



**MISSISSIPPI INTERSTATE COOPERATIVE RESOURCE ASSOCIATION**

**Executive Board Meeting Notes**

January 25-27, 2021

Remote Participation

**TABLE OF CONTENTS**

Decisions and Action Items ..... iii

Agenda..... vii

Meeting Notes ..... 1

    1) Call to Order ..... 1

    2) Chairman’s Report..... 3

    3) Coordinator’s Report ..... 8

    4) Arkansas/Red/White Sub-basin Update ..... 13

    5) Lower Mississippi River Sub-basin Update ..... 16

    6) Missouri River Sub-basin Update ..... 31

    7) Ohio River Sub-basin Update..... 40

    8) Tennessee/Cumberland Sub-basin Update..... 46

    9) Upper Mississippi River Sub-basin Update ..... 54

    10) AFWA Legislative Affairs Update..... 57

    11) Tennessee Valley Authority Update..... 64

    12) U.S. Fish and Wildlife Service Update ..... 72

    13) U.S. Geological Survey Update ..... 75

    14) Joint Strategic Plan..... 79

    15) Fishery Commission Initiative Next Steps..... 911

    16) 2021 Congressional Outreach ..... 98

    17) 2021 Policy Coordination Contract Renewal ..... 100

18) Review of MICRA Planning Documents ..... 101  
19) Mississippi River Economic Profile ..... 102  
20) Review of Standing Committees..... 105  
21) ASA Government Affairs Committee ..... 108  
22) River Champion Award..... 115  
23) Young Professionals Travel Stipend..... 118  
24) 2021 Operational Budget and Workplan..... 119  
25) Schedule Spring Conference Call and Summer Executive Board Meeting..... 122  
26) Other New Business ..... 123



## **MISSISSIPPI INTERSTATE COOPERATIVE RESOURCE ASSOCIATION**

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### **DECISIONS AND ACTION ITEMS**

#### Decisions

1. The Executive Board tentatively approved the Joint Strategic Plan as final pending revisions to Appendix A as discussed during the meeting.
2. The final Joint Strategic Plan will be distributed to the MICRA Delegates once Appendix A is finalized and Appendix B is reviewed and modified as needed based on the preliminary legal department reviews.
3. The Executive Board agreed to review the Joint Strategic Plan and MICRA Priorities Document and then discuss MICRA's standing committees at the summer Executive Board meeting.
4. The Executive Board decided to consider a nomination for Ron Brooks as the next River Champion award recipient and potentially seeking nominations from the membership in early 2022 for future recipients.
5. The Executive Board decided to revisit the 2021 Young Professionals Travel Stipend during the summer meeting.
6. The Executive Board approved a motion to contract hire policy coordination support in 2021 for an amount not to exceed \$29,000.
7. The Executive Board decided to schedule quarterly Zoom meetings for 2021. Meetings will be rescheduled or added as needed. Scheduling an in-person meeting will be revisited later in the year once we begin to see agencies lifting travel restrictions.

#### Action Items

1. Conover will check with the CAWS Stakeholder Group to confirm that the attached letter was submitted to USACE.

*Complete: The CAWS Advisory Committee letter was submitted to USACE. A response from USACE was received on December 18, 2020 and is included in the notes.*

2. Conover will revise Appendix A based on the drafting team's discussion and provide the revised Appendix to the Executive Board for review and comment. A reference to the Great Lakes Fishery Commission's process will be added and the reference to the Encyclopedia Americana will be deleted. The idea of emergent consensus will be linked to the Great Lakes Fishery Commission. Bullet 3.b) that references "the specter of public revelation" will be deleted.
3. Fiss, Canaday, and Moses will provide the Memorandum of Agreement in Appendix B to the legal staff in their states to review the document and provide feedback.
4. Conover will update the dates in the recitals of Appendix B in the Joint Strategic Plan.
5. Schoenung will send a brief update to the MICRA Delegates to inform them that the Executive Board tentatively approved the Joint Strategic Plan as final and will provide them the final document once the Memorandum of Agreement has undergone review.
6. Conover will schedule a follow-up conference call for the Executive Board to discuss the fishery commission talking points with the Service to make sure that both groups are comfortable with the messaging and support each other's messages.
7. Smith will send a copy of the National Wildlife Federation's resolution supporting a Mississippi River Basin Fishery Commission (and other such documents from other organizations) to Conover to share with the Executive Board members.
8. Smith will send a list of organizations talking with Ashlee about supporting the Mississippi River Basin Fishery Commission concept to Conover to share with the Executive Board members.
9. Smith will send her draft bill language to establish a Mississippi River Basin Fishery Commission to Conover to share with the Executive Board members.
10. Smith will develop a list of key committee members and offices for MICRA's visits to identify which fish chiefs will need to be invited to participate in the meetings.
11. Schoenung will contact the fish chiefs in the MICRA states where MICRA will be conducting office visits to invite and request local participation in the meetings.
12. Conover will invite Tokowitz to a call with the MICRA Executive Board to discuss MICRA's interest in a Mississippi River Basin Fishery Commission and opportunities for partnering with ASA more broadly. This discussion will be

scheduled after the Executive Board works with the Service to develop talking points regarding the purpose, need, and benefits of a fishery commission.

13. Conover will add information on the River Champion Award and the inaugural winners to the MICRA website.
14. Moses will talk with Bobby Reed and make arrangements to get him his River Champion Award and to get a photo of Reed with the award for the MICRA website.
15. Fiss will develop a River Champion nomination for Ron Brooks to share with the Executive Board for consideration before October.
16. Schoenung will talk with Smith regarding the need to develop and use MICRA talking points when discussing the proposed Mississippi River Basin Fishery Commission.
17. Conover will send Parsons a new invoice for 2020 membership dues with today's date.
18. Conover will send out doodle polls to schedule quarterly Executive Board Zoom meetings for 2021.
19. Board members were asked to give some thought to the process for standing up the commission, including how the Executive Board would integrate, and to be prepared for a more in-depth discussion of this topic during the next meeting.



## MISSISSIPPI INTERSTATE COOPERATIVE RESOURCE ASSOCIATION

### Executive Board Meeting Notes

January 25-27, 2021

Remote Participation

### AGENDA

#### Session 1: Monday, January 25, 9:00-10:30 (CST)

##### Call to Order

- 1) Call to Order (Brian Schoenung)
- 2) Chairman's Report (Schoenung)
- 3) Coordinator's Report (Greg Conover)

##### Sub-basin Updates

- 4) Arkansas/Red/White Rivers (Ricky Moses)
- 5) Lower Mississippi River (Angie Rodgers)
- 6) Missouri River (Kasey Whiteman)
- 7) Ohio River (Schoenung)
- 8) Tennessee/Cumberland Rivers (Frank Fiss)
- 9) Upper Mississippi River (Brad Parsons)

##### AFWA Legislative Affairs Update

- 10) Legislative Affairs Update (Jen Mock Schaeffer)

#### Session 2: Monday, January 25, 2:00-3:30 (CST)

##### Sub-basin Updates

- Continued

##### Federal Entity Updates

- 11) TVA (Dennis Baxter)

12) USFWS (Aaron Woldt)

13) USGS (Rip Shively)

Session 3: Tuesday, January 26, 1:00-3:00 (CST)

**Old Business**

14) Joint Strategic Plan (Conover)

15) Fishery Commission Initiative (Schoenung)

16) 2021 Congressional Outreach (Schoenung)

17) 2021 Policy Coordination Contract Renewal (Schoenung)

18) Review of MICRA Planning Documents (Conover)

Session 4: Wednesday, January 27, 8:00-10:00 (CST)

**New Business**

19) Mississippi River Economic Profile (Bryan Hopkins, MO DNR)

20) Review of Standing Committees (Conover)

21) ASA Government Affairs Committee (Conover)

22) River Champion Award (Canaday)

23) Young Professionals Travel Stipend (Conover)

24) 2021 Operational Budget and Workplan (Conover)

25) Schedule Spring Conference Call and Summer Executive Board Meeting  
(Conover)

26) Other New Business (Schoenung)





**MISSISSIPPI INTERSTATE COOPERATIVE RESOURCE ASSOCIATION**

**Executive Board Meeting Notes**

January 25-27, 2021

Remote Participation

**MEETING NOTES**

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

**1) Call to Order**

Roll call and introductions

**2021 MICRA Executive Board Members**

Voting Members

Arkansas/Red/White Rivers	Ricky Moses	Present sessions 2,3,4
Lower Mississippi River	Ben Batten	Present sessions 2,3,4
Missouri River	Kasey Whiteman	Present all sessions
Ohio River	Brian Schoenung	Present all sessions
Tennessee/Cumberland Rivers	Frank Fiss	Present all sessions
Upper Mississippi River	Brad Parsons	Present all sessions
USFWS	Aaron Woldt	Present sessions 2,3,4
USGS	Rip Shively	Present all sessions

\* Six voting members are needed for a quorum.

*A quorum of Executive Board members was present for all sessions.*

Non-voting members

MICRA Chairperson	Brian Schoenung	Present all sessions
MICRA Chairperson-Elect	Brad Parsons	Present all sessions
MICRA Past Chairman	Larry Pugh	Absent all sessions
MICRA Past Chairman	Brian Canaday	Present all sessions
MICRA Coordinator	Greg Conover	Present all sessions
LMRCC Alternate	Angie Rodgers	Present all sessions

Committee Chairpersons

AIS Committee (MRBP)	Chris Steffen	Absent all sessions
Freshwater Mussel Committee	Vacant	
Gamefish Committee	Vacant	

Habitat Committee  
Paddlefish/Sturgeon Committee

Jeff Janvrin  
Joe McMullen

Present session 3  
Absent all sessions

Guests

Allan Brown  
Bruce Drektrah  
Mark Gaikowski  
Jen Mock Schaeffer  
Dennis Baxter  
Ashlee Smith  
Bryan Hopkins

USFWS  
MDC  
USGS, UMESC  
AFWA  
TVA  
MWF  
MO DNR

Present all sessions  
Present all sessions  
Present all sessions  
Present session 1  
Present session 2  
Present session 3  
Present session 4

Drafting Team Members (Session 3)

Jeff Janvrin  
Dennis Riecke  
Randy Schultz  
Robby Maxwell  
Tim Bister  
Chris Greene

Wisconsin DNR  
Mississippi DWFP  
Iowa DNR  
Louisiana DWF  
TPWD  
Alabama DWFF

## 2) Chairman's Report

- Sent an email thanking Aaron and Brian with USFWS for problem solving a resolution for Region 3 staffing issues that resulted in Greg once again being able to focus all of his attention on the business of MICRA. The progress we have made towards finalization of the strategic plan would not have been possible without this change.
- MICRA signed on to the CAWS stakeholder group letter encouraging the USACE to fund ongoing development of options for one-way southbound controls of ANS at the CAWS. (See draft letter on next page.)
- The board successfully pulled off an all-delegates meeting via zoom!
- Discussed draft strategic plan comments from Pennsylvania with Heather Smiles to ensure comfort level with strategic plan direction and basin commission concept. Pennsylvania was concerned about potential staff time commitments should the basin commission concept move forward and also wanted clarification of consensus.
- Participated in a number of calls with Greg and Ashlee to plan DC visits.

*Submitted by Brian Schoenung*

### Notes:

Schoenung reviewed his written report making a few highlights. He noted that the past 4-5 months have been busy and he was thankful to have the MICRA coordinator

- Schoenung thanked the USFWS for finding a way to meet the supervisory needs at Carterville FWCO and returning Conover to his MICRA coordinator role, fulfilling the USFWS's commitment to MICRA partnership.
- Schoenung was working with Ashlee Smith to send a MICRA version of the attached CAWS letter to USACE, but the letter was not finalized before the WRDA bill was finalized.
- After talking with Heather Smiles (PFBC), Schoenung is confident that Pennsylvania's comments were not a deep concern. The agency just wanted to make sure that MICRA is aware of the issues they might run into with respect to time commitments to a Mississippi River Basin Fishery Commission. She is looking forward to seeing additional information on consensus. Smiles did not convey any new concerns as it relates to other comments the board has already received on this issue. He does not expect PA will oppose moving forward with the Joint Strategic Plan.

## Agenda Item 2

- It is likely that we will conduct all or a portion of the February Congressional office visits remotely. Schoenung is hopeful that this may allow for increased participation from other state delegates that have not been able to travel to DC for past visits.

### Discussion:

- ! Conover will check with the CAWS Stakeholder Group to confirm that the attached letter was submitted to USACE.

*Complete: The CAWS Advisory Committee letter was submitted to USACE. A response from USACE was received on December 18, 2020 and is included in the notes.*



DEPARTMENT OF THE ARMY  
OFFICE OF THE ASSISTANT SECRETARY  
CIVIL WORKS  
108 ARMY PENTAGON  
WASHINGTON DC 20310-0108



December 18, 2020

Chicago Area Waterway System Advisory Committee  
c/o Northwestern Indiana Regional Planning Commission (Ms. Kathy Luther)  
6100 Southport Road  
Portage, IN 46383

Dear Ms. Luther:

This is in response to the Chicago Area Waterways System Aquatic Invasive Species Stakeholder Group letter, dated October 20, 2020, requesting Fiscal Year (FY) 2021 Work Plan funding to develop options to prevent the two-way transfer of aquatic invasive species (AIS) between the Great Lakes and Mississippi River (GLMR) basins. The letter also advocated the need to implement measures outlined in the GLMR Interbasin Study (GLMRIS) – Brandon Road Lock and Dam (Brandon Road) Chief's Report.

The GLMRIS legislation authorized the U.S. Army Corps of Engineers (Corps) to conduct a study of options and technologies available to prevent the transfer of AIS between the GLMR basins. Under this authority, the Corps completed a study of measures to control the upstream transfer of invasive species at the Brandon Road Lock and Dam. Congressional authorization is required to implement any potential measures identified in the study. The Army will consider the study of a one-way downward control point to prevent AIS transfer from the GLMR basin, along with other programs, projects and activities across the Nation that are competing for limited Federal resources.

Please provide a copy of this letter to the other signatories of your letter. Thank you for your support of the Army Civil Works program.

Sincerely,

R.D. James  
Assistant Secretary of the Army  
(Civil Works)







XX, 2020

Mr. R.D. James  
Assistant Secretary of the Army for Civil Works  
Office of the Assistant Secretary of the Army (Civil Works)  
108 Army Pentagon  
Washington, DC 20310-0108

Re: Finalizing the Great Lakes and Mississippi River Interbasin Study

Dear Assistant Secretary James:

This letter is written on behalf of The Chicago Area Waterway System Aquatic Invasive Species Stakeholder Committee (Committee), whose members have met since 2014. The Committee includes representatives from 40 public and private stakeholders that benefit from and have responsibilities related to the Chicago Area Waterway System (CAWS), as well as regional stakeholder groups representing maritime, commercial, recreational, and environmental interests. The goal of the Committee is to contribute to efforts to develop and implement a viable and sustainable plan to prevent the two-way movement of AIS through the CAWS, while maintaining other beneficial functions of the system.

Specifically, we ask you to support the Army Corps of Engineers, Chicago District's request for funding under its FY 2021 work plan to develop options for a one-way down-bound control point(s) to help prevent the transfer of ANS from the Great Lakes into the Mississippi River Basin and other water bodies. This is a next important step to update and maintain the value invested into GLMRIS. This will continue the work of developing options for preventing two-way aquatic invasive species transfer through the CAWS, consistent with the original Great Lakes and Mississippi River Interbasin Study (GLMRIS) authorization. Under the GLMRIS authorization, Congress tasked the Corps with developing alternatives that would "prevent the spread of aquatic nuisance species between the Great Lakes and Mississippi River Basins." Since the original GLMRIS report in January 2014, the Corps has taken steps to address species bound for the Great Lakes, but has made little progress in addressing down-bound species headed for the Mississippi River Basin, a critical component of Congress' goal of preventing the transfer of aquatic nuisance species moving in both directions.

Aquatic nuisance species (ANS) continue to pose a serious threat to the ecological health of rivers and lakes, as well as the people and economies those waters support in both the Mississippi River Basin and the Great Lakes Basin. In 2011, the Corps released an ANS White Paper as a product of its ongoing GLMRIS study that identified 39 species as ANS of Concern for the CAWS. Ten were of concern for potential transfer to the Great Lakes Basin from the

Mississippi River; the remaining 29 species were of concern for potential transfer from the Great Lakes to the Mississippi River Basin. The final list of 13 ANS target species contains 3 species posing a risk to the Great Lakes (scud, Silver carp, Bighead carp) and 10 species found in the Great Lakes posing a risk of significant damage to the Mississippi River Basin. Work to prevent the transfer of ANS into the Mississippi River and Great Lakes Basins should continue under GLMRIS.

Implementing the Corps' Brandon Road Lock and Dam project is critical to improve protections against Asian carp entering the Great Lakes. The Corps finalized the Brandon Road Chief's Report in May 2019. The U.S. House Water Resources Development Act of 2020 and the U.S. Senate America's Water Infrastructure Act of 2020 both include language authorizing the Brandon Road Chief's Report. Additionally, the House increased the Investigations line item in its FY21 Energy and Water Appropriations and included the follow report language referring to the Brandon Road project, "As the Corps prioritizes projects, it shall consider critical projects to prevent the spread of invasive species. The Corps is reminded that this project is eligible to compete for additional funding within the Investigations account." The Senate has not yet released its FY21 appropriations bills. The CAWS Stakeholder Committee encourages funds requested for this project in the Corps work plan be included into final appropriations.

While these advancements are positive, structural measures at Brandon Road Lock and Dam will not protect against the many ANS poised to move from the Great Lakes into the Mississippi River. Hence, the need to finalize the original direction Congress gave to the Corps under the authorization of GLMRIS.

We must stress that continued action on one-way down-bound prevention should happen simultaneously with, and not divert resources or focus away from, implementing the Brandon Road Lock and Dam project.

Please contact Kathy Luther at [kluther@nirpc.org](mailto:kluther@nirpc.org) or (219)254.2513 if you have any questions regarding the Chicago Area Waterways System Aquatic Invasive Species Stakeholder Group.

Thank you for your consideration of our request.

Sincerely,

GROUPS SIGN HERE

Cc: Major General Robert F. Whittle, Jr., Great Lakes and Rivers Division Commander

### 3) Coordinator's Report

#### Budget

- Accountant, bank, and coordinator financial records all reconcile as of 12/31/2020
  - Yearend balance = \$187,480.76
- Status of 2020 membership dues (see table on page 6)
  - 2020 dues invoices not mailed out until October 2020
  - Table accounts for 21 agencies, however not all reflected in EOY balance
    - Dues received from 10 states plus USGS before December 31
    - Dues from 9 states and TVA were received after December 31 – not reflected in yearend balance
- MRBP funding
  - FY19 financial assistance agreement zeroed out in 2020
  - FY20 FWS funding for MRBP was increased back to the original funding level of \$50,000
    - Awarded 08/31/2020
    - MICRA receives \$4,500 for indirect cost
    - MRBP has expended approximately \$8,400 to date
    - MICRA has not invoiced any FY20 funding to date
  - FY21 FWS has not published NOFO yet

#### Financial

- The change of address for MICRA has created a number of lengthy corrections with state and federal financial systems.
- MICRA's SAM registration is the one system that I have been unable to get corrected.
  - Requires a letter from the Secretary of State
  - No letter for the MICRA partnership in the Illinois or Iowa databases
  - Next step will be to request a search of Missouri database
  - Not sure how this will be resolved if unable to obtain a letter from a Secretary of State
  - This is significant, because MICRA cannot obtain any new federal grants without an active SAM registration

#### Black carp bounty

- There is interest from some state and federal partners in expanding the black carp bounty program currently managed by IL DNR with GLRI funds.
- I have been approached about the ability for MICRA or MRBP to administer a bounty program if funds are obtained.



- I am expecting a project description that provides details of what would be requested from MICRA/MRBP.
- No action required at this time, simply getting this on the Executive Board's radar.

Notes:

Conover reviewed his written report. Aside from the Joint Strategic Plan and the all delegate meeting, he has been focusing on getting MICRA's financial records up to date.

Conover stressed the importance of the problems he is encountering renewing MICRA's SAM registration. He does not know what will be required of the partnership if MICRA is not in the Missouri Secretary of State database. This could become a problem for the partnership that will require the Board's attention in the near future. He will be focusing on this after the preparation for the DC visits is complete.

Dennis Scarnecchia has reached out to Conover several times about his interest in working with MICRA to develop a basinwide paddlefish management plan, as well as providing some information on bowfishing. Scarnecchia recently shared a published review of the history and development of bowfishing with the MICRA delegates and offered to work with the states if there is interest within MICRA to discuss management of bowfishing. Scarnecchia has been invited to discuss these topics with the Paddlefish Sturgeon Committee during their winter meeting.

Conover has been approached about the potential for MICRA or the MRBP to administer a black carp bounty program within the basin, to expand on the program Illinois has been managing in its boundary waters the last several years using GRLI funds. The general question has been raised to him on a couple of occasions, but he has not been provided with any details of what this would entail. This is something that may be presented to the Executive Board for consideration soon.

Discussion:

Parsons will check on MN DNR 2020 dues payment.

Rodgers noted that the black carp bounty discussion has come up within multiple sub-basin Asian carp partnerships and appears to be of most interest in the Missouri River sub-basin. It would be difficult for a state agency to administer the bounty program and they have been discussing the need for a larger umbrella group to provide assistance.

### Agenda Item 3

Schoenung has been involved in some partnership discussions regarding the black carp bounty program. This program is of particular interest among researchers who are able to use the collected specimens to complete a number of projects including ploidy, diet, etc. The Illinois bounty is \$100/fish. Southern Illinois University has been administering the program for the IL DNR. The Illinois program will continue for Illinois boundary waters. The biggest concern regarding expanding the program is finding an entity that can pay money out to fishermen for the bounty. State and federal agencies are not set up to do this. There is some question on how to handle instances when a fisherman collects multiple fish, particularly if someone were able to capture a large number of YOY. In the Ohio and Wabash river boarding Illinois, all fish have turned out to be diploid. The diet data has not been conclusive to this point. There is an understanding within IN DNR that there is value in documenting fish in new locations and understanding their distribution and movement. The Ohio River partnership has been discussing the value of information that can be obtained from a black carp bounty program.

Fiss commented that he will need to consider if Tennessee regulations would allow a commercial fisher or angler to participate in a bounty program. This might be a concern in other states.

Indiana has a commercial fisherman that began catching black carp consistently in the Ohio River once he learned about the bounty. There is potentially value in expanding the program, but it is not likely something that will provide value long-term.

Conover suggested that the MRBP might be a better option for administering the program if MICRA were to decide to provide this type of assistance. The MRBP recently published a Request for Proposals for some additional administrative support. This contract person could potentially be assigned this responsibility and the additional work that would come with administering a bounty program. This is an option that can be explored once we see a proposal with the details and know the level of interest within MICRA and the MRBP.

When your agency or local news media puts out a story about a bounty program, it generates a significant amount of interest; especially from a significant number of people that are unlikely to ever encounter black carp.

Parsons noted that MN DNR changed their invasive species rules that allowed for the public to transport Asian carp to a DNR office. Once the fish are inspected by the DNR, the fisherman can keep the fish. It was previously illegal for the public to keep and eat an Asian carp. This required a rule change.

The MRBP has a considerable amount of funding available from 2020 for projects. There has been discussion about completing a review of Asian carp regulations particularly as they relate to transport. Conover completed a review of state regulations a few years ago. The panel may have the new contract person update the state regulations summary during 2021.

Agenda Item 3

<b>2020 Membership Dues</b>					
	<b>2020</b>	<b>2019</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>
Alabama	1,500	1,500	1,500	1,500	1,500
Arkansas	1,500	1,500	1,500	1,500	1,500
Colorado	1,500	1,500			
Georgia	1,500	1,500			1,500
Illinois	1,500	1,500	1,500	1,500	1,500
Indiana	1,500	1,500	1,500	1,500	1,500
Iowa	1,500	1,500		1,500	1,500
Kansas	1,500	1,500	1,500	1,500	1,500
Kentucky	1,500	1,500	1,500	1,500	1,500
Louisiana	1,500	1,500	1,500	1,500	1,500
Minnesota		1,500	1,500	1,500	1,500
Mississippi	1,500	1,500	1,500	1,500	1,500
Missouri	1,500	6,500	1,500	1,500	1,500
Montana			1,500	1,500	1,500
Nebraska	1,500	1,500	1,500	1,500	1,500
New York		1,500	1,500		
North Carolina			1,500	1,500	
North Dakota	1,500	1,500	1,500	1,500	1,500
Ohio		1,500	1,500	1,500	1,500
Oklahoma	1,500	1,500	1,500	1,500	1,500
Pennsylvania	1,500	1,500	1,500	1,500	1,500
South Dakota	1,500	1,500	1,500	1,500	1,500
Tennessee		1,500	1,500	1,500	1,500
Texas	1,500	1,500	1,500	1,500	1,500
Virginia					
West Virginia		1,500	1,500		1,500
Wisconsin	1,500	1,500		1,500	1,500
Wyoming					
TVA	5,000	5,000	5,000	5,000	5,000
USGS	5,000	5,000	5,000	5,000	5,000
USFWS					
<b>Total Dues Collected</b>	<b>38,500</b>	<b>52,500</b>	<b>43,000</b>	<b>43,000</b>	<b>44,500</b>
Number Agencies Paid	21	27	24	24	25
10 states, plus USGS received before December 31 and appear in FY20 EOY actual					
9 states, plus TVA were received after December 31 and do not appear in FY20 EOY actual					
GA, NY, VA, WY	Not included in budget projections				
GA	PD, not included in 2020 projections				
MN, MT, NC, WV	Included in 2020 projects, but have not paid				
NY, OH, TN	Payment not received, but I have been contacted regarding payment				

#### 4) Arkansas/Red/White Sub-basin Update

**Arkansas** (submitted by Ben Batten)

##### Lower Arkansas River Work

- AGFC staff completed their second year of catfish sampling, with a focus on Flathead in Pool 2, and also completed a community fish sample.
- Florida Bass were stocked into Pool 2 for the first time. We will continue this effort and monitor to see if we achieve the desired effect of increased trophy fish production.

##### Aquatic Nuisance Species

- Northern Snakeheads continue to expand their range in the state and have been detected in Missouri associated with the St. Francis River and Mississippi from the White River.
- Giant Salvinia has shown up in two additional locations in Arkansas.
  - It was detected in Lake Columbia in December 2019. Lake Columbia is a 3,000 acre lake that serves as the water supply for the city of Magnolia in Columbia County. The lake is owned by the county and they treated the GS in the late summer, early fall of 2020. They are having to work with the Arkansas Health Department to maintain health requirements for drinking water supply.
  - Giant Salvinia was discovered in Millwood Reservoir in December 2020. This is a 28,000-acre Corp of Engineers Lake in Southwest Arkansas. The Arkansas Game and Fish is working with the COE to develop a management plan for its control.
  - AGFC ANS Coordinator and Fisheries Districts 1, 2, 7, and 10 biologist continue to monitor the Lower White, the lower Ouachita River and 5 large COE reservoirs in the Lower Mississippi River Basin for zebra mussels. High water flows have prevented further investigation of the Zebra Mussels that were found in the White River tailwater. No Zebra Mussels have been detected at monitoring sites except for the one on the Lower White River below the navigation canal and Bull Shoals Lake.

## Red River

### Louisiana - Submitted by Ricky Moses

- LDWF continues to monitor the spread of bighead and black carps northward along the Red River. More of them are being seen and captured by anglers and biologists each year and this trend continues in 2020.
- Giant Salvinia continues to be problematic on most of the Red River raft lakes and associated backwater. The Louisiana Department of Wildlife and Fisheries 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. Research efforts to produce and grow salvinia weevils that are more cold tolerant continue in 2020.
- LDWF is sampling for larval Asian Carp species to monitor range expansion and reproduction in the Red River Basin. Sites that were sampled in 2013 and 2014 were revisited in 2019, and will be part of another round of sampling in 2021 and 2022.
- 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, between 100 and 150 new stream flow gages will be placed throughout the state. LDWF is represented on multiple Technical Advisory Groups including Projects, Policy, Outreach, and Data/Modeling, and is advocating for fish and wildlife resource protection. Ideally, green infrastructure and “nature based solutions” will be implemented, where possible.

### Notes:

Moses noted that his report stands as submitted. He did not contact Oklahoma or Colorado for updates.

Batten noted that giant Salvinia has been found in a new location in November/December each of the past four years. It is a very problematic plant in Arkansas. The state implemented a new regulation that started January 1 requiring boaters to pull their drain plug before pulling onto a public roadway when leaving a

boating access area. They may be one of the first states in the southeast to implement this type of regulation.

Discussion:

Has Mississippi appointed a new fish chief? Angie Rodgers reported that Larry Bull, assistant chief, retired about the same time that Larry Pugh moved up. Jerry Brown is the new assistant chief. He was the southwest region supervisor until 8-9 years ago when he moved to the headquarters office as their agency's state lakes coordinator. No one has been hired as the new fish chief yet, and not aware of anyone acting in that role. Jerry Brown has been the point of contact for both MICRA and LMRCC.

## 5) Lower Mississippi River Sub-basin Update

### Arkansas (submitted by Ben Batten)

#### Live Fish Trade Regulations

- From 2019-2020, Arkansas Game and Fish Commission fisheries staff worked with stakeholders to completely revamp our codes pertaining to all aspects of the live fish trade industry including aquaculture, bait fish sales, and the movement of fish into and out of the state.
- This had not been undertaken in decades, and reflects a great improvement in the regulations to better protect the natural resources of Arkansas, while still allowing for this important industry to conduct their business.
- Of special interest to MICRA are the following changes pertaining to Asian Carp which all went live on January 1, 2021:
  - USFWS Certified Triploid Grass Carp replaced Diploid Grass Carp on the Arkansas Approved Commercial Aquaculture Species List. Only permitted farmers under conditional permits can now possess Diploid Grass Carp, and only for the purpose of producing Triploid fish.
  - Bighead Carp and Black Carp (both diploid and triploid) are now on the conditional species permit list. Conditional species permits require additional biosecurity measures to hold and propagate listed species and facilities must be inspected and approved by AGFC staff before conditional species permit are issued.
  - Resident Fish Farm Permit holders that hold a valid conditional species permit for Bighead Carp on January 31<sup>st</sup>, 2021 may continue to obtain an annual conditional species permit for this species as long as they own the farm and meet the permit requirements, but they are not transferable to any other individual or entity.
  - Silver Carp were removed from the Conditional Species Permit List, and may not be possessed by anyone.

#### American Eels

- The Arkansas Game and Fish Commission has been studying out-migration dynamics of silver American Eels from the Ouachita-Black-Red-Atchafalya River since 2017. We implanted 49 eels with transmitters from three rivers in the Ouachita River basin during September 2020, and a total of 83 eels have been tagged for the entire project. We have 10 stations with 15 VR2s that detect migrating eels, including at sites above and below dams.
- Dr. Todd Slack with the U.S. Army Corps of Engineers has been operating VR stations at Jonesville and Simmesport, Louisiana.



- The Louisiana Department of Wildlife and Fisheries and the Baton Rouge office of the U.S. Fish and Wildlife Service cooperate to maintain arrays near the mouth of the Atchafalaya River at Morgan City and at the Wax Lake outlet. They did an excellent job in getting their arrays deployed during 2020 despite seemingly insurmountable issues associated with record numbers of hurricanes.
- We don't have preliminary migration estimates for 2020 at this time. We have seen considerable inter-annual variation in the chronology of migration each year of the study, which appears loosely associated with high flow events. This project has been added to the itag and FACT telemetry networks so we can determine if marine researchers in the Gulf of Mexico or the Florida Atlantic coast detect these eels on their way to the Sargasso Sea to spawn.

**Kentucky** (submitted by Jessica Morris and Adam Martin – covers LMR and TNCR)

- KDFWR continues to promote the harvest of Asian carp from Kentucky waters through routine contact with commercial fishers and fish processors. There are currently four companies in Kentucky that purchase Asian carp from commercial fishers. KDFWR employees conduct ride-alongs with commercial fishers who are fishing within the Asian Carp Harvest Program (ACHP), which allows commercial access to closed waters for the purpose of Asian carp harvest. Most of the commercial effort for Asian carp is on the Cumberland River and its associated reservoir, Lake Barkley. There is some commercial effort put forth on the Mississippi, Ohio, and Tennessee Rivers as well. Commercial effort towards harvesting of Asian carp from Kentucky waters has increased exponentially over the past several years. In 2020, harvest of Asian carp by commercial fishers in Kentucky totaled over 6.4 million pounds; the second year in a row that Asian carp harvest has totaled over 6 million pounds in the state of Kentucky.
- KDFWR has engaged in a Public/Private Partnership between KDFWR and the Kentucky Fish Center in western Kentucky. The primary objective of the Kentucky Asian Carp Public/Private Partnership is to facilitate Kentucky's fish processing industry targeting Asian carp with meeting their current market demands and their desire to significantly expand those markets. This Partnership began in 2019 and the Kentucky Fish Center has facilitated the harvest and sale of over 10.2 million pounds of Asian carp to date.
- KDFWR verified the capture of one Black Carp in Lake Barkley on the Cumberland River, and eleven Black Carp in the Ohio River in 2020. All of the Black Carp reported were captured as bycatch in gill nets by commercial fishers. KDFWR processed the fish according to the Black Carp protocol, and sent samples to the respective laboratories of the USGS and USFWS.
- KDFWR continues to conduct standardized sampling with gill nets for Asian 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 Asian carp in each reservoir. TWRA and other partners in the TNCR Basin are pursuing similar standard sampling methods.

- KDFWR remains actively engaged as a partner with the USFWS to test the Bio-Acoustic Fish Fence (BAFF) at Lake Barkley Lock. A study plan has been compiled, and the BAFF was installed in November 2019. In 2020, KDFWR provided support to surgically implant acoustic transmitters into Silver Carp (404), Smallmouth Buffalo (40), Freshwater Drum (32), and Paddlefish (23) in the tailwaters of Lake Barkley Dam. Movement of these fish will be monitored by the extensive telemetry receiver array surrounding the BAFF and Barkley Lock throughout testing of the BAFF. KDFWR also assists with maintenance of the telemetry receiver array, including offloading and sharing data, and turning the BAFF components on and off for its scheduled rotation as described in the study plan.
- KDFWR continues to expand the VEMCO telemetry receiver array in the lower Ohio (11), Green (2), Tennessee (23), and Cumberland (18) rivers to monitor movements of Asian carp, in conjunction with partners in the TNCR Basin and throughout the greater Ohio River Basin.
- KDFWR participated in the TNCR Deterrent Strategic Decision Making Workshops hosted by the USGS. KDFWR provided data and perspective from our agency for the discussions and letter that was written containing the groups suggested Asian carp deterrent placement strategy for the TNCR Basin. The letter was submitted to the Tennessee Valley Authority for consideration during the creation of the Programmatic Environmental Assessment of all Tennessee River Dams that is currently being conducted.
- KDFWR maintained the community sampling conducted in the tailwaters of Kentucky and Barkley Dams on the Tennessee and Cumberland rivers respectively, throughout 2020. Data collected through this long term sampling is being analyzed to determine impacts Asian carp may be having on native fish communities in these areas. In 2019, KDFWR conducted a creel survey in the tailwaters as well to monitor impacts of Asian carp populations on anglers fishing in the tailwaters. This survey is on a three year rotation and will be completed again in 2022.
- KDFWR continues to monitor the commercial fishery for paddlefish through reports submitted by commercial fishermen. These reports indicated that paddlefish harvest numbers decreased for the Ohio and Mississippi River systems to the lowest harvest on record in the 2018 commercial license year. Paddlefish harvest in 2019 was only slightly higher. Data for the 2020 license year is still being collected. KDFWR is developing a workgroup to further investigate the decline in paddlefish harvest and associated factors.

- KDFWR will continue its fish community electrofishing survey of the Mississippi River every other year. Additionally, fish community surveys will continue to be conducted on some of our oxbow lakes located in our wildlife management areas.
- Alligator Gar have been stocked in tributaries to the Mississippi River since 2009 and will continue to be stocked for several more years. Alligator Gar have also been stocked since 2009 in the Clarks River which is a tributary to the Tennessee River. In 2020, Murray State University surgically implanted VEMCO acoustic tags into 3 large Alligator Gar which had been held in the hatchery for several years, and have plans to tag several more hatchery fish in the fall of 2021. Wild-caught Alligator Gar collected by commercial fishers will also be tagged if they are submitted to Murray State staff in good condition.

**Louisiana** – (submitted by Alex Perret, Raynie Harlan and Robby Maxwell)

- Giant apple snails continue to invade and increase their range throughout southern Louisiana in recent years. They have now been sighted in 28 parishes in coastal Louisiana. The latest expansion has been westward into the lower Calcasieu River in Calcasieu Parish. New records upstream of established populations seem to be originating at boat launches. Louisiana continues to participate in regional river-related committees such as MICRA and the Gulf States Marine Fisheries Commission, with personnel sitting on GSARP and the MRBP on Aquatic Invasive Species, and the Paddlefish/sturgeon committees.
- LDWF annually samples fisheries resources and controls invasive aquatic vegetation in the LMR.
- Larval Asian Carp Sampling – LDWF is continuing sampling of larval Asian carp in rivers and tributaries throughout Louisiana in May and June of 2020 and 2021. The data collected will be compared to information gathered from the initial larval Asian carp sampling that took place at previously established big river sampling stations in 2013, 2014, and 2019, and telemetry studies focused on the Intracoastal Waterway.
- Asian Carp Telemetry – LDWF is partnering with LSU to study Asian carp movement between basins across the Intracoastal Waterway. Forty receivers will be placed between the Calcasieu River and the Barataria Basin, and 200 carp will be tagged. The goal is to understand Asian carp behavior in South Louisiana to inform management and control efforts.
- Swamp Eels (*Monopterus albus*) were first encountered in Louisiana in 2019 in Bayou St. John in New Orleans. Monitoring was conducted in 2020, and they don't seem to have spread beyond that waterbody, but multiple size classes suggest reproduction. LDWF will continue to monitor for expansion of range.
- Tilapia have been found in the University Lakes in Baton Rouge. Reproduction has been observed, but sampling efforts have not found them beyond the lakes and associated canals.

## Agenda Item 5

- Hurricane Laura caused numerous fish kills in the Calcasieu and Mermentau basins, and LDWF will monitor recovery of fisheries stocks in 2021.
- 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, between 100 and 150 new stream flow gages will be placed throughout the state. LDWF is represented on multiple Technical Advisory Groups including Projects, Policy, Outreach, and Data/Modeling, and is advocating for fish and wildlife resource protection. Ideally, green infrastructure and “nature based solutions” will be implemented, where possible.
- American Eels – Lab work has concluded on a statewide study of American Eels that investigated diet, presence of the parasite *Aguilicolides crassus*, and age of eels caught as bycatch. In total, 420 eels were examined, and results are being processed. Additionally, VemCo receivers have been placed at the Wax Lake Outlet at Calumet and The Atchafalya River at Morgan City to detect eels that Jeff Quinn has tagged in Arkansas. To date, eight eels have been detected making the migration from Arkansas to the Gulf with these receivers.
- LDWF continues to collaborate with the LMRCC, the Nature Conservancy, and the USFWS on completing a restoration and access project on the Richard K. Yancey Wildlife Management Area near Simmesport, LA. The project will re-establish hydrological connections and restore water levels on the Black Hawk scar lakes within the batture lands at MS river mile 320. National Fish and Wildlife Foundation (NFWF) recently awarded additional funding to LMRCC, Nicholls State University and LUMCON to support research and management of habitat and species specific responses to the hydrological alterations. Objectives for the project have been identified, prioritized, and approved. To date, the following objectives have been accomplished:
  - LDWF sport fish sampling (electrofishing and gill net methods)
  - LDWF continuous water depth and temperature observations concluded (captured time-series data through the flood pulse)
  - LDWF and Nicholls State conducted two ‘pre-construction’ samples (Alligator gar targeted sampling)
  - LUMCON conducted one ‘pre-construction’ site visit (habitat observations)
  - enhanced boat launch into Blackhawk Scar Lakes for improved public access
  - Completed Engineering and Design phase for all restoration elements
- LDWF is currently conducting repairs and improvements to the boat ramp at Deer Park. Construction efforts have been delayed several times due to elevated river levels. This project will ensure continued access to the Mississippi River oxbow.

**Mississippi** (submitted by Dennis Riecke, Ryan Jones, Chad Washington)MICRA Activities

- Reviewed MICRA Strategic Plan Document.

Aquatic Plant Control Activities

- MDWFP fisheries biologists chemically treated Water Hyacinth, Alligator weed, Cuban bulrush, Hydrilla, and Giant Salvinia at Ross Barnett Reservoir.
- MDWFP fisheries biologists chemically treated Water Hyacinth at Horseshoe Lake and Little Round Lake.

Asian Carp Control & Research Activities

- Issued 3 Special Permits for the harvest of Asian Carp at Moon Lake for 2020-2021 season (November 2020).
- Submitted Grant Application Documents to secure a new contract fishing project for Asian Carp removal in the MS River and Yazoo River Basin. Initiated October 2020. Contacted over 1, 200 commercial fishing license holders about this opportunity. Fifty Three indicated interest, 20 selected to proceed with program. Only 1 person sent in the required information. Contract fishing program was cancelled and MDWFP is pursuing a program to reimburse Asian Carp processors for the fish they buy. We also have a grant for Asian Carp removal at Pickwick Lake.
- Submitted Grant Application Documents to secure new Asian Carp movement research study at Moon Lake conducted by MS State Univ. Initiated October 2020.
- Coordinated and administered ANS grant for MS State Univ. research on "Development of management strategy for surveillance and containment of invading Asian carp in waters connected to the Tennessee River". Initiated in September 2019.
- Continued agency telemetry project for Asian Carp in TN River and TTW. Continued agency sampling for Asian Carp in Pickwick, the Divide Cut, and Bay Springs.
- Participated in conference calls to decide on Asian Carp barrier locations and barrier types at TVA reservoirs in Tennessee.

ANS Coordination and Field Activities

- Attended Gulf and South Atlantic Panel on Aquatic Invasive Species virtual meetings in April and December 2020.
- Attended Mississippi River Basin Panel on Aquatic Nuisance Species meeting in March 2020 and conference call in December 2020.

## Agenda Item 5

- Participated in the Aquatic Nuisance Species Task Force and Panel principal conference calls in December 2020.
- Edited the Aquatic Nuisance Species Task Force (ANSTF) Report to Congress and the ANSTF Bylaws.
- Reviewed two Asian Carp research proposals for the Lower Miss. River Conservation Commission.
- Notified online sellers (Amazon, eBay, Craigs List and Etsy) that sales and shipment of water hyacinths, alligator weed and *Trapa natans* are illegal under federal law.
- Sampled Eagle Lake, Chotard /Albermarle, and Lake George (MS River oxbows) for sportfish in fall 2020 and did not observe a snakehead.
- MDWFP has confirmed 9 Northern Snakeheads from 7 locations in Mississippi from 2017-2020: Lake Whittington, Lake Beulah, Perry Martin Lake, Desoto Lake, Horseshoe Lake, Steele Bayou and a vernal pool near Gunnison, MS,

### **Missouri** (submitted by Joe McMullen and Sara Tripp)

#### Paddlefish

- Draft final report and potential regulation changes have been submitted from the 5-year exploitation study
- In order to meet the objectives of the project, in the large rivers (Mississippi and Missouri rivers and their tributaries) 2,311 Paddlefish were tagged with jaw bands, 102 of those with transmitters, and on the Mississippi River 1,015 trawls were completed to document successful reproduction
- Of the 2,224 Paddlefish tagged in the Mississippi River that were  $\geq 24$ -inches, 139 tags were called in and 92 were harvested by commercial and recreational anglers over the 5-year study
- The average annual exploitation rate was 2.5% ( $\pm 0.58$ ; range 1.36 – 4.25) when factoring in a non-reporting rate of 12.75% if we consider all Paddlefish implanted with transmitters that were not detected by the stationary receiver array as not reported
- During the five-year study high water levels limited the number of effective fishing days, exploitation rates may be higher in years with more effective fishing days.
- In addition to the primary objectives of this project we have also summarized additional information to help inform potential regulation changes, including length at maturation for paddlefish in the Mississippi River Basin. Length at first maturation for females (black eggs/ready to spawn that year) was 28-inches for a small portion of the fish collected and checked. None of the females at our current length limit of 24-inches were reproductive, our current length limit does not protect our spawning stock. Our spawning stock needs to be protected to

support a self-sustaining paddlefish population on our large rivers. At 32-inches, 41 percent of all females that were checked, were mature (had black eggs, or had spawned at least once and were developing eggs). Paddlefish are interjurisdictional, increasing Missouri's minimum length limit would protect the spawning stock and align our regulations more closely with other states within the Mississippi River Basin.

- Potential River Recommendations:
  - Establishing a paddlefish commercial fishing season of Nov. 1 to April 15
  - A 32-inch minimum length limit both recreational and commercial
  - Allowing paddlefish commercial gear to be set and left untended from 4 p.m.- 10 a.m. during the paddlefish commercial season

#### Sturgeon

- Age 0 sampling from mid-May to mid-July using the OTO4 Otter trawling, 370 trawls were conducted in the Middle Mississippi River which resulted in 2,437 YOY sturgeon
- Almost 90% of YOY sturgeon were 10-30mm with the highest catch rates from June 3 – June 15
- A subsample of these YOY sturgeon have been submitted to SIU for genetic analysis

#### Asian Carp

- In 2020, MDC was funded to contract with commercial fishermen for removal of Asian Carp, we are in the process of developing these contracts and getting fishermen on board for the spring of 2021
- MDC is also expanding the telemetry array that will reach from the northern and southern border on the Mississippi River and its tributaries as well as the Missouri River, additional Asian carp will be tagged with transmitters in each basin (the Upper Mississippi River, Lower Mississippi River, and the Missouri River) to track movement between basin and guide removal efforts

Assessment of Vital Rates (Exploitation, Size Structure, Age and Growth, and Total Annual Mortality) to Evaluate the Current Harvest Regulations for Blue Catfish and Flathead Catfish in the Missouri and Mississippi Rivers.

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## Agenda Item 5

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### Objectives:

- 1.) Determine current commercial and recreational exploitation rates for Blue Catfish and Flathead Catfish in the Missouri and Mississippi rivers.
- 2.) Determine population demographics (size structure, age and growth, and total annual mortality) of Blue Catfish and Flathead Catfish in the Missouri and Mississippi rivers.
- 3.) Determine if growth or recruitment overfishing of Blue Catfish and Flathead Catfish is occurring on the Missouri and Mississippi rivers, and if modifying harvest regulations is warranted.
- 4.) Harvest regulation recommendations will focus on ensuring quality growth and recruitment among large river catfish fisheries and increasing the yield of catfish available to fishers.

### Status:

Completed

### Abbreviated Abstract:

Blue Catfish and Flathead Catfish are native to the Missouri and Mississippi rivers, and support extremely important fisheries on these big rivers. However, these populations have not been intensively managed in the past, and information needed to inform management and regulatory decisions is limiting. We sampled Blue Catfish and Flathead Catfish primarily using low frequency pulsed-DC electrofishing. Blue Catfish and Flathead Catfish grew slowly, reaching a preferred size (762 mm total length, TL) in about 10-11 years. Annual mortality was estimated for each population using a weighted catch curve and tag recovery model and ranged from 31.0% to 38.2%. Using reward tags, we estimated exploitation to be between 10% and 12%, and modeled the effects of multiple minimum length limits on yield and size structure of the Blue Catfish and Flathead Catfish populations relative to a baseline of 381 mm TL, the smallest fish usually harvested by anglers. All minimum length limits increased the proportion of larger fish (>762 mm TL) in the population while also increasing yield or not reducing yield by more than 2%, except for a 9% decrease in yield of Flathead Catfish on the Mississippi River with the 610-mm limit. We continue to develop and work through our communication and outreach strategy with a coordinated survey to identify the attitudes and preferences associated with catfish management, angling, and harvest on big rivers. Once popular attitudes toward exploitation of these fisheries are fully



understood, a regulation change could be considered to address the desires of fishers who prefer catching larger fish (i.e., size favored over yield).

**Tennessee** (submitted by Eric Ganus)

- TWRA continues to monitor the commercial fishery for paddlefish through reports submitted by commercial fishermen. Reported harvest decreased from 1,351 (FY 2019) to 1,022 (FY 2020) because of reduced harvest pressure in April. Scheduled paddlefish surveys on the Mississippi River will not occur for FY 2021 due to Covid-19 concerns.

Species/Waterbody	Roe Fish Harvest				Total Number of Fish
	Flesh (lbs)	Egg Weight (lbs)	No. of Females	No. of Males	
<u>Bowfin</u>					
Mississippi River		21.58	26		26
<u>Paddlefish</u>					
Mississippi River	10,672	2,931	929	93	1,022

- Due to covid-19 restrictions, TWRA and partners were not able to stock sturgeon into the Cumberland and Tennessee rivers in 2020. However, the TWRA and partners were able to sample the both the Cumberland and Tennessee rivers as part of our annual monitoring. Twelve Lake Sturgeon were collected on Old Hickory during sampling from November 16<sup>th</sup> – November 19<sup>th</sup> and 36 Lake Sturgeon were collected on the Tennessee River (Watts Bar and Fort Loudon reservoirs) from December 7<sup>th</sup> – December 10<sup>th</sup>.
- TWRA partnered with USFWS Spatial Ecologist to develop an Alligator Gar Spawning Habitat Suitability Model on west Tennessee’s Mississippi River tributaries (e.g., Hatchie River, Obion River, etc.). Model results were validated through field surveys on the Hatchie River in the spring of 2020. These data were used to determine appropriate locations for upcoming stockings. USFWS Warm Springs National Fish Hatchery stocked 559 Alligator Gar fingerlings into the Hatchie River in September 2020.
- TWRA’s FY 20 (July 1, 2019 through June 30, 2020) ACHIP purchases were 3,270,600 lbs. Currently, FY 21 ACHIP purchase total 1,898,169 lbs through January 2021.

**LMRCC Coordination Office** (submitted by Angie Rodgers)

- The LMRCC received a grant from National Fish and Wildlife Foundation's 2020 Lower Mississippi Alluvial Valley Fund for work on the Blackhawk Scar Lakes at the Richard K. Yancey Wildlife Management Area in Louisiana. Project partners include The Nature Conservancy, Louisiana Department of Wildlife and Fisheries, Nicholls State University, LUMCON. Project description: Restore floodplain hydrology over 700 acres and connect 5 miles of streams on the R.K. Yancey Wildlife Management Area near Mississippi River Mile 321 in Louisiana by weir enhancement and culvert replacements, thereby providing restoration methodology techniques to private lands via management recommendations to the public. Monitor floodplain resource use by Alligator Gar and associated fish community post-restoration activity in the Blackhawk Scar Lakes to serve as baseline information, providing a rough replicate for similar restoration assessments and transferrable methodologies for freshwater fish ecology in restored floodplain habitats.
- Provided testimony to the Mississippi River Commission in Greenville, MS (August 2020).
- Lower Mississippi River (LMR) habitat restoration opportunities continue to be discussed with partners in both the Memphis and Vicksburg USACE Districts. If river levels allow, 2020 projects will include: Yancey WMA floodplain restoration project with LDWF; Densford Dike Field (RM 757, TN, just upstream from Memphis), and Lower Cracraft Dike Field (RM 510, AR). Additional sites are being identified with the Vicksburg District.
- LMRCC, through a grant from NFWF to Mississippi River Trust, has funding to complete a pilot woody debris trap, in partnership with USACE ERDC to test the efficacy of retaining large woody debris in connected secondary channels, in addition to monitoring the use of the structures by benthic macroinvertebrates.
- The Lower Mississippi and Arkansas, Red, White Asian Carp Partnerships identified high priority projects in FY20 to implement in their respective basins. A similar process has been used for FY21 project identification.
- LMRCC held its annual business meeting (virtually) in November 2020. Jason Henegar with TWRA took over as Chair of the organization.

Notes:

Rodgers reported that Arkansas has made some recent regulation changes that took effect on January 1 that Batten will likely want to review during Session 2 so that he can answer any questions from the board members.

Kentucky provided information for the Lower Mississippi River and Tennessee Cumberland sub-basin updates in the same report that is included in both sections of the briefing book. Most of the work they reported on is occurring in Tennessee Cumberland sub-basin. There is some commercial harvest reported from the lower Mississippi.

Louisiana provided some updates on their Asian carp projects funded with USFWS FY20 funding. They are conducting some larval Asian carp sampling in the lower Mississippi and Red rivers to get a handle on where reproduction is occurring. This is adding on to work the agency completed back in 2013-2014. Louisiana is also partnering with LSU for a movement study on the lower Mississippi River and intercoastal waterway. They are gearing up for this project, it has not been started yet.

LMRCC is continuing to work with LADWF on a reconnection project on one of their wildlife management areas. The LMRCC received a grant from the National Fish and Wildlife Foