For example, natal origin on a basinwide scale could change the way we are looking at things on a piecemeal approach. The on-going decision analysis efforts within some of the sub-basins may help.

Is the Executive Board expecting the ICAC to approve the project proposals or the entire funding package? The purpose of the review is really an information gathering process for the ICAC members to get in front of the next planning cycle. Roles have perhaps changed since the MICRA Executive Board is no longer serving in the role of ICAC members. Previously, the ICAC did approve the funding package for submittal to the USFWS for funding consideration. The level of review by the Executive Board members varied but it was primarily an information gathering process for them as well to know what was happening in their own and different sub-basins. That is not the time to influence projects, the proposals have been in development for months. That needs to occur on the front end of proposal development. The Executive Board did not express a need for the ICAC to approve the project proposals.

We might think about the future of these on-going discussions. Perhaps less of an update and more of a discussion on the big items like scoping a broader vision for the basinwide coordination. We may want to consider adjusting the meeting agenda for future board meetings to allow the board to dig into one or two issues more deeply. For example, a 4-hr working session on ICAC and invasive carp priorities. The focus topics would likely be different at each meeting.

A basinwide invasive carp meeting for summer 2024 was discussed to enhance inter-basin communication and basinwide coordination. The Great Rivers Museum in Alton, UMESC in La Crosse, Ducks Unlimited in Memphis, and ERDC in Vicksburg were suggested as ideas for meeting location.

Will the sub-basins be ready to report out on their objectives as part of the meeting? A planning team is needed to figure out how best to structure the meeting. What is the desired outcome? Would next summer be better timing for the sub-basins?

Will the meeting be held in late summer? The intent would be to have the meeting early enough to inform the FY25 planning cycle which will begin by August. If planned out, the coordinators can hold calls with their partnerships to prompt what will be discussed at the meeting and gather information going into it to be more effective. It is difficult for the agencies that are developing new project ideas to start that in August and complete the scoping and budget development by October. That is not much time. Ideally you want to start generating the ideas that are going to be crafted into project proposals sooner, whether through sub-basin or basinwide meetings.

The sub-basin partnership coordinators voiced the opinion that next summer would be a better target for a basinwide meeting. They also liked the idea of planning for sub-basin partnership breakouts during the basinwide meeting.

We could also consider breakouts for different themes. An alternative would be to use recorded presentations that are viewed ahead of the meeting so the meeting itself could be more of a working meeting rather than a series of presentations.

Is there something that could be done virtually this year that sets the stage for an in-person meeting in Summer 2025? That would be a way to be responsive to the partners interest in basinwide information sharing but allow more planning for a purposeful outcome of the in-person meeting.

There is interest across the basin in having a basinwide meeting, but the ICAC can have more discussion about the timing.

Schoenung reported that the Control Actions Workgroup (CAW) has had a couple of meetings. Their goal is to get the agencies on the same page regarding the different strategies that are being implemented for removal programs. A lot of these are focused on incentive programs and understanding what each agency is attempting to accomplish. A biologist from the Illinois River Biological Station (IRBS) is creating a GIS data layer with all the current incentive programs in the Mississippi River Basin. There is a lot of communication taking place among the agencies, particularly among the states with incentive programs.

The initial need is coordination of the on-going efforts, but do you anticipate future conversation focused on identifying and addressing factors limiting commercial harvest, e.g., increasing the number of commercial fishers and developing processors in

locations without them? To some extent, but we are the right people to address those types of problems. We are not business development experts. The workgroup can consider what they can do to address the different challenges. If they are not able to address a specific challenge, then these needs can be communicated outward to find other means. It is not as simple as just throwing more money at removal.

There is only one processor servicing a large region. What happens if that business were to shut down? It is hard to recruit new commercial fishers because of the startup cost and if they are not tied to a particular processor, they have trouble selling their fish. The processors prefer to work with the commercial fishers that work with them and that they cultivate relationships with. They know how many fish they need to buy each week and roughly how many fish each of the fishers can provide. This makes it hard for commercial fishers to sell to a processor that they are not selling to on a regular basis.

SeaGrant published a study a few years back and reported that inland commercial fishers in Louisiana averaged 65 years old. Most responded that 'yes' they would choose to be a commercial fisher again if they had the option, but responded 'no' when asked if they would recommend their children be commercial fishers for a living.

KDFWR formed a "partnership" in the last year or so with Murray State University's College of Business Center for Economic and Entrepreneurial Development. The person he is working with there has been connected with all the processors. Now when someone calls with a business idea for removing invasive carp, they have someone with business expertise to direct them to. Was this partnership developed using a USFWS carp grant? No, he is just doing outreach on behalf of the university. Moving forward, the college is going to connect KDFWR with the local purchase area development district. Their job is to write grants and to work with local entities to bring in business.

Has anyone thought about encouraging a private equity investor to invest in deterrents to provide the non-federal cost share and perhaps providing a return on investment through stopping fish from moving into an area where we do not want invasive carp. Similar to what we are doing now to incentive removal through harvest, you might incentive the investors to provide the non-federal cost share for construction and maintenance of the barrier. How would they make a profit? They could be paid an incentive based on the performance of the deterrent.

Invasive Carp Advisory Committee
Update to MICRA Executive Board
January 2024

Brian Schoenung (IDNR)
Rob Simmonds (USFWS)

1

Overview

- October 2023 ICAC meeting
- Guidance to Sub-Basin Partnerships
- Funding Package review process
- Basinwide invasive carp meeting – Summer 2024
- SAW/DAW/CAW
- Past MICRA Executive Board action items for ICAC



2

October 2023 ICAC Meeting



- ICAC role
- Defining success
- [Guiding efforts across the basin]
- [Review process for FY24 Funding Package]

3

Guidance to Sub-Basin Partnerships

- Help ensure focus on key elements/actions.
- Improve integration of work from all partners, particularly federal.
- Better understand each sub-basin's approach to management and control.
- Any additional thoughts from review of FY24 Funding Package (proposals).
- Out to Sub-Basin Partnerships ~April.

4

Funding Package Review Process

- Funding Package and review status
- Mostly taking the opportunity to familiarize ourselves with what's happening across the entire basin and in the process considering:
 - Additional guidance
 - What we do and don't want to see in FY25 Funding Package/proposals
 - Collaboration opportunities or other basinwide opportunities
 - "Caution flags"
 - Recommendation to MICRA in late Feb

5

Basinwide Invasive Carp Meeting – Summer 2024

- Purpose
- Themes
 - Decision analysis, other large-scale efforts
 - Removal efforts/programs
 - Deterrents
 - Measuring effectiveness
 - Creative solutions
- Audience
- Logistics



6

SAW (Sampling Approaches Workgroup)

- Measure progress toward decreasing abundance and restricting distribution (starting with silver carp)
- Need to identify:
 - What to measure (CPUE in moderate to high abundance areas); data from fish in hand will contribute to other population models
 - Where to measure (many, many places...refine based on objectives being developed)
 - How to measure (electrified dozer trawl, boat electrofishing, and maybe remote sensing)
- Will it work...



7

DAW (Data and Analysis Workgroup)

- DAW exploring sample size needed for electrified gears
- Joint SAW/DAW meeting in April to compare notes and formulate path forward
- Considering all existing data available and what analyses are possible
- CarpDAT: Invasive Carp Data, Analysis, and Tools
 - Centralized database constructed
 - Gathering metadata: who's collecting what and how to make it all talk
 - Beta testing beginning
 - Target is fully functioning database in summer 2025



8



9

Past Executive Board Action Items for ICAC (1a)

- The ICAC was asked to provide the Executive Board with a list of questions to survey the basin states regarding limitations, challenges, and needs for increasing staff capacity to collaboratively work on invasive carp and how MICRA can potentially assist address these needs.
 - Some exploring as part of FY24 budget recommendations from ICAC: covered with project funding, small amount for meeting travel/salary, covered by agency funds, not engaged, need consistent funding.

10

Past Executive Board Action Items for ICAC (1b)

- Potential questions to survey the basin States regarding limitations, challenges, and needs for increasing staff capacity and how MICRA can assist:
 - What most limits your State’s ability to adequately staff collaborative invasive carp efforts?
 - What other than staff limitations constricts your ability to collaboratively work invasive carp management and control?
 - What could MICRA, or another entity/agency, do to help address limitations?

11

Past Executive Board Action Items for ICAC (2-3)

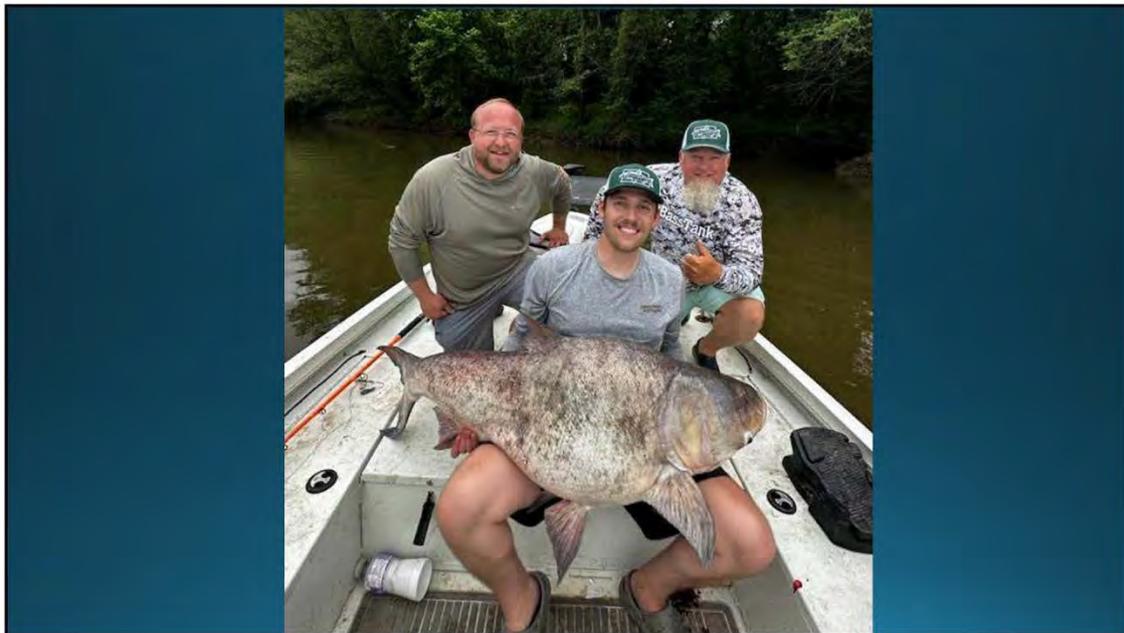
- The ICAC was asked to develop a list of survey questions to gather baseline information from the basin states on current invasive carp removal efforts and potentially other needs to support the workgroups with the basinwide population assessment.
- The MICRA Executive Board and invasive carp committees will consider ways to engage with NGO’s (e.g., Wildlife Forever) so they are more informed and aware of the collaborative inter-agency efforts to manage and control invasive carp throughout the basin.

12

Past Executive Board Action Items for ICAC (4-6)

- The sub-basin partnership coordinators and ICAC co-chairs will provide examples of communications needs and barriers to the Executive Board.
- The sub-basin partnership coordinators will work with their respective sub-basin partnerships to identify sub-basin scale objectives to assist the ICAC and MICRA Executive Board with basinwide planning and communications.
- The sub-basin partnership coordinators and the ICAC co-chairs will continue to discuss how the sub-basin scale objectives should be consistently developed and will report back to the Executive Board when they have reached consensus.

13



14

18) Sub-basin Invasive Carp Partnership Coordinators Update

Information Item:

The sub-basin invasive carp partnership coordinators will provide an update on collaborative development of sub-basin scale objectives and project proposals for USFWS FY24 invasive carp funding consideration.

Notes:

Neal Jackson, Caleb Aldridge, and Rebecca Neeley walked through the slides below to provide an update to the MICRA Executive Board.

At the board's August 2023 meeting, it was reported that all sub-basin partnerships had made some movement towards the development of sub-basin scale objectives. There has been continued progress but not a lot more. The intention with the development of the sub-basin scale objectives is to make sure all partners are on the same page with what we are collaboratively trying to accomplish. The importance of identifying what we want to do together is that we can then implement collaborative management actions effectively, monitor the appropriate things effectively, and build structure into this to help us make decisions as a collaborative group. The importance is not the objectives themselves, but what we can do once we have collaboratively identified them. The partnerships are working through questions like:

- What are the values and concerns of the sub basin partnership?
- What is the partnership trying to achieve?
- What is the future desired state of the system?
- How will we achieve the future desired state?
- How will we monitor progress towards our goal?

Clarity around the questions that are being discussed through the objectives setting process will help us develop clear communications both internally and externally.

The UMR is probably the further along than the other partnerships, but the process they are using has not been as involved as some of the other partnerships. The coordinators are paying attention to the different ways each group is working to develop objectives and watching to see if that affects implementation.

UMR:

- In 2019, the UMR followed the SDM process as a way to update and reassess the objectives of the UMR ICT.

- The SDM was nearly finished when the process was stopped because one of the state partners did not agree.
- In 2023, the UMIRCT determined that due to the number of invasive carp being collected in the system it was a good time to review our goal and objectives.
 - Not all participants were willing to use the SDM process due to the results of 2019.
 - UMRICT 2023 Summer Meeting was held June 6&7 in person.
 - Discussions over two days resulted in a draft goal and objectives.
 - Second virtual meeting held Sept 8th.
 - Reviewed and revised the draft after partner comments and suggestions were incorporated.
 - During this revision, the term Invasive carp refers only to silver and bighead carp.
 - Six iterations were reviewed and revised through October 2023
 - **Updated Goal:** To minimize the impacts of silver and bighead carp to native species and the ecosystem by reducing the abundance and distribution of silver and bighead carp in the Upper Mississippi River Basin.
 - Objective 1: Reduce the existing populations of invasive carp in Pools 2-19 by 50% by 2033 while minimizing impacts to native fish populations.
 - The specific targets were agreed upon as a starting point.
 - Data analysis and modeling will be used to refine these numbers.
 - For example, where can invasive carp realistically be reduced in significant numbers and what is a realistic target?
 - Capacity is one of the biggest challenges for reducing existing populations.
 - There is only one commercial fisher that works in Pools 5-8. Low abundance of fish and lack of techniques for capturing invasive carp when they are present in low abundance contribute to the lack of commercial fishers in the upper pools.
 - There is no commercial fishing in Pools 10-13 and limited fishing in Pool 14.
 - The majority of commercial fishers are coordinated by the IL DNR and INHS (Jim Lamer) working

primarily in Pools 18-20. There is a small amount of commercial fishing in Pools 16-17.

- Wisconsin requested funding for the first time this year to begin building capacity to address invasive carp in the Mississippi River.
- Objective 2: Reduce the existing populations of invasive carp in Pools 20-22 over the next 5 years to reduce propagule pressure and emigration into upper pools while minimizing impacts to native fish populations.
 - The lower pools are source populations for the upper river.
 - MDC is doing removals in these pools.
- Objective 3: Minimize upstream movement of invasive carp in the UMR and UMR tributaries.
 - Deterrents are of interest to the UMR partners.
 - 323 invasive carp were removed from Pool 6 earlier this year. That is the largest number that has ever been removed at one time in an upper pool.
 - Otoliths were removed from 200 fish to try to determine natal origin.
 - USGS is assisting the states to consider deterrent locations and other options in addition to Lock and Dam 19.
 - Dams 14, 15, 18, and 5 were all identified in a previous survey as locations that could potentially support a deterrent.
 - The state of Minnesota just completed an SDM process to identify other methods that could be used in the UMR to deter invasive carp movements.
 - Report was released on January 18.
 - The report will be considered by the partnership.
 - These updated goals and objectives were used to determine projects put forth for funding in 2024.

MOR:

- Kansas received FY23 funds to initiate an SDM process for the Missouri River sub-basin.
 - The partners have agreed to use an SDM process.

- Kansas intends to put out an RFP for a facilitator.
- The coordinators will meet with Kansas to discuss what is happening in other sub-basins to see if there is interest in consistency across sub-basins.
- The main delay is the partners interest in not wanting to start the planning process until a new coordinator is in place for the Missouri River Basin.
 - Emily Pherigo has taken a new job and Neal Jackson has been assisting to fill the gap with MOR sub-basin partnership coordination in her absence.

TNCR:

- Considerable discussion about the TNCR SDM project yesterday.
- Phase 1 was constrained by the WRDA Section 509 legislation that USACE is following to implement the program.
- Phase 2 does not include those same constraints (e.g., no distribution or abundance requirements).
 - The partnership is currently working through Phase 2, considering what they think is important.
 - Includes all activities, not limited to deterrents. Deterrents were pulled out for Phase 1 to inform USACE's process, but the partnership is thinking broader than deterrents for Phase 2.

ORB:

- Started working through objectives during the partnership's coordination meeting last summer.
- The partnership plans to hire (using FY24 funds) the same facilitation team that is doing the SDM work for the TNCR partnership.
- That project will hopefully begin in 2024 but depends on the facilitation team's workload and availability.

LMR/ARW

- The partnership is considering how to leverage all the information they currently have in a meaningful way.
 - A mathematical framework is needed to tie the information from the different projects together to inform decisions moving forward.
- The partnership has developed a modeling framework to project what they expect the future distribution and abundance of invasive carp to be and linked that to those things the partnership identified are important (i.e., fundamental objectives).

- Currently, working to quantify what the units of measure are for the fundamental objectives.
 - Gathering data through 2024.
 - Anticipate implementing some of this into the planning process in 2025.
- Does it make sense to reach out to some of the other sub-basins that are working through this to seek consistency between sub-basins?

The coordinators provided an estimate for each sub-basin on when what the partnerships are doing right now with objectives and SDM effect the planning process.

- UMR – FY24
- MOR – FY26
- TNCR – FY25
- ORB – FY26
- LMR/ARW – FY25

We are probably looking at a couple years for all the partnerships to be in the same place. Some have not started yet. We're hoping that the process will be more efficient for the sub-basins that use a similar process to what other sub-basins are using now.

Because the Arkansas, Red, and White rivers all flow into the Lower Mississippi River and the line dividing the LMR and ARW sub-basins does not impact invasive carp management and control, the partnerships have agreed to work together through the project planning process.

The coordinators then provided an overview of how they expect the partnerships to take what comes out of these planning processes and apply it in a unique way. Once we have the management objectives, the partners can focus available resources on what is needed to accomplish each. Monitoring and metrics to measure the things the partnership identified that they care about will be defined. Once defined, the planning discussion then focus on how we accomplish what we identified needs to be done. Research questions will also rise to the top. The annual planning cycle should be more efficient. The communication piece also becomes easier at all levels.

The coordinators don't believe it is critical that the partnerships utilize consistent processes to get the necessary information. It is likely more important that each sub-basin uses a good process to define what they need to do annually. However, there is some uncertainty around this.

The coordinators elevated the question of aligning parallel efforts between the sub-basin partnerships and the ICAC/SAW/DAW to the Executive Board. The ICAC has requested the SAW and DAW to define the best metric for evaluating abundance. The TNCR decision analysis process will define which metric the partners in that sub-basin

need to use in order to evaluate the objectives that the partnership has developed. What is the connection between these two efforts? What is the sequencing of information that comes from each of these different efforts and how do they relate to each other. It is possible that each could come up with something different. It would have been ideal to have the sub-basin objectives and appropriate metrics already identified and then fed into the SAW to identify the best design and methodology to get the partners the needed information that they identified. That is not how the sequencing has worked out and there is potential for conflicting results.

The Executive Board was informed on some transitions within the sub-basin partnership coordination team.

- Emily Pherigo left the Missouri River coordinator role in 2023. Neal Jackson has been filling that role in the interim. USFWS Columbia FWCO recently completed interviews to fill that position.
- Neal Jackson will transition away from ORB and TNCR coordination role by the end of 2024. A new position will be hired at USFWS Cartersville FWCO to fill the ORB coordination role. Caleb Aldridge will transition in as TNCR coordinator.
- Opportunity to be proactive in considering how we support the sub basin partnerships through coordination.

Discussion:

ERDC is negotiating with the University of Minnesota to conduct some modeling at Lock and Dam 5 related to gate operations.

What is the starting point for evaluating progress towards reducing a population by 50%? We do not know how many fish are currently present. The team is working on ways to measure abundance using hydroacoustics, CPUE, and other means. There is a pilot study planned for this year to evaluate ways to estimate abundance when invasive carp are present in low abundance.

Minnesota legislature has limited the number of invasive carp that can be tagged and released back into the river. Tagged fish were key to locating the 323 invasive carp that were removed earlier this year. There are plans to tag more fish (Iowa does not limit the number of fish that can be tagged and released) and expand the hydrophone network into tributary rivers. Although the large number of invasive carp was surprising, the upper basin experienced the 3rd highest flood of record, and some upstream movement of invasive carp was anticipated. Telemetered fish were tracked moving upriver as far as Pool 5 during the flood and then right back down to Pool 8 or below. Roughly, more than 90% of fish necropsied over the last several years have been large silver carp or silver carp x bighead carp hybrids.

The Executive Board might consider coordinating with the ICAC and sub-basin partnerships to understand their greatest limitations and needs to inform the development of talking points for future MICRA DC Fly-in events. For example, capacity limitations and the scheduled removal of the underwater acoustic deterrent system (uADS) have been identified as concerns by UMR partners.

One of the biggest challenges the coordinators have is to get people to think big picture about process, planning, and strategy to determine how we collaboratively work together to figure out what we want to do and how we are going to measure our effectiveness rather than getting into the weeds to talk about fish which is what we all want to talk about.

How many meetings did it take for the TNCR to get to the end point? What amount of effort does this take to identify objectives? The TNCR is a unique situation using a two-phase approach to inform a programmatic process for USACE. It depends on how you structure it. A more efficient approach is to begin with a 2-3 workshop for the facilitators to gather the information they need to begin developing models. The partnerships have been attempting to do this through a series of weekly 2-hour meetings. Scale is an issue for the partnerships, too. A smaller, less complex area (e.g., a refuge) than a sub-basin could get completely through the process in 2 days. The TNCR has 3-4 2-hour meetings per month for 6 months. A large part of this time has been spent clarifying the legislative constraints that are influencing Phase 1. Do you have facilitators for each of those meetings? Yes. Some meetings are just the facilitation team, and some are with the full group. The coordinators hope to finish Phase 2 in the next month or two. The facilitation team will debrief after that to consider how to design a process for the Ohio River Basin. There will also be some follow-up with the partners to get their input on challenges and preferences. The Ohio River partnership should be a much more streamlined process.

There are multiple products that can come out of a SDM process. There are also follow-up products that can help inform targeted research by identifying the pieces of information that are limiting the ability to make informed decisions.

What can the Executive Board do to assist with aligning the sub-basin partnerships' SDM processes and the ICAC/SAW/DAW effort to define the best metric for evaluating abundance? The roles and responsibilities of each group and their interactions are not clearly defined. For example, when the SAW comes up with a recommendation for evaluating abundance, how is that taken to the partnerships? What does the conversation look like? How do we apply that? What if the SAW recommendation is different than what came out of a partnership's SDM process?

Is there a way for the Executive Board to get out in front of these efforts? Should this be part of basinwide meeting? The basinwide meeting will be better timed in one year when the partnerships and SAW/DAW are further along. Should the SAW and DAW co-leads participate in the TNCR SDM meetings to understand where that group is at in its discussions? The state co-leads for both workgroups are from TNCR states and have been participating in the SDM process.

Rolling all this up into fact sheets will be helpful for higher level conversations with agency and other decision makers.

The board members were asked if they support the general path the coordinators described that they are guiding the partnerships down to make more informed decisions. It would be better to align the partnerships and ICAC/SAW/DAW efforts sooner rather than later. What is the alternative? The process that we are using now is that the partners develop a list of projects that weren't specifically developed to address a collaboratively agreed upon sub-basin scale objective, the partners rank the projects, a priority project list is developed based on mean rank, and projects are trimmed to meet the sub-basin's target funding level.

The board indicated that they support the direction the sub-basin partnership coordinators are headed with the partnerships. The coordinators encouraged the board members to talk with their staff that have been involved with the planning process to get their feedback and share it with the coordinators. The coordinators feel like they have good relationships with the partners and are getting honest feedback, but they also recognize that they work for the agency that holds the purse strings for these projects. From that perspective, the more feedback they get the better.

- ! Executive Board members were requested to talk with their staff that have been involved in the sub-basin invasive carp partnership planning process to get their feedback and share it with the respective partnership coordinator.

The UMR partnership decided not to fund two project proposals this year because they did not address the sub-basin scale objectives that were collaboratively developed. The Executive Board supports this approach to make sure that the funds are being utilized most effectively.

When these processes within the sub-basin partnerships are complete and we are looking at project proposals in FY26 (for example), does this help us answer how an additional \$1 million dollars should be spent (i.e., subsidies for increased removal versus monitoring)? Yes. It will help us know what is most important, how much is

needed, and where our shortcomings are. To this point, we have not identified what is needed to make a difference. We have been focused on what we can do with a set amount of funding within each sub-basin. Through this process, we can get to a list that identifies what is needed, what is funded, and what is unmet need.

What happened in the UMR that one partner was able to put a stop to the SDM process in that partnership? In this case, the partner just did not like this approach to making decisions. It requires everyone to be explicit about what their priorities are, even if that is to keep the lights on in your lab. It can make people feel vulnerable. That may or may not have been the issue in the UMR.

Invasive Carp Sub Basin Partnership Coordination Update

Caleb Aldridge, Neal Jackson, Rebecca Neeley
MICRA EB 1/30/24

1

Development of Objectives

- What are the values and concerns of the sub basin partnership?
- What is the partnership trying to achieve?
- What is the future desired state of the system?
- How will we achieve the future desired state?
- How will we monitor progress towards our goal?

2

Development of Objectives

- Progress to date by sub basin
 - UMR – Developed objectives and actions that can be taken to achieve objectives in 2023
 - MOR – Kansas has FY23 funds to initiate SDM process
 - TNCR – completed one round of SDM, working on a second round.
 - ORB – Developed draft objectives
 - LMR/ARW – working through parts of the SDM process. Completed a problem statement, crafted an objectives tree, and developed a decision model.

3

Development of Objectives

- What are the next steps
 - UMR –
 - MOR –
 - TNCR –
 - ORB –
 - LMR/ARW –

4

Development of Objectives

- When will partnership decisions be informed?
 - UMR – FY24
 - MOR – FY26
 - TNCR – FY25
 - ORB – FY26
 - LMR/ARW – FY25

5

Development of Objectives

- Questions or concerns?
 - What will implementation of the SDM process look like?
 - How will we infuse the objectives and actions needed to achieve objectives into sub basin partnership planning processes?
 - Is consistency between partnerships important? If so, how?
 - Aligning parallel efforts (example: metric development)
 - Partnerships
 - ICAC
 - SAW
 - DAW

6

FY24 Planning Process Update

- No federal budget
- Worked with partnerships to meet draft target funding levels (assuming \$31M funding level for the USFWS)
- Provided draft projects to ICAC for review

7

Coordination Transition

- Emily Pherigo left the MOR coordinator role in 2023. NJ has been filling that role in the interim. USFWS Columbia FWCO recently completed interviews to fill that position.
- NJ will transition away from ORB and TNCR coordination role in 2024. A new position will be hired at USFWS Cartersville FWCO to fill the ORB coordination role
- Opportunity to be proactive in considering how we support the sub-basin partnerships through coordination.

8

SDM process

- Develop Problem statement
- Create Objectives Hierarchy
- Identify metrics for measuring performance of actions on objectives
- Develop list or suite of alternative management actions
- Analyze the performance of suites of management actions on objectives
- Implement management actions that perform best
- Monitor actual performance of management actions

9

19) Wildlife Forever

Discussion Item:

Pat Conzemius, Wildlife Forever CEO, will join the Executive Board via Zoom at 4:00pm (EST) for a continued discussion about collaboration on invasive carp communications and policy outreach. The following Action Item resulted from the board's discussion following the meeting with Conzemius during the board's February 2023 meeting. The board may want to revisit this Action Item following the discussion with Conzemius.

The MICRA Executive Board and invasive carp committees will consider ways to engage with NGO's (e.g., Wildlife Forever) so they are more informed and aware of the collaborative inter-agency efforts to manage and control invasive carp throughout the basin.

Notes:

Conover introduced the discussion and Zach Burnside, Invasive Species Program Manager for Wildlife Forever, to the Executive Board. In discussion that Conover had with Pat Conzemius and Burnside following the board's discussion with Conzemius during the board's February 2023 meeting, a few items of interest for further discussion with the board were identified: 1) how can Wildlife Forever assist the states with outreach, which is Wildlife Forever's area of expertise; 2) working with MICRA on policy priorities; and 3) discussing how information is shared from the sub-basin partnerships, MICRA, and USFWS with NGO's and the public. Wildlife Forever is frequently asked questions by constituents or policy makers about invasive carp and they cannot speak to what is happening within the agencies and partnerships. The partner coordination meetings are structured for management agencies. For those not involved in the partnerships, there is little to no information communicate out about how the funding is being used and the progress that is occurring on the ground.

Wildlife Forever is a national, non-profit, conservation organization based out of Minnesota. Wildlife Forever runs the national Clean, Drain, Dry initiative implementing both prevention tools at access sites and outreach throughout the community in several forms (print, billboards, radio, tv, and on-line). Over the past 17-years Wildlife Forever has developed marketing expertise and methods for reaching the boating and angling public to influence behavior change for the prevention of AIS.

Within the last year or two, Wildlife Forever, has taken over leadership of the 'War on Carp' initiative that was started by Wade White. It has been rebranded as 'Citizen Carp Control'. They hope to leverage this program in partnership with several industry

partners – Yamaha ‘Right Waters’, NMMA, ASA, BASS, and others, as a public outreach tool for information, public engagement, and advocacy for the removal of carp.

A few years ago, Wildlife Forever pushed hard for the ‘commercial harvest incentive program’ to build up infrastructure for both the harvest and production of invasive carp. They would like to be a resource and asset to MICRA and the states and are interested in discussing how they can help further their efforts.

Discussion:

Wildlife Forever was in DC last week mostly focused on the Map Waters Act. Wildlife Forever is working on developing some mapping solutions for cleaning and decontamination station locations across the country. There was not a lot of traction on carp issues during those meetings. There was some discussion with Representative McCollum’s office about the Mississippi River Restoration and Resiliency Initiative (MRRRI) bill. Smith has heard that it is supposed to be reintroduced February 7th.

Smith asked what Wildlife Forever priorities MICRA might be able to assist with. Burnside said that Wildlife Forever would like to keep up with the public outreach and engagement on invasive carp the same way that they have done for their Clean, Drain, Dry initiative. Building a grassroots effort and helping people to care about the issue will hopefully give some more momentum behind some of the other programs we are trying to push. Making it a two-sided issue of subsidies and outreach to move this forward.

Are you doing all your carp work through Citizen Carp Control? Yes. The rebranding from the War on Carp Campaign was in response to some push back from agency staff regarding militaristic language. There is a lot of work being done looking at unintended consequences from how we speak about AIS issues. The program will not change functionally. It will still be used as a tool for outreach, education, and public engagement. It will also be used to advance legislative initiatives and science-based solutions for removing carp. It is mostly a Facebook page platform. The name change transition has not happened on the Facebook page yet, but a new website has been developed: citizencarpcontrol.org. They would like to host resources on the website and use it as a hub for the public to find their congress person and send them a letter in support of legislative initiatives Wildlife Forever is trying to move forward.

Is the audience for the website the general public and what is the action you’re trying to evoke from them. Yes, the audience is primarily the general public. The action is building awareness around the issue and understand the costs of invasive carp in our waterways. Clean, Drain, Dry has been used successfully to promote behavior change. That is the model for the Citizen Carp Control program.

Burnside is interested in hearing from the agencies and MICRA how Wildlife Forever can be used as an asset to their efforts. Smith asked Burnside for Wildlife Forever's support on the Mississippi River Basin Fishery Commission and permission to use the organization's logo on the coalition website. Smith would recommend on-going dialogue with Wildlife Forever to identify where priorities align so the organizations can support one another.

What type of information is needed to support the Citizen Carp Control Facebook page? Short videos, pictures, links to articles, and brief sound bites would all be useful for disseminating information to the public. Wildlife Forever would be happy to cross post information that agencies provide them. If the agencies provide content, that could provide a means of getting desired facts out to the public. Access to Flickr pages could be helpful, i.e., USFWS and proposed MICRA Flickr pages. Smith has created an Instagram account for the Fishery Commission coalition and needs to create a Facebook account. Information can be cross posted on the two accounts.

How do we build the synergy between the science-based organizations and Wildlife Forever? The content development and sharing can go both directions. Wildlife Forever can be a resource hub for the states. They could also assist the states individually by sharing information about what is happening within a state. The question is how to make the best use of the different skill sets to create the greatest synergy. Wildlife Forever is looking for increased participation and transparency from the agencies and for that information to be more readily available to the public.

It is important that we are telling the correct or complete story. For example, taking a single part of a partnership's overall effort without the correct context could convey the wrong message about what the agencies are working to accomplish as a group. It is important to encourage communications priorities as the sub-basin partnership and basin-wide scales. It would be best to develop these things holistically and then feeding them into these different avenues for getting the word out. A strategy for sharing a complete message is needed. This is hopefully something that the USFWS has some capacity to assist with soon.

MICRA began working on a communications plan several years ago and table that effort. There appears to be an immediate need for an invasive carp specific communications strategy. Perhaps we should schedule a focused session on invasive carp communications at an upcoming Executive Board meeting. Who would do the communications work? That is full-time work with dedicated staff within the agencies. We know what the messages are, we just don't know the best ways to communicate them to the different audiences. Developing the strategy would clarify our

communications needs. MICRA may not have the resources to implement a communications plan, but this is the right group to identify the communications needs. Then the individual states, USFWS, and ngo's can help to address those needs.

Wildlife Forever develops the audiences. We need to provide the science-based content that we want the public to be aware of. Providing content and developing a communications plan are two very different things. If your simply providing content, you don't know if you're having the desired affect without a plan.

Wildlife Forever is interested in content now for the Citizen Carp Control program. Content can be sent to Zach Burnside at zburnside@wildlifeforever.org.

- ! Smith will send Zach Burnside the sign-on letter for the Mississippi River Basin Fishery Commission and the most recent version of the Mississippi River Restoration and Resiliency Initiative legislation.
- ! Smith will share MICRA's Congressional talking points with Zach Burnside and Pat Conzemius at Wildlife Forever before MICRA's fly-in in March.
- ! Executive Board members and the invasive carp coordinators (sub-basin partnerships and ICAC) will encourage agency staff to provide science-based content, pictures, and videos to Wildlife Forever for sharing with the public through their Citizen Carp Control platform.

Part of the importance of continuing a dialogue with Wildlife Forever is their CEO has been clear that they will continue advocate for resources for invasive carp removal. It's important that they understand what the agencies are trying to collectively accomplish and what is needed to help the agencies. Smith has been putting a lot of work to sharing MICRA's talking points and messages for Capitol Hill with Wildlife Forever. It is in our collective interests to make sure that they are not advocating for something that is counterproductive to the agencies' efforts. Recognizing the fact that they are an NGO and they are looking for money to support a role for them in invasive carp outreach, they are also a partner that could potentially assist MICRA on the advocacy side.

20) Tour of Tennessee Aquarium Conservation Institute

Information Item:

Executive Board members will meet in the classroom and for a 1-hour tour of the Conservation Institute research facilities at 8:30.

21) Paddlefish Sturgeon Committee Update

Information Item:

Sara Tripp, IL DNR, will provide the Executive Board with an update on the Paddlefish/Sturgeon Committee. Topics for discussion will include:

- Support letter for North American Sturgeon and Paddlefish Society's (NASPS) initiative for establishing National Sturgeon Day on October 27th.
 - NASPS was requested to pay more money than they were willing to commit.
 - Re-evaluating and may implement a small fund-raising campaign to assist with the cost.
 - May require a vote of the governing board at their next meeting on 9/21.
- Basinwide Paddlefish Management Framework progress delayed.
 - The framework workgroup held several virtual meetings early in 2023 to begin work on the framework.
 - Dr. Scarnecchia was out of commission for personal health reasons for nearly the last 9-months.
 - He has resumed work on the framework and expects to provide the committee with a draft by late summer.
 - The workgroup will review the framework and consider the need for an in-person meeting this fall to move the document along.
- Committee Meeting
 - The committee typically meets in the first quarter of the calendar year.
 - The Chair will be recommending a brief virtual meeting in the first quarter and an in-person meeting in early Fall in conjunction with a meeting of the framework workgroup.

Notes:

Sara Tripp reviewed the update provided in the briefing book.

Discussion:

Are there any committee needs from the Executive Board? Not at this time.

Lake Sturgeon have been brought up several times during the board meeting. That may be something for the committee to consider during their next meeting and review of the MICRA priorities document.

Many of the action items from the Paddlefish Commercial Harvest States report were sequenced to follow the completion of the basinwide framework so that is the committee's current focus.

22) Mississippi River Basin Panel on AIS Update

Information Item:

Rob Bourgeois, LDWF, will provide the Executive Board with an update on the Mississippi River Basin Panel. A written report that was provided for the ANS Task Force meeting January 24-25, 2024, is provided below.

The MRBP received a letter from the Great Lakes Panel, provided below, requesting “assistance in addressing the threat of naturally reproducing and self-sustaining populations of grass carp, *Ctenopharyngodon idella*, to our nation’s waterways and freshwater fisheries.” A similar letter was sent to each of the ANS Task Force Regional Advisory Panels, and a discussion of the letter was planned for the January 2024 ANS Task Force meeting.

The MRBP shared the Great Lakes Panel letter and a draft response letter with the MICRA delegates that allow stocking of diploid grass carp and requested information from the delegates “to make sure the member agencies' perspectives are fairly and accurately represented in the correspondence with GLP and during discussions at the ANS Task Force meeting.” A copy of the email to the diploid state delegates and the response provided to the Great Lakes Panel are also provided below. Responses were received from five of the six states and are summarized below. An overview of the discussion at the ANS Task Force meeting will be provided to the Executive Board.

Notes:

Rob Bourgeois reported that the MRBP did not meet since the Executive Board’s August 2023 meeting. The MRBP will meet April 16-18, 2024, in Little Rock, Arkansas. The ANS Task Force and Regional Panels Principals met January 23-25, 2024, in Reston, Virginia.

Conover provided an overview of recent grass carp correspondence provided in the briefing book. He also reminded the board members of the recommendations in the 2014 MICRA Grass Carp Report that provide a framework “for a consistent national policy strategy for Grass Carp to minimize the risk of unintentional and illegal introductions of diploid and triploid Grass Carp in the U.S.” He then reviewed the updates provided by the delegates in the diploid grass carp states (see summary table below). Only Colorado and Arkansas have prohibited stocking of diploid grass carp since the report was published. Iowa and Mississippi attempted a regulation change but pulled back following public push back. Nebraska is currently attempting a regulation change. Missouri added agency restrictions on diploid grass carp. Only Alabama has

taken no action; however, they did report that they support the recommendations in the MICRA grass carp report and the MRBP response letter.

There is increasing discussion about grass carp within the Regional Panels and the desire for a national policy strategy for grass carp is expected to be on the agenda for the ANS Task Force's May meeting. All diploid grass carp states, except Hawaii, are in the Mississippi River Basin. MICRA or the diploid grass carp states may be contacted by other states or Regional Panels regarding the interest in a national policy strategy that prohibits the live transport and stocking of diploid grass carp.

Discussion:

What is the relationship between the MRBP, ANS Task Force, and AIS Committee? The AIS Committee is a standing committee under the MICRA Executive Board that focuses on MICRA's AIS priorities. The national ANS Task Force was established by the Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990 (NANPCA) and has six regional advisory panels. MICRA was requested to participate as an *ex officio* member of the ANS Task Force and to host one of the advisory panels – the Mississippi River Basin Panel (MRBP) on AIS. As the host organization, MICRA serves as the fiscal agent and provides coordination and operational support for the panel. MICRA receives grant funding (\$50,000) from the USFWS each year to support the operations of the MRBP. The ANS Task Force and the Regional Panels are subject to the Federal Advisory Committee Act (FACA) and the MRBP is focused on supporting the ANS Task Force strategic plan. There is considerable overlap in membership of the two groups, but the MRBP membership is broader and includes Canadian, academia, and industry representation. The MICRA AIS Committee has more ability to address policy related issues so there are interests within the MRBP that are passed over to the MICRA AIS Committee to address.

Mississippi River Basin Panel (MRBP) Update to the ANS Task Force January 16, 2024



MRBP Coordination Meetings

- The MRBP held a hybrid all-panel coordination meeting at Barr Lake State Park in Brighton, Colorado from July 26-28, 2023. The meeting was hosted by Colorado Parks and Wildlife. There were forty-four attendees during the three-day event that had presentations on the bait pathway, priority pathogens, fish health management, horizon scanning, risk assessments, organisms in trade, and invasive carp management. MRBP committees held meetings in conjunction with the event and participants toured a watercraft inspection and decontamination station.
- The next meeting of the MRBP will be hosted by the Arkansas Fish and Game Department in Little Rock, Arkansas from April 9-11, 2024.

Recent MRBP Accomplishments

- The Mississippi River Basin Panel on Aquatic Invasive Species officially changed their name from the former Aquatic Nuisance Species. A logo revision and rebranding project is underway with a website redesign anticipated in the future.
- The MRBP held three elections in the past year and welcomed Patrick Kroboth, USGS, as the new Research and Risk Assessment Committee Chair; Rob Bourgeois, LA-DWF, as the new MICRA AIS Committee Chair and MRBP Liaison; and Amy Kretlow, WI-DNR, as the new First Term Co-Chair.
- The Prevention and Control Committee surveyed members and compiled a list of priority invasive pathogens that have the potential to be spread through the bait pathway.
 - Over the next year, the Education and Outreach Committee will examine current educational resources on these pathogens and determine needs for potential future project work. Similarly, the Research and Risk Assessment Committee will conduct a needs assessment to identify research gaps that may be considered for future MRBP project work.
 - The MRBP has compiled a list of Fish Health Experts at the federal and state level in hopes of fostering collaborative efforts that will ultimately help to reduce the spread of invasive pathogens through the aquatic bait pathway.
- The Prevention and Control Committee examined State ANS Plans within the MRBP and compared the plans' priority species lists in preparation for revising the MRBP's Most Troublesome AIS List (2003).
- The Prevention and Control Committee surveyed members and compiled a spreadsheet of state regulated invasive species that are also on the federal injurious wildlife list to

inform the revision of the MRBP's Most Troublesome AIS List and to contribute to conversations regarding the Lacey Act.

- The Prevention and Control Committee surveyed members and updated a compilation of state regulations on each invasive carp species to aid in interjurisdictional invasive carp management efforts.
- The Research and Risk Assessment Committee updated contact information on the black carp identification and reporting guide “Keep, Cool, Call.”
- The Research and Risk Assessment Committee developed an informational fact sheet summarizing the MRBP's Tributary Data Project with Southern Illinois University, which was conducted from 2021-2022. The fact sheet was distributed through the MRBP and American Fisheries Society chapters.
 - The MRBP coordinated the collection of water samples from across the Mississippi River Basin during the 2021 field season for an assessment of water chemistry (strontium, barium, calcium, magnesium, and manganese concentrations and stable oxygen isotope ratio) of main-stem rivers and tributaries in the Basin, focusing on rivers where limited or no water chemistry data are available. Analyses of otolith stable isotopes and elemental compositions can provide insights regarding environmental history of individual fish in a variety of environments, and are particularly useful for identifying environments used by fishes during early life stages. The water chemistry data needed for these analyses were missing or incomplete in many parts of the Basin. This project was designed to fill in these knowledge gaps, which will benefit ANS and fisheries management for all MRBP members.
 - The project produced a data set of water chemistry data for the Mississippi River Basin that can be used to inform otolith microchemistry studies on invasive fishes. All data generated by this project is archived with the Southern Illinois University data and publications repository. The data is open source and may now be accessed by anyone.
- The Research and Risk Assessment Committee provided contract support and management for a multi-year MRBP agreement with the University of Nebraska Omaha to conduct and complete a silver carp genetics project titled, “Identifying Target Spawning Populations through Genomic Analysis for Directed Management”. This project has just completed and the final report will be presented at the April 2024 MRBP Meeting in Arkansas.
- The Education and Outreach Committee is considering hosting a Community Based Social Marketing (CBSM) Workshop with Doug McKenzie-Mohr in 2024. The MRBP is open to partnering with other Panels on the workshop if there is interest.

[EXTERNAL] Regional panel discussion and coordination regarding Grass Carp with MRBP

Fischer, Eric D <EFischer@dnr.IN.gov>

Fri 6/30/2023 1:51 PM

To: Andrew.Stump@ky.gov <Andrew.Stump@ky.gov>; Cole R. Harty <cole.r.harty@tn.gov>; Conover, Greg <greg_conover@fws.gov>

Cc: Cecilia Weibert <cweibert@glc.org>

📎 1 attachments (122 KB)

MRBP Diploid Grass Carp letter-6.30.23.docx;

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Good afternoon,

I am writing on behalf of the Great Lakes Panel on Aquatic Nuisance Species (GLP) to request your assistance in addressing the threat of naturally reproducing and self-sustaining populations of grass carp, *Ctenopharyngodon idella*, to our nation’s waterways and freshwater fisheries. The GLP would like to work with the other regional panels to understand their members’ level of concern about this species and advocate for prohibition of the stocking of diploid grass carp. The GLP took steps in 2019 to work with the Council of Great Lakes Fisheries Agencies to advocate for the prohibition of introduction and stocking of diploid grass carp in the six U.S. states where it remained legal. Since that time, several states have made the decision to no longer stock or use diploid grass carp in their own work, but none have successfully passed legislation preventing the movement or stocking of diploid grass carp within the waters of the state. Our goal in sending these letters to each regional ANS panel is to open a dialogue, from panel to panel, to gain a better sense of understanding on the members’ opinions and priorities about this issue, and identify areas where it makes sense to work together to push the issue forward.

Our letter contains additional context about this request, including five specific questions that we are seeking your feedback on. As noted in the letter, we are happy to discuss these questions together via a virtual meeting, or to receive written responses – whatever your communication preference is, we are open to any dialogue. I look forward to your response and continuing our panels’ work to protect our water from the negative impacts of AIS.

Respectfully,

Eric Fischer
Current Chair of the GLP panel
 Indiana Aquatic Invasive Species Coordinator
 402 W. Washington Street, Room W-273
 Indianapolis, Indiana 46204
 317-234-3883 efischer@dnr.IN.gov



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glc.org/work/glpans

Chair: Eric Fischer, Indiana Department
of Natural Resources
Vice Chair: Kelly Pennington, Minnesota
Department of Natural Resources

June 30, 2023

Dear Andrew Stump, Cole Harty, and Greg Conover,

I am writing on behalf of the Great Lakes Panel on Aquatic Nuisance Species (GLP) to request your assistance in addressing the threat of naturally reproducing and self-sustaining populations of grass carp, *Ctenopharyngodon idella*, to our nation's waterways and freshwater fisheries. The GLP would like to work with the other regional panels to understand their members' level of concern about this species and advocate for prohibition of the stocking of diploid grass carp. This non-native species has been an important tool for aquatic vegetation control since the 1960s. Grass carp are highly specialized feeders that, in high densities, often consume all aquatic vegetation in a system, which in turn has direct and indirect effects on aquatic communities and water quality (e.g., Dibble and Kovalenko 2009). Recently, natural reproduction of grass carp has been documented in the Great Lakes (Embke et al. 2016), the Colorado River Basin (Brandenburg et al. 2019), and tributaries to Truman Reservoir (Hayer et al. 2021). Grass carp are also reproducing in the Trinity River in Texas and throughout the lower and middle Mississippi River and its larger tributaries. Self-sustaining populations of grass carp have the potential to damage valuable natural resources both within and beyond the jurisdictions that constitute the Mississippi River Basin Panel on Aquatic Nuisance Species (MRBP). Their reproduction in tributaries to the Great Lakes is creating international concern about the production, shipment, and stocking of *diploid* grass carp in the U.S. Thus, many states and partner groups are advocating for a consistent, national policy that permits only the stocking of certified sterile triploid grass carp.

The GLP would like to work with the MRBP and the other regional ANS panels to assess the level of concern about the stocking, spread, reproduction of established populations, and impacts of diploid grass carp in your jurisdictions. As of the writing of this letter, stocking of diploid grass carp remains legal in Alabama, Arkansas, Iowa, Mississippi, Missouri, and Nebraska.

As recorded in the U.S. Geological Survey's Nonindigenous Aquatic Species database (USGS-NAS, <https://nas.er.usgs.gov/queries/FactSheet.aspx?SpeciesID=2947>), diploid grass carp have been stocked historically in MRBP jurisdictions. Diploid grass carp also have been captured in areas where they have not been stocked, indicating evidence of spread or illegal stocking. There is also natural reproduction in several waterbodies in member states of the MRBP.

As a response to this threat, and the threat posed by bighead carp, black carp, and silver carp, federal and state agencies are spending approximately \$40 million annually to prevent their introduction, establishment, and spread. This includes spending to develop efficient, targeted tools and techniques to reduce the abundance of wild invasive grass carp.

There are several reasons to support the sale and use of triploid grass carp over diploid. It's widely recognized that the use of functionally sterile, triploid grass carp is an environmentally safer alternative to diploid grass carp by significantly reducing the risk of self-sustaining populations and negative ecological impacts. Although initially more expensive to procure at wholesale than diploid fish, farm owners can recover the additional cost of purchasing triploid grass carp in the retail price to consumers. The cost to produce and purchase triploid grass carp is substantially less than the cost of chemical control of aquatic vegetation and eliminates risks caused by using toxic herbicides. In addition, the useful life of triploid grass carp for providing vegetation control is marketed at two years more than diploid carp, resulting in a lower overall cost to consumers.

Convened by the Great Lakes Commission under section 1203 of the Nonindigenous Aquatic Nuisance Prevention and Control Act (P. L. 101-646) to coordinate activities that pertain to aquatic nuisance species in the Great Lakes Basin. Representation from federal, state, regional and municipal governments, binational agencies, tribal authorities, private user groups and commercial interests.

Reproduction of grass carp in the upper Colorado River Basin underscores the threat of stocking diploid grass carp. Recovery of the *Gila* spp. chubs and Razorback Sucker *Xyrauchen texanus* are threatened by destruction of seasonal wetlands required by early life stages of these native and endangered species. We believe that there are many water bodies, including upstream tributaries, still uninvaded by diploid grass carp in the WRP jurisdictions and that WRP members have a strong desire to protect those water bodies and the ecosystems and recreational opportunities that they support. Despite evidence of spread and reproduction, taking actions to prevent any future introductions is a tangible way to limit additional spread, establishment, and reproduction of new populations.

The GLP would like to work with MRBP and the other four regional ANS panels to address this issue collaboratively. To that end, we would like to know:

- What is the MRBP membership’s level of concern about naturally reproducing and self-sustaining populations of grass carp?
- Are MRBP members aware of any established/reproducing populations within MRBP jurisdictions that are not currently recorded in the USGS-NAS database?
- Are you willing to engage state agencies on researching whether there are naturally reproducing or self-sustaining populations of grass carp in MRBP jurisdictions?
- What is the MRBP membership’s level of concern about permitting stocking diploid grass carp for vegetation control?
- What are the MRBP membership’s opinions about replacing the stocking of diploid grass carp with stocking of triploid grass carp?

Based on the responses that we receive from each regional ANS panel, there may be an opportunity to work together to provide an update to the Aquatic Nuisance Species Task Force on a joint recommendation provided by the GLP and the Mississippi River Basin Panel on Aquatic Nuisance Species in 2015, or to submit a new joint recommendation based on the interest of other regional ANS panels.

Respectfully,

Eric Fischer
Current Chair of the GLP panel
 Indiana Aquatic Invasive Species Coordinator
 402 W. Washington Street, Room W-273
 Indianapolis, Indiana 46204
 317-234-3883 efischer@dmr.IN.gov

References

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Hayer, C.-A., M.A. Bayless, C.A. Richter, A.E. George, and D.C. Chapman. 2021. Grass Carp reproduction in small tributaries of Harry S. Truman Reservoir, Missouri: implications for establishment in novel habitats. *North American Journal of Fisheries Management* 43:154-163.

Response requested: diploid grass carp letters and ANS Task Force discussion

Conover, Greg <greg_conover@fws.gov>

Thu 11/30/2023 9:43 AM

To:Greene, Chris <Chris.Greene@dcnr.alabama.gov>;Benjamin Batten <ben.batten@agfc.ar.gov>;Joe Larscheid <Joe.Larscheid@dnr.iowa.gov>;Jerry Brown <Jerry.Brown@wfp.ms.gov>;Bruce Drecktrah <Bruce.Drecktrah@mdc.mo.gov>;Dean Rosenthal <dean.rosenthal@nebraska.gov>
Cc:amy.kretlow <amy.kretlow@wisconsin.gov>;Rob Bourgeois <rbourgeois@wlf.la.gov>;MICRA <micra@micrarivers.org>

📎 3 attachments (1 MB)

MRBP Diploid Grass Carp letter-6.30.23.docx; MRBP Diploid Grass Carp GLP Letter Response 12.2023.docx; MICRA Grass Carp report to USFWS final no appendices.pdf;

MICRA Delegates,

My apologies up front for the length of this email. Four specific requests are listed in **bold** below. The Mississippi River Basin Panel (MRBP) on AIS received the attached letter from the Great Lakes Panel (GLP) on ANS referencing natural reproduction of grass carp in the Colorado River Basin, Trinity River in Texas, tributaries of Truman Reservoir, and the Great Lakes as cause for "international concern about the production, shipment, and stocking of *diploid* grass carp in the U.S." that has resulted in "many states and partner groups are advocating for a consistent, national policy that permits only the stocking of certified sterile triploid grass carp." The GLP specifically identifies Alabama, Arkansas, Iowa, Mississippi, Missouri, and Nebraska as states in the Mississippi River Basin where stocking of diploid grass carp remains legal. (The only other state in the nation that allows stocking of diploid grass carp is Hawaii.) The GLP goes on to request the MRBP's assistance 1) understanding our member agencies' level of concern about the stocking, spread, reproduction of established populations, and impacts of diploid grass carp in your jurisdictions, and 2) in advocating for prohibition of the stocking of diploid grass carp. Similar letters were sent to all six regional advisory panels to the ANS Task Force.

The MRBP Executive Committee has drafted the attached response letter to the GLP and this topic will be discussed at the ANS Task Force meeting in January. MICRA and the MRBP have both been on record for more than a decade expressing concern about the risk of unintentional and illegal introductions of diploid and triploid Grass Carp in the U.S. and advocating for a consistent, national policy that permits only the stocking of certified sterile triploid grass carp. Amy Kretlow (WI), Rob Bourgeois (LA), and I will be attending the ANS Task Force meeting in January representing MICRA and the MRBP. We, and the MRBP Executive Committee, want to make sure the member agencies' perspectives are fairly and accurately represented in the correspondence with GLP and during discussions at the ANS Task Force meeting.

1. **Please let us know if you have any concerns regarding the draft MRBP letter by next Friday, December 8, so they can be discussed on our MRBP Executive Committee call the following Monday.**
2. **If applicable, please advise on changes to your state's regulations to prohibit the use of diploid grass carp and/or require only the stocking of certified triploid grass carp so that we can provide accurate information.**
3. **In response to the GLP's request, please let us know if you would like a different perspective from those of MICRA and the MRBP to be communicated regarding your agency's level of concern about stocking, spread, reproduction of established populations, and impacts of diploid grass carp.**
4. **Similarly, please let us know if you would like to provide any perspective, information, or discuss this topic with us as we prepare for the discussion at the ANSTF meeting in January.**

For those that aren't aware, the USFWS funded MICRA to complete a proposed 'National Analysis of Grass Carp Regulation, Production, Triploid Certification, Shipping, and Stocking' (National Analysis) in June 2012. MICRA sub-contracted HDR Engineering, Inc. to complete the independent National Analysis of the Grass Carp industry in the U.S. and to provide recommendations to prevent unintentional and unintentional and illegal introductions of diploid and triploid Grass Carp. Attached is the project report that MICRA submitted to the USFWS. (The Executive

Summary is a quick read at a little more than 2 pages.) Based on the results of the National Analysis, recommendations provided by HDR, and comments received from USFWS, state, and Grass Carp industry representatives, MICRA developed a set of eight minimum recommendations for a consistent national policy strategy for Grass Carp to minimize the risk of unintentional and illegal introductions of diploid and triploid Grass Carp in the U.S. The MRBP worked closely with the MICRA Executive Board in managing this project and developing the report. The MRBP also has kept implementation of the report recommendations on the panel's work plan.

Thank you!
Greg

Greg Conover
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December 18, 2023

Dear Mr. Eric Fischer,

On behalf of the Mississippi River Basin Panel (MRBP) on Aquatic Invasive Species (AIS), we appreciate the Great Lake Panel (GLP) letter dated June 30, 2023, requesting assistance in addressing the threat of naturally reproducing and self-sustaining populations of grass carp, *Ctenopharyngodon idella*, to our nation’s waterways and freshwater fisheries. The MRBP agrees that there is a need to work collaboratively across regional panels to advance a national policy that aligns state and federal authority to further the prohibition of stocking diploid grass carp and consistent, uniform regulations that allow stocking of only USFWS certified triploid grass carp.

The MRBP has recently updated a shared document that describes member states’ invasive carp regulations. This document is intended to inform the national conversation related to grass carp and other invasive carp species. Given the MRBP’s geographic overlap with other panels, this document includes all the Great Lakes Panel states, except Michigan, and several Western Regional Panel and GSARP states. The MRBP offers to expand this resource to include additional states.

The Mississippi Interstate Cooperative Resource Association (MICRA) developed a report for the U.S. Fish and Wildlife Service in 2015 titled “The use of grass carp (*Ctenopharyngodon idella*) in the United States: production, triploid certification, shipping, regulation, and stocking recommendations for reducing spread throughout the United States”. The first five recommendations address state regulatory improvements and the need to provide a consistent national policy and strategy for grass carp. The remaining recommendations are intended to improve the efficacy of the USFWS National Triploid Grass Carp Inspection and Certification Program and to address education and outreach needs. The MRBP recommends this report be used as a framework to inform and advance cross-boundary collaboration.

The MRBP is concerned about the stocking, spread, reproduction of established populations, and impacts of diploid grass carp within the basin and across the nation. As such, we have referred this topic, and specifically your request for the panels to work collaboratively, to the ANS Task Force for discussion at their upcoming meeting in January. It is our understanding that invasive grass carp is now an agenda item at that meeting. We look forward to engaging with the GLP and other regional panels through the ANS Task Force. The MRBP Executive Committee will revisit this topic following that discussion.

Respectfully,

Cole Harty, Second-Term Co-Chair of the MRBP
 292 San Diego Road
 Carbondale, Illinois 62901

mrbp@micrarivers.org - www.mrbp.org

cc: Susan Pasko, ANS Task Force Executive Secretary

2024 Diploid Grass Carp States MRB

CO: USFWS certified triploid only w/ restrictions

NE: diploid (attempting a regulation change)

IA: diploid (**attempted a regulation change**)

MO: diploid (added agency restrictions)

AR: USFWS certified triploid only for stocking

MS: diploid (**attempted a regulation change**)

AL: diploid

23) Aquatic Invasive Species Committee Update

Information Item:

Rob Bourgeois, LDWF, will provide the Executive Board with an update on the Aquatic Invasive Species Committee. The committee has been working to develop a new template for state fact sheets. The template is provided below and will be discussed with the Executive Board. The template, created as a fillable .PDF, is two-sided. One side is about AIS, the other side is about interjurisdictional fisheries management.

Notes:

Bourgeois reviewed the new 2-sided state fact sheet template provided below. LDWF provided a fillable PDF template. The board members were asked what the most useful information would be to add into the space created on the AIS fact sheet by moving the economic impact of freshwater fishing table to the native species fact sheet. There has been some discussion about filling the space on the AIS fact sheet with state AIS expenditure data, but the states may not have that information easily available. The board members were also asked how much standard language (i.e., consistent bullets) they would like on the native fish fact sheet. For example, one or more bullets regarding the fishery commission.

Five states have tested the template. It appears to work well and save time but there are some additional modifications that are needed before it is ready for wider distribution.

Discussion:

Are we shooting to get fact sheets from all 28 states? That would be great, but the priority will be the states that Ashlee has identified as the highest priority. The next priority will be any state that Ashlee schedules a visit with.

Can we put in the blank space the economic impact that AIS are wreaking on the state? Is that possible to estimate? We likely would not have that information in a consistent way for each of the states. Expenditures would likely not be impactful for many states. Some states just don't have much funding to direct to AIS control.

If you only use one side of the fact sheet or the other with an individual office, the economic table could be used on both sides. Leave the native species side just the way it is. It would be great to add some kind of economic component to the AIS fact sheet. Maybe we relay the message that it is better to spend a smaller amount on the front end to prevent introduction and establishment than it is to spend more later on control and

management. We could use the invasion curve graphic that shows the relative expense of prevention versus control.

Do we have any reliable estimates of economic impacts of AIS in the US or invasive carp in the US? That would be an impactful number. There is not much on either fact sheet regarding invasive carp. We should make sure to include some information on invasive carp, even if it is a map of their distribution in the blank space.

On one of the previous versions, there was a sub-basin map that showed presence of invasive carp. For the states that are removing invasive carp, we could use that space to show annual and/or long-term totals.

Perhaps we give the states a few options to use how works best for them this year. The AIS Committee can revisit after this year to continue to refine.

AQUATIC INVASIVE SPECIES (AIS)

A problem for ALL Louisiana residents

ONCE CONSIDERED AN ISSUE FOR NATURAL RESOURCE MANAGERS ONLY, AIS HAVE BECOME A PROBLEM FOR ALL CITIZENS.

Aquatic invasive species are non-native species that are a major problem in the U.S. and represent a threat to the environment, as well as a threat to water suppliers, industry, power generation, recreation, and ultimately, the U.S. economy.



MAJOR AIS ISSUES IN LOUISIANA INCLUDE

Reproducing populations of invasive carp are expanding in both range and numbers within the major rivers of the state impacting fisheries production and recreation.

- Apple Snails are increasing their range and disrupting food chains.

- Giant Salvinia, Water Hyacinth and other invasive plants are impacting boating and other recreation and modifying aquatic habitat.

HOW IS LOUISIANA ADDRESSING AIS?

- Collaborating with other states to implement the Lower Mississippi River Invasive Carp Control Strategy Framework.

- Treatment of 32,000 acres of invasive aquatic vegetation including 19,000 acres for Giant Salvinia and 9,000 acres of Water Hyacinth.

- Developing prohibited list of species to slow down the next invasive species.

- Supporting the call for a Mississippi River Basin Fishery Commission with a dedicated funding source to provide increased collaboration among the 31 state management agencies, and their federal and tribal partners, for the effective management of shared fishery resources, including AIS, throughout the Basin.



MORE INFORMATION

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NATIVE FRESHWATER FISHERIES

INTERJURISDICTIONAL (IJ) FISHERIES MANAGEMENT

THERE ARE MORE THAN 90 FISH SPECIES AND 150 RIVERS IN THE MISSISSIPPI RIVER THAT COME UNDER INTERJURISDICTIONAL MANAGEMENT

“Interjurisdictional fish” are fish species that move either short or long distances between political jurisdictions in the completion of their life cycles, and therefore, come under the management of two or more governmental entities.



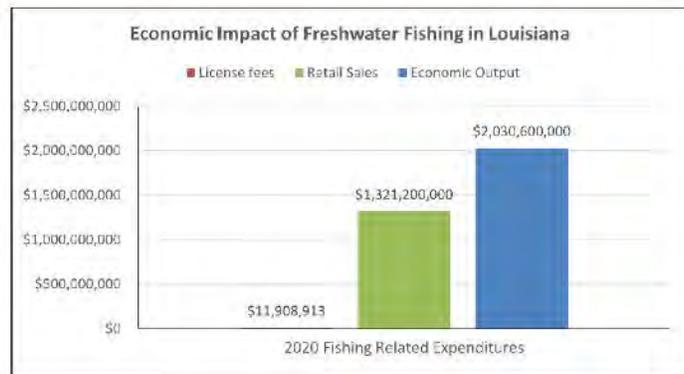
MAJOR IJ FISHERIES IN LOUISIANA INCLUDE

Reproducing populations of invasive carp are expanding in both range and numbers within the major rivers of the state impacting fisheries production and recreation.

- Apple Snails are increasing their range and disrupting food chains.
- Giant Salvinia, Water Hyacinth and other invasive plants are impacting boating and other recreation and modifying aquatic habitat.

IJ FISHERIES MANAGEMENT IN LA

- Collaborating with other states to implement the Lower Mississippi River Invasive Carp Control Strategy Framework.
- Treatment of 32,000 acres of invasive aquatic vegetation including 19,000 acres for Giant Salvinia and 9,000 acres of Water Hyacinth.
- Developing prohibited list of species to slow down the next invasive species.
- Supporting the call for a Mississippi River Basin Fishery Commission with a dedicated funding source to provide increased collaboration among the 31 state management agencies, and their federal and tribal partners, for the effective management of shared fishery resources, including AIS, throughout the Basin.



MORE INFORMATION

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24) Webpage Dashboard Demonstration

Discussion Item:

At the Executive Board's August 2023 meeting, Rebecca Neeley and Ross Ruehmann, USFWS La Crosse Fish and Wildlife Conservation Office, provided a demonstration on how a dashboard could be developed for the MICRA website to get information out to the public or as needed by MICRA. The board was interested in further developing the demonstration dashboard into a base tool that could be added to the MICRA website and shared with the MICRA committees and delegates to identify future needs and additional data layers that could potentially be built into the dashboard to meet their needs. The initial layers discussed for the base dashboard include the MICRA sub-basin management units, USGS HUCs, Congressional districts, MICRA's list of 6th order and larger interjurisdictional rivers. Two potential next steps were identified by the Executive Board: 1) information that would be useful for MICRA's DC fly-in in March, and 2) using the dashboard to visualize and report out on how USFWS invasive carp funding is being used throughout the basin. The following two action items resulted from the discussion.

- ! The Executive Board will consider what a few top priority communications needs or maps might look like and the data layers that would be needed to develop them.
- ! Rebecca Neeley will determine the possibility of the La Crosse FWCO developing a web-based dashboard tool for MICRA that includes MICRA sub-basin group boundaries, congressional districts, MICRA's 6th order and larger streams, and the characterization of relative abundance of bigheaded carps similar to the figure included in the USFWS-led Report to Congress.

Neeley and Ruehmann will provide an update on progress developing the base dashboard for the MICRA website.

Notes:

Neeley requested the board members' feedback and input on what information they would like to see included in the dashboard. The UMR invasive carp data was added to the demonstration dashboard as an example of what could be created for the entire basin. Ruehmann walked through a demonstration with the added functionality that was built into the dashboard since the previous demonstration.

The dashboard now includes a data table for invasive carp projects in the UMR. There are widgets and filters that can be tied with the data imbedded in the dynamic web map.

Pop-up tables are fully customizable with desired information and links to external websites or data. Congressional districts have been added as a data layer. Congressional districts can be selected to view pop-up attribute tables with detailed information on the selected district.

An excel data sheet with information on UMR invasive carp projects including year, title, lead partner, cooperating agencies, and funding by year was used to generate a list of projects on the dashboard. Projects can be linked to additional information, e.g., annual project report on the MICRA web site, and information such as lead state can be highlighted on the web map. A chart of annual funding in the UMR was also added to the dashboard. Selecting a year on the chart filters the table for a list of projects funded that year. The information that is built into the dashboard is dependent on the story that MICRA wants to tell. Data, such as the annual funding, can be formatted into different types of charts. For example, a pie chart could be created to show the allocation of annual funding to the different sub-basins. The dashboard can be configured so that you can filter by a Congressional district to show any of MICRA's IJ rivers and any invasive carp projects occurring within the district. At this point, projects are only linked at the state level based on the lead agency. It may be difficult to create a project area in the map for many of the projects. Some simply include a list of pools where the work will be done.

Discussion:

What is the foundation for the dashboard? It is an ESRI product. Any spatial data or tabular data is pulled into ArcGIS Pro for manipulation and transformation. The dashboard is published on ArcGIS on-line where it is currently hosted. This is where the map is built out. Other layers can be added and turned on or off depending on the story you want to tell.

Will the work that Angela Erves is doing on the IJ rivers be able to be included as a data layer? Yes. Providing Ruehmann with the final list of MICRA's IJ rivers is an action item from the board's last meeting. HUC layers are currently included in the dashboard and can be turned on and off.

Is Angela producing static maps? No, she provided an ESRI product to review the information. If she is building static maps, they can be linked to. The final product will be data tables and static maps of the basin and sub-basins.

Was the status map of bigheaded carps that is used in the USFWS's Report to Congress added to the dashboard? No, but it could be added. We have that spatial data.

Is this something that the USFWS would host and would be linked to from the MICRA website? The dashboard is currently being built on USFWS infrastructure and could be hosted there. It could be embedded in the MICRA website while being hosted on the USFWS ArcGIS on-line account. MICRA would need a license if it were to be hosted on the MICRA website.

Will the USFWS continue to build, update, and maintain the dashboard? This would need to be discussed internally. Ruehmann has about 22 hours in to building the demo version of the dashboard, including 3 hours to build in the UMR invasive carp data. There would be regular updates required to include the annual project and funding information from each sub-basin. This would not be a heavy burden for Ruehmann once the structure is built. The sub-basin invasive carp would have some additional work to build the data tables that would be provided to update the dashboard.

How will the dashboard be used by MICRA? The initial idea was to develop an interactive version of the updated list of IJ rivers in the basin. Rather than having multiple static maps that are printed for briefings, an interactive map could be used to share information. At the board's August meeting, there was broad discussion about how a dashboard could be used. There was agreement that summarizing the invasive carp projects and funding in the basin would be very useful and a good first step.

How hard would it be for the sub-basin invasive carp partnership coordinators to provide Ruehmann with the information needed to build the invasive carp data out in the dashboard? What exactly is needed: a list of project titles by year, funding amount, lead and participating agencies? For the UMR, the total funding amount for each year was all that was provided. As much detail can be built in as provided. It took about 20 minutes to compile the data for the UMR. That would not be too heavy of a lift for the other sub-basin coordinators. It will be relatively easy to provide the information back to 2020, before prior years it will take a little more work.

Do the MICRA members that participate in the DC fly-ins anticipate using the dashboard during visits? Would it be shared using a tablet? The main point that the MICRA reps want to convey is how the funding was used. Being able to broadly categorize by removal, monitoring and detection, and research or other categories would be useful. That information could be added as a widget. It looks like the basic information is here once the other sub-basins' information is added.

Can multiple sub-basins be selected at once in the dashboard to query data, e.g., ORB and TNCR or ARW and LMR? Yes, all, one, or any combination of the six sub-basins or states can be selected.

Is there a mobile version? That is a relatively recent technology with dashboards. A mobile version that is more appropriate for cell phones and tablets can be configured from the same URL. It will take some adjustments for a mobile version. Maybe consider including a QR code for the mobile version of the dashboard on MICRA's briefing documents. A step further would be a QR code for each state. Traffic from QR codes can be tracked.

If the coordinators provided a funding breakdown by state for each project, then the dashboard can be queried by state to be able to report how much funding has gone to work in each state. This would be useful information when talking to Congressional offices.

IL DNR has someone working on a similar project for the removal work that is being done in the basin. It would be good to coordinate these efforts.

There is utility for the dashboard beyond the Congressional visits. It would be nice to have the dashboard integrated into the MICRA website in addition to the list of invasive carp plans and reports for the basin. It is a visual and interactive version of the information that is already provided in the reports on the website.

Is there additional information that is not in the demonstration, other than project funding by state, that would be beneficial to include? The sub-basin names need revised to align with the MICRA nomenclature and the Tennessee Cumberland Sub-basin needs corrected. The bigheaded carp distribution map that is used in the Report to Congress is a data layer that we previously discussed. It may also be useful to keep the USEPA's impaired waters data layer that was in the demo last August. Native species information or other information that could be useful when talking about the fishery commission can be added eventually. There could be dropped down menus for the type of data that can be queried. Data layers for ceded territories, tribal lands, and federal nexus could all be added along with the list of 6th order and larger IJ rivers.

Will MICRA need to reimburse La Crosse FWCO for their work to develop the dashboard? The financial info was provided just for information and awareness. There is no expectation that MICRA would reimburse or pay for the labor to develop the dashboard. Neeley will discuss internally to confirm she has support to fund this work through her station.

MICRA has requested communications support from USFWS. The dashboard would be a useful communications tool for MICRA, USFWS, and the sub-basin partnerships.

- ! The Executive Board requested USFWS and the sub-basin coordinators to continue building out the invasive carp data on the dashboard that La Crosse FWCO has begun developing.
- ! Neeley will share the Excel table that was provided to Ruehmann with the UMR invasive carp project data with the other sub-basin invasive carp partnership coordinators to add new tabs with the respective data for the remaining sub-basins. Coordinators were also asked to provide a breakdown of project funding by state.
- ! La Crosse FWCO was requested to make the following updates to the dashboard: 1) change the Tennessee River to the Tennessee-Cumberland; 2) change all sub-basin headings from 'Region' to 'Sub-Basin'; 3) add a data layer for the bigheaded carp distribution map that is used in the USFWS's Report to Congress; 4) add USEPA's impaired waters data layer; and 5) add data layers for MICRA's list of 6th order and larger IJ rivers including ceded territories, tribal lands, and federal nexus (once complete and provided by MICRA).

How will you evaluate if the dashboard is effective in advancing MICRA's goals and objectives? Evaluation could be addressed as part of MICRA's communications plan. If its on the website, it can be tracked. There will be both qualitative and quantitative aspects to evaluating the utility of the dashboard during Hill visits. In part will be simply gaging the staff member's engagement when the dashboard is shared.

Will it be a problem if the dashboard does not break down funding levels to Congressional district? State level should be sufficient even in the House offices.

25) Mississippi River Basin Fishery Commission Next Steps

Discussion Item:

The Executive Board will continue the on-going discussion to prepare for operationalizing the proposed Mississippi River Basin Fishery Commission. In February 2023, the Executive Board identified the following three topics to revisit:

1. Does the board need to start putting together a rough budget on the initial administrative and operational needs, i.e., how will the \$1 million in appropriations be used?
2. Is more discussion needed regarding a request to AFWA or seeking a contractor to continue these planning discussions?
3. What are our next steps?

In August 2023, the board discussed this topic before, during, and after the All-Delegate meeting. Key points from the board's August 2023 discussions are provided below.

Prior to All-Delegate Meeting

- There was agreement that the Executive Board does not need to have a plan completely lined out, but that it would be in the board's best interest to be able to communicate within \$100,000 what the commission will do with the initial \$1 million in appropriations and to have a rough idea of what the transition and timeframe look like once the commission is authorized.
- The initial step would be to hire an executive director. The board discussed keeping staff minimal but adding key positions such as an administrative assistant/grant specialist, a communications director that could also serve as a deputy director or director in training if needed, and a staff biologist.
- Each state agency in attendance addressed their ability and challenges to use proposed Commission funding to add capacity for large rivers interjurisdictional fisheries management.
 - Is there a nuance that needs to be made to the invasive carp funding or the commission funding if it comes to fruition to make it more like the state/interstate ANS management plan funding? That funding must be appropriated annually, but many states have used that funding to justify adding an AIS coordinator position to their staff. Are these funds considered more reliable or viewed differently from the invasive carp funds?

- There is no match requirement in the commission legislation. That will make a big difference for several states.
- The purpose of the commission is added resources and capacity for interjurisdictional fisheries management. If the agencies are running into position caps, is there something that MICRA can do to inform the Directors and help support requests for increased position caps to support the commission? Is there a different mechanism that we have not discussed to allow you to get the work done?
- Could the commission provide the additional capacity for the states rather than providing funding? That could get complicated from the commission's standpoint. Some directors are challenging their staff to get more done without adding to their position counts. Are you proposing that a commission employee would be hired and paid by the commission but stationed within a state agency to support interjurisdictional fisheries work? Yes, they could be essentially assigned as agency staff.
- There would be a considerable administrative burden on the commission if there is wide interest in hiring commission staff positions that are then assigned to work for the states. Payroll, benefits, human resources, etc. would all fall to the responsibility of the commission. There are considerations with the number of employees that we will need to be aware of.
- We previously discussed the need for some contract support for legal and accounting needs in addition to the four initial positions for the commission. Those contract needs will be much higher if the commission is hiring additional staff to work for the states.

All-Delegate Meeting

- Each state's "Fish Chief" (or equivalent) would serve as the delegate to the commission. This would be consistent with the existing MICRA membership and the Great Lakes Fishery Commission's Council of Mississippi River Fishery Agencies. The existing MICRA Executive Board structure would be used for establishing the actual Commissioners. As proposed, the Commissioners would be identified by the member agencies and not be political appointments.
- The governance, rules, and procedures are intentionally not specified in the draft legislation. Developing the governance documents will be critical first steps during the first year. It will be important to hire an Executive Director quickly. There may be a period of time between the authorization of the commission and initial appropriations to support the commission.

- The intent of the non-competitive funding is to enable the state agency commission members to increase their capacity for commission and interjurisdictional fisheries management related work. The board is interested in learning the states' ability and interest to add staff to participate in the commission and work on large river interjurisdictional fisheries management if they were to receive non-competitive grant funding each year through the commission (e.g., \$100,000 or \$250,000).
 - Batten summarized that the consensus appears to be that although it would take time, it sounds like most agencies have options to pursue. It was brought up that HR departments are another consideration in how long it may take to fill these positions, whether new or repurposed. It may be necessary to contract out initially while the agencies work through their internal processes.

After All-Delegate Meeting

- There will be several things for MICRA to begin preparing immediately, e.g., initial charter documents, rules and procedures, the official document used for states to join the commission, elect and convene the governing council, etc.
- There is some legwork that could be done to research the transition. Someone could start by contacting each of the existing commissions to discuss their governance documents. A state agency would likely hire an attorney to work on something like this. Smith could potentially assist with this once the legislation is passed. She knows a lawyer with the right experience and background that MICRA could reach out to.
- What can we start working on now rather than scrambling once the authorizing bill is passed? It would be good to start holding regular calls focused on the transition. The board might want to consider a transition team sub-committee, but who would be able to participate?

Notes:

Batten summarized the board's previous discussions and some of the needs that have been previously identified. The board's on and off discussions on this topic make it difficult to really move forward.

Discussion:

The board may need to consider a series of focused 1 or 2-hour calls every couple weeks or month. We had previously thrown out the idea of a work group or committee to move this forward between meetings and communicate back to the full board.

We might start with an inventory of the governance documents from the existing commissions as a model for what we might do for the Mississippi River Basin. There are other things a work group could get started on such as drafting an announcement for the Executive Director.

- ! A small workgroup was formed with Batten, Parsons, Zweifel, Gaikowski, and Conover to work on operationalizing the fishery commission between Executive Board meetings.

Bob Lamb retired from his position as Executive Secretary of the Great Lakes Fishery Commission. His assistant, Marc Gaden, will be the new Executive Director. Commissioners are appointed by the U.S. President and Prime Minister of Canada. The Executive Secretary is staff to the Commissioners. The group did not know if the Commissioners hire the Executive Secretary, and that person is responsible for hiring and supervising the rest of the Secretariat staff. We could ask them for their administrative procedures if they would be willing to share.

26) USFWS Economic Value Report Update

Discussion Item:

Conover will provide an update on his discussion with Jim Caudill, USFWS Division of Economics, regarding the development of a new economic value report for the Mississippi River Basin.

Notes:

Conover invited Caudill to discuss the new economic value report that MICRA talked with him about a year ago. Caudill said that his office is still planning to work on the report for MICRA. The first step will be to send a methodology for coming up with an estimate to the MICRA Executive Board to review and approve. He hopes to provide the proposed methodology in the April-May timeframe. Caudill is interested in receiving new creel data from the basin states. The data he has is approximately 15 years old.

Caudill asked Conover about the desired scale for the report. Conover requested basin-wide and sub-basin scale. He told Caudill that MICRA is not looking for state-level estimates.

For the methodology, Caudill mentioned using an unofficial Delphi method with fish angling days by species.

Discussion:

Is Caudill interested in basic creel data like how many fish did you catch and what did you keep? Creel surveys don't generally include questions about economics. Caudill didn't detail what type of information that he specifically wanted to obtain from the creel data. The number of angler days may be an example.

The last estimate included all the reservoirs. Are we talking mainstem river, every reservoir, etc.? Caudill asked about specific river sections or reservoirs that might have creel data.

Caudill is looking for input from MICRA. He would like to know if MICRA does or does not want the estimate to be inclusive of the reservoirs, or if there is other information that MICRA is specifically interested in.

It may be more complicated to use the mainstem reservoirs, but that will certainly increase the fishing value. Reservoirs were included in the original estimate. It doesn't make sense to limit the estimate to the unimpounded portions of the mainstem river.

TVA has a lot of information for the Tennessee River, but it typically looks at water recreation as a whole so it includes boating and other things as well.

Louisiana has trip tickets for commercial fishing. It may be more interesting to see an estimate of commercial fishing value. The last report was just recreational fishing and we asked him to provide a new estimate using the most recent data.

Can we just use the ASA numbers? We would need a basis to say how we derived the number. For our purpose, we really are just trying to communicate that the basin's fishery resources are very valuable.

Is this something that Caudill is doing on contract or his office just providing support? The only cost is the time the Board members and agency staff put into providing feedback, providing requested creel data, etc.

- ! Conover will setup a call with Batten and Caudill to discuss MICRA's interest in an economic value estimate and to better understand Caudill's request for creel data from the basin states.

27) MICRA's 2024-2028 Priorities Document

Decision Item:

The Executive Board members approved updates to the 2024-2028 priorities document and 2019-2023 accomplishment tracking in December 2023. A few comments and suggested editorial revisions were proposed to the document. Two accomplishments were revised to reflect that the actions are on-going and are expected to be completed in early 2024. An updated document with the suggested edits and revisions indicated with track changes is provided in [Appendix 4](#). The Executive Board will be asked to approve the document for posting on MICRA website and sharing with the delegates.

Notes:

The updated Priorities Document was provided to Executive Board members the last week of December with a request to provide any final comments and/or approve the revised document as final. Conover received a response and approval from all but one board member, including some editorial suggestions. The board members reviewed and discussed the suggested editorial revisions. Conover then asked the board for final approval to share the document with the delegates and to post on the MICRA website.

- ! The Executive Board approved final revisions to the 2024-2028 MICRA Priorities Document.
- ! Conover will post the 2024-2028 MICRA Priorities Document on the MICRA web site.
- ! Batten will email the 2024-2028 MICRA Priorities Document to the MICRA delegates.

28) MICRA's Aquatic Habitat Action Plan

Discussion Item:

Conover will discuss changes to the updated list of interjurisdictional rivers to add the ceded territories and 6th order and larger rivers with a federal nexus. Updated sub-basin tables are provided below. Updated maps are included in the draft Aquatic Habitat Action Plan in [Appendix 5](#). The Executive Board will discuss remaining steps to finalize the Aquatic Habitat Action Plan.

[Navigable Waterway Network](#)

Notes:

Conover worked with Angela Erves on continued updates to MICRA's list of interjurisdictional rivers between Executive Board meetings. No revisions were made to the draft action plan following the last meeting as there is more work needed to finalize the IJ rivers list first.

Adding the ceded territories information was straight-forward, however, adding the federal nexus information resulted in more questions for the Executive Board to consider. Angela used the USGS's Protected Areas Database (PAD) to identify 6th order and larger rivers within 1 mile of federal land and which rivers are within ceded lands. Angela also used the US DOT's Navigable Waterway Network Lines data to identify which rivers are navigable waterways. The PAD information was more complicated than hoped. There are lands identified as federally owned and state owned but federally managed. The sub-basin tables were updated to indicate rivers that flow through ceded territories (UMR only) and a column was added to indicate rivers with a federal nexus. federal nexus is only indicated with an 'X', there is no detail regarding the agency or reason for the nexus. That desired level of detail is something they would like the board's input on.

Erves worked from the list of 6th order and larger interjurisdictional rivers previously developed based on multiple state or state and tribal jurisdictions to identify rivers with a federal nexus. When discussing the results, we realized that there is an additional set of 6th order and larger rivers that were not included in her first analysis because they had been removed previously for not having multiple state or state and tribal jurisdictions. Erves then repeated the analysis on the 6th order and larger rivers that were removed for not having multiple state or state and tribal jurisdictions. This resulted in some new rivers being added to the sub-basin tables (indicated with track changes) and some sub-basin specific question for the sub-basin representatives (listed below the respective sub-basin table below).

Discussion:

What do we mean by federal nexus? Nexus refers to some form of jurisdictional authority regarding the river. For example, navigable waters, National Park Service's National Wild and Scenic Rivers System, and National Wildlife Refuge and Forest Service lands that border the river.

The Executive Board requested the addition of this information at the last meeting. Indicating the complexity of jurisdictional authorities was considered valuable information to include.

Conover asked the Executive Board if the updated lists of IJ rivers is adequate as a first cut at the updated list of IJ rivers for inclusion in the action plan so that it can be finalized. If further detail is desired for the federal nexus information, that could be completed in a second phase and the table in the action plan updated when phase 2 is complete.

Is the purpose more than demonstrating the complexity of management jurisdictions on the river? The sub-basin lists will be combined in an appendix to provide a citable list of interjurisdictional rivers in the basin.

Is there more detail on the tribal jurisdictions? No, we simply have marked those rivers that border, or flow through, tribal lands or the ceded territories of 1837 or 1842.

Is the list intended to include just true tributaries to the Mississippi River? The Pearl and Sabine rivers are interjurisdictional rivers within the LMR that are not Mississippi River tributaries.

The Hatchie River in Tennessee may have a federal nexus.

- ! Conover will check with Erves to see if the Hatchie River is included in her data files as having a federal nexus.

We may want to have the tables cleaned up and reviewed by the sub-basin representatives for any obvious errors or omissions.

Erves will be starting a 2-month 50% detail soon, with an option to extend to 4 months. That will affect her availability to continue working on this project for MICRA.

Can you clarify what it means when the Tennessee River is marked as having a tribal nexus? The criteria that were used to define a tribal nexus is 6th order and larger rivers that border, or flow through, tribal lands or the ceded territories of 1837 or 1842.

Why are the Green and Barren rivers listed together on the same line in the Ohio River Basin table? That is the way they are listed in the Navigable Waterway Network Lines data and was flagged as a question for Dreves.

At the last Executive Board meeting, Conover was asked to remove the references to the reservoirs from the sub-basin tables. All changes since the August meeting are indicated with the Track Changes feature so you can see that they are all crossed out in the tables.

In the UMR, there is no distinction between tribal nexus within and outside of the ceded territories.

Will this document live on the MICRA website? Will be able to update and revise without too much trouble?

The maps in Appendix 5 have been updated with the additional rivers and tribal lands.

There are additional interjurisdictional rivers in southern Louisiana within the footprint of the LMR that drain to the Gulf and not the Mississippi River. There is connectivity with the Mississippi River through the intercoastal waterway. There has been movement of invasive carp from the Mississippi River along the coast. Are these rivers truly a part of the Mississippi River Basin if they do not drain into the Mississippi River? No. Why does the footprint of the LMR include rivers that are Gulf tributaries? The LMR footprint is based on the USGS HUCs. Are there significant 6th order or larger rivers that are not identified on the map? Would you expect questions from the Louisiana delegation about the absence of any significant rivers that are not included? Possibly. The Calcasieu River is a significant river for navigation. We might need to revisit the Amite River again.

The UMR does not include the Des Plaines River and the connection with Lake Michigan. The Tennessee-Tombigbee Waterway (TTW) in the TNCR was included in the sub-basin table even though it is a manmade channel. We should be consistent in how we handle these types of connections. Is the Des Plaines River a navigable waterway?

The Duck River in the TNCR has a NWR on it and the Hatchie River in the LMR has two NWRs. The Buffalo River has a federal nexus. If NWRs are considered a federal nexus, then there are likely additional rivers in southwest Louisiana that should be added. Any

6th order or larger river that runs through or borders federal lands should be included in MICRA's list and identified as having a federal nexus.

There is a lot of work that remains to finalize the federal nexus information. Should we continue to work on federal nexus as Phase 2 once the action plan is updated and published on the MICRA website or would the board prefer to delay the action plan until the federal nexus piece is worked out? Considering the purpose of the document, it would be beneficial to delay the action plan and include the federal nexus information. It would not make sense for the federal component to be left out.

It would be helpful if the board would settle on a definition of "interjurisdictional", "tribal nexus", and "federal nexus". Would federal nexus include being identified in WRDA? That has not been a criterion that has been used to this point. Is there a database that could be used to find this information and include in the metadata?

It would be helpful to have a list of tribes and tribal contacts within the basin. That might be something the board can consider as a next step once the action plan is complete.

- ! Conover will send the sub-basin maps and lists of 6th order and larger interjurisdictional rivers to the sub-basin representatives along with a description of how federal nexus was defined and determined.
- ! Executive Board members will collaborate on final definitions of "interjurisdictional", "tribal nexus", and "federal nexus" for the identification of interjurisdictional rivers in the Mississippi River Basin.
- ! Sub-basin representatives will review the sub-basin maps and lists of 6th order and larger interjurisdictional rivers and provide recommended additions, changes, and/or questions for Conover to address with Erves.

Conover suggested to the board members that they might want to entertain some form of recognition for the work Angela Erves has put into this project for MICRA.

Arkansas-Red-White Rivers Sub-basin – 6th order and larger interjurisdictional rivers

Rivers	Stream Order	States	Tribal	Federal
White	8	AR, MO		x
North Fork	6	MO, AR		x
Black	7	MO, AR		x
Current	6	AR, MO		x
Spring	6	MO, AR		
Eleven Point	6	MO, AR		x
Arkansas	9	CO, KS, OK, AR	x	x
Salt Fork Arkansas	7	OK, KS	x	x
Medicine Lodge	6	OK, KS		
Chikaskia	6	OK, KS	x	
Cimarron	6	OK, KS, CO	x	x
Verdigris	7	KS, OK	x	x
Caney	6	OK, KS	x	
Little Caney	6	OK, KS	x	
Neosho	7	OK, KS	x	x
Spring	6	MO, KS, OK	x	
Illinois	6	AR, OK	x	x
Canadian	8	OK, TX, NM	x	x
North Canadian**	7	OK	x	x
Beaver	6	OK, TX	x	x
Poteau	6	AR, OK	x	x
Red	7	LA, AR, OK, TX	x	x
North Fork Red River	6	OK, TX		x
Washita	6	OK, TX		x
Muddy Boggy Creek**	6	OK		
Kiamichi**	6	OK		x
Little	6	OK, AR		x
Mountain Fork	6	OK, AR		x
Sulphur	6	AR, TX		x
Twelve Mile Bayou*	6	LA		x
Big Cypress	6	TX, LA		x
Loggy Bayou*	6	LA		
Bayou Dorcheat	6	AR, LA		

Green text are additions to MICRA list.

* Loggy Bayou is not an interjurisdictional river but is formed by IJ tributaries.

** ~~North Canadian, Muddy Boggy Creek, and Kiamichi flow through or border tribal lands.~~

Navigable Waterways

1. San Bois Creek (OK, Arkansas trib in Robert Kerr Reservoir): stream order?

2. Cypress B'you (TX and LA, Red River trib): stream order?

Lower Mississippi River Sub-basin – 6th order and larger interjurisdictional rivers

Rivers	Stream Order	States	Tribal	Federal
Mississippi	10	MS, LA, TN, AR, MO, KY		x
Ohio	9	OH, PA, WV, KY, IN, IL		x
Obion	7	IN		x
Hatchie	6	TN, MS		
St. Francis	7	AR, MO		x
(Right Hand Chute) Little River ³	6	MO, AR		x
White	8	AR, MO		x
Arkansas	9	AR, KS, CO, OK		x
Yazoo	7	MS, LA		x
Red	8	TX, OK, AR, LA		x
Black ¹	7	LA		x
Little River	6	LA		x
Tensas	6	LA		x
Oauchita	7	LA, AR		x
Bayou Bartholomew	6	LA, AR		
Boeuf	6	LA, AR		
Amite	7	MS, LA		
Atchafalaya ²	8	LA		x

Green text are additions to MICRA list.

Navigable Waterway Network

1. Obion
2. Tensas
3. Little River

NOTES:

¹ The Black River is not an interjurisdictional river but is formed by interjurisdictional tributaries.

² The Atchafalaya River is a distributary river formed by the Mississippi and Red Rivers.

³ Are these two different rivers? If so, are both IJ?

Missouri River Sub-basin – 6th order and larger interjurisdictional rivers

Rivers	Stream Order	States	Tribal	Federal
Missouri	9	MO, NE, SD, ND, MT, IA, KS	x	x
Madison	6	WY, MT		x
Gallatin	6	WY, MT		x
Milk ²	6	MT, AB ³ , SK ³	X	x
Marias ²	6	MT, SK ³	X	x
Yellowstone	8	WY, MT, ND		x
Clarks Fork	6	WY, MT		x
Bighorn ²	7	MT, WY	X	x
Wind ²	7	WY	X	
Tongue ²	6	MT, WY	X	x
Powder	6	MT, WY		x
Little Missouri	6	SD, ND, WY, MT	X	x
Grand ¹	6	SD		x
North Fork Grand	6	ND, SD		x
Moreau ²	6	SD	X	
Cheyenne	7	WY, SD		x
Belle Fourche	6	WY, SD		x
White	6	SD, NE	X	x
Niobrara	6	WY, NE		x
James	7	ND, SD		x
Big Sioux	7	SD, IA		
Rock	6	MN, IA		
Little Sioux	6	IA, MN		x
Platte ¹	8	NE		
South Platte	7	NE, CO		x
Laramie	6	WY, CO		x
North Platte	7	NE, WY, CO		x
Nishnabotna	6	IA, MO, NE		
Kansas ¹	8	KS		x
Smoky Hill	7	CO, KS		x
Republican	7	NE, KS		x
Beaver Creek	6	WY, SD		x
Big Blue	7	NE, KS		x
Little Blue	6	NE, KS		
Grand	7	IA, MO		x
Thompson	6	IA, MO		
Osage ¹	7	MO		x
Marais des Cygnes	6	KS, MO		x
Gasconade	6	MO		x

Green text are additions to MICRA list.

Navigable Waterway Network

1. Gasconade
2. Osage

Notes:

- ¹ The ~~Grand (SD), Platte, Kansas, and Osage~~ rivers are not interjurisdictional rivers but are formed by interjurisdictional tributaries.
- ² The Milk, Marias, Bighorn, Wind, Tongue, and Moreau rivers flow through or border tribal lands.
- ³ AB = Alberta Canada, SK = Saskatchewan

Ohio River Sub-basin – 6th order and larger interjurisdictional rivers

Rivers	Stream Order	States	Tribal	Federal
Ohio	9	OH, PA, WV, KY, IN, IL		X
Allegheny	8	NY, PA		X
Monongahela	7	PA, WV		X
Cheat	6	WV, PA		X
Youghiogheny	6	PA, MD		X
Beaver¹	7	PA		
Mahoning	6	OH, PA		
Little Beaver Creek	6	OH, PA		
Muskingum	7	OH		X
Little Kanawha	6	WV		X
Kanawha¹	6	WV		X
New	6	WV, VA, NC		X
Big Sandy	7	WV, KY		X
Tug Fork	6	KY, WV, VA		X
Levisa Fork	6	VA, KY		X
Russell Fork	6	KY, VA		X
Licking	6	KY		X
Kentucky	6	KY		X
Green (and Barren)	7 (6)	KY		X
Wabash	6	IN, IL, OH		X
Vermillion	6	IL, IN		
Tradewater	6	KY		X
Cumberland	7	KY, TN		X
Tennessee	8	KY, TN, MS, AL		X

Green text are additions to MICRA list.

Navigable Waterway Network

1. Tradewater
2. Green (and Barren)
3. Kentucky
4. Licking
5. Little Kanawha
6. Muskingum

Notes:

¹ The Beaver ~~and Kanawha~~ rivers are not interjurisdictional rivers but are formed by interjurisdictional tributaries.

Tennessee and Cumberland Rivers Sub-basin – 6th order and larger interjurisdictional rivers

Rivers	Stream Order	States	Tribal	Federal
Tennessee (including Kentucky Lake, Pickwick Lake, and Guntersville Lake)	8	KY, TN, MS, AL		<u>X</u>
Holston ⁴	6	TN		<u>X</u>
South Fork Holston	6	TN, VA		<u>X</u>
Wautaga (including Wautaga Reservoir)	6	TN, NC		<u>X</u>
French Broad	7	TN, NC		<u>X</u>
Nolichucky	6	TN, NC		<u>X</u>
Little Tennessee (including Tellico and Calderwood Reservoirs)	6	TN, NC, GA		<u>X</u>
Clinch	6	VA, TN		<u>X</u>
Emory	6	TN		<u>X</u>
Hiwassee (including Chatuge and Nottely Reservoirs)	6	TN, AL		<u>X</u>
Elk	7	TN, AL		<u>X</u>
Tennessee Tombigbee Waterway ²	N/A	TN, MS, AL		<u>X</u>
Cumberland (including Cordell Hull Lake and Dale Hollow Lake) ³	7	KY, TN		<u>X</u>
Red	6	KY, TN		

Green text are additions to MICRA list.

Navigable Waterway Network additions

1. Emory

NOTES:

⁴The Holston River is not an interjurisdictional river, but it is formed by interjurisdictional tributaries.

² The Tennessee Tombigbee Waterway divide cut is not in the USGS NHD flowline database so no stream order is available for this manmade canal. It is included in MICRA’s list because it is an IJ waterway and connects the TN river to the Tombigbee River in the Mobile Drainage. Inland waterway data layer.

Upper Mississippi River Sub-basin – 6th order and larger interjurisdictional rivers

Rivers	Stream Order	States	Tribal	Federal
Mississippi River	10	MN, WI, IA, IL, MO	<u>x</u>	<u>x</u>
Minnesota (incl. Big Stone Lake)	8	MN, SD	<u>x</u>	<u>x</u>
Whetstone	6	SD, MN		
St. Croix	6	MN, WI	<u>x</u>	<u>x</u>
Chippewa ¹	7	WI	x	<u>x</u>
Black ¹	6	WI	x	<u>x</u>
Wisconsin ¹	6	WI	x	<u>x</u>
Rock	7	IL, WI		<u>x</u>
Pecatonica	7	IL, WI		
Sugar	6	IL, WI		
Iowa ¹	7	IA	x	<u>x</u>
Des Moines	7	IA, MN, MO		<u>x</u>
Illinois ²	8	IL		<u>x</u>
Kankakee	6	IN, IL		
Iroquois	6	IN, IL		
Fox	6	WI, IL		<u>x</u>
Missouri	9	MO, NE, SD, ND, MT, IA, KS	x	<u>x</u>
Big Muddy	<u>6</u>	<u>IL</u>		<u>x</u>
Kaskaskia	<u>6</u>	<u>IL</u>		<u>x</u>

Green text are additions to MICRA list.

Navigable Waterway Network

1. Kaskaskia

NOTES:

¹ The Chippewa, Black, Wisconsin, and Iowa rivers Borders or flows through tribal lands or are the ceded territories of 1837 or 1842.

² The Illinois River is not an interjurisdictional river, but it is formed by interjurisdictional tributaries.

29) Passing of the Gavel: Installation of MICRA Chairperson 2024-2025

Business Item:

Ben Batten will be installed as the MICRA Chairperson for the 2024-2025 term. Brad Parsons will assume the non-voting Executive Board position of Immediate Past-Chairperson.

Notes:

Ben Batten assumed the role of MICRA Chair for the 2024-2025 term. Batten recognized Brad Parsons for his services as MICRA Chair and presented him with a small award. Parsons thanked Batten for his assistance as Chair-elect.

- ! MICRA Chair-elect, Ben Batten, was installed as MICRA Chair for the 2024-2025 term and Brad Parsons stepped-down as Chair and will serve as MICRA's Immediate Past Chair on the Executive Board for the 2024-2025 term.

30) Nomination for MICRA Chair-elect 2024-2025

Discussion Item:

The Executive Board will discuss the nomination of a Missouri River Sub-basin delegate for the vacant MICRA Chair-elect position for the term 2024-2025.

Notes:

Whiteman and Parsons have both sent emails to the Missouri River sub-basin delegates to seek potential candidates that would be interested in the chair-elect position. Neither received a response. Parsons called and spoke with John Lott in South Dakota. John expressed some interest, but he doesn't have the ability to travel as needed to meet MICRA's needs for the chair.

Discussion:

We may want to consider looking beyond the Missouri River basin. We need a chair-elect that can attend meetings and engage. That is more important than sticking to a rotation.

We are looking for someone that can serve as chair-elect for two years and the chair for two years. Correct. There is now a non-voting informal role for an additional two year term as immediate past chair if possible, but the real commitment is for 4 years.

- ! Parsons will follow-up with the Missouri River sub-basin delegates in an effort to recruit a chair-elect.
- ! Sub-basin representatives will consider potential options for recruiting a chair-elect from their respective sub-basins.

31) Nomination for Lower Mississippi River Sub-Basin Representative

Discussion Item:

The Executive Board will discuss the status of filling the vacant Lower Mississippi River Sub-Basin Representative position on the MICRA Executive Board.

Notes:

Jason Henegar was asked about his interest in serving as the LMR representative to the MICRA Executive Board during the LMR sub-basin update earlier in the meeting and he offered to serve in that role.

- ! A motion was made and approved to accept the nomination of Jason Henegar as the Lower Mississippi River sub-basin representative to the MICRA Executive Board.

32) 2024 Workplan Development

Discussion Item:

The Executive Board will review the MICRA 2024-2028 Priorities Document and discuss a workplan for 2024.

Notes:

Batten highlighted what he sees as critical for MICRA in 2024.

1. Authorization of the Mississippi River Basin Fishery Commission and planning for operationalization
2. MICRA's continued presence on Capitol Hill, e.g., DC fly-ins and briefings
3. Basinwide collaboration on invasive carp management and control and coordination of sub-basin partnerships, ICAC, workgroups, and MICRA Executive Board
4. Continued support of technical committees
5. Focused discussions as part of the future MICRA Executive Board meetings, e.g., operationalizing the fishery commission, invasive carp, and communications

Discussion:

The Executive Board previously discussed the need to regularly review the priorities document to make sure that the document is guiding the board's and standing committee's work throughout the 5-year operational period. We want to make sure that we are considering the priorities document before the board is working on tracking progress and accomplishments at the end of the 5-year operational period. This might be something that the board does annually.

33) Young Professionals Travel Stipend

Decision Item:

No applications have been received for the 2024 Young Professionals Travel Stipend.

Notes:

- ! Conover will send an email to the MICRA delegates to inform them that nominations remain open for the 2024 Young Professionals Travel Stipend.

34) Interjurisdictional Fisheries Symposium

Discussion Item:

The Executive Board will consider the Action Item from the board's August 2021 meeting for MICRA to discuss hosting a symposium on Interjurisdictional Fisheries Management in the Mississippi River Basin at an upcoming national or regional conference.

Midwest Fish and Wildlife Conference

- 2024 | South Dakota
January 28 – 31, 2024
Sioux Falls, South Dakota
- 2025 | Missouri
Dates & Location TBA
- 2026 | Indiana
Dates & Location TBA
- 2027 | Michigan
Dates & Location TBA
- 2028 | Nebraska
Dates & Location TBA

American Fisheries Society

- [2024 Honolulu, HI: September 15-19, 2024](#)
- 2025 San Antonio, TX: August 10-14, 2025
- 2026 Columbus, OH: August 30- September 3, 2026

Notes:

During a previous Executive Board discussion about organizing a Mississippi River Basin aquatic habitat symposium, the suggestion was made for the board to consider MICRA organizing a Mississippi River Basin interjurisdictional fisheries symposium. The aquatic habitat symposium was a success. Do we look to build from that and sponsor another symposium, or is MICRA spread too thin to take on another project?

Discussion:

It will take agency staff other than those on the Executive Board to organize the proposed symposium. There was a staff person from MN DNR and WI DNR that took

the lead for the aquatic habitat symposium. The board would need to provide support to the staff that are working to organize the symposium.

Rather than the Executive Board deciding to move forward with this idea and then going out to recruit volunteers to organize the symposium, the MICRA chair could let the chair of the Paddlefish/Sturgeon Committee know that the board has agreed to support an interjurisdictional fisheries symposium. The committee could then discuss and consider if there is a topic and people are willing to lead the effort.

The Southern Division AFS Warmwater Streams Committee will meet in New Orleans in 2026.

- ! Conover will inform the Paddlefish/Sturgeon Committee chair that the Executive Board has agreed to support a Mississippi River Basin focused interjurisdictional fisheries symposium at an upcoming national or regional meeting if the committee has interest and sees benefit in organizing a symposium.

35) Schedule Spring Conference Call and Summer Executive Board Meeting

Discussion Item:

Executive Board members will schedule a Spring conference call and Summer Executive Board meeting.

Notes:

The board had previously considered holding the summer meeting in Ohio with the possibility of spending time fishing the Ohio River or Lake Erie. Batten reminded the group that the idea was made earlier in the meeting to hold the board's summer meeting in support of the board's efforts to secure a chair-elect from the Missouri River sub-basin. Zweifel has indicated that he would be willing to host.

Discussion:

Do we need to plan on August? The meeting date is flexible. Late August would be good for Lake Erie fishing. The meeting would likely be held somewhere around Cleveland if the board members are interested in fishing Lake Erie. There is also the potential for Ohio River catfishing out of Cincinnati. The location of board meetings moves around the basin states, but the meetings have been held outside of the basin before.

Yankton, SD, could be a good place to meet in the Missouri River basin with connections to South Dakota and Nebraska. Gavins Point Dam and a National Fish Hatchery are in Yankton.

Pheasant hunting is open in January. January in South Dakota would be better for ice fishing. Maybe we'll consider South Dakota in January.

- ! Zweifel will explore meeting and fishing options in Ohio in late August and report back to Batten and Conover.
- ! Batten and Conover will schedule a Spring conference call as needed after the MICRA DC Fly-in is complete.

36) Other New Business / Parking Lot

Discussion Item:

Executive Board members will address topics put in the parking lot during the meeting and additional business items not on the agenda that board members would like to bring up for discussion.

Notes:

Batten proposed the Executive Board consider making a financial donation to the Tennessee Aquarium for the use of their facilities for the meeting. There was no charge for the meeting space.

Discussion:

- ! The Executive Board approved a \$500 donation to the Tennessee Aquarium Conservation Institute for the use of their facility for the board's meeting.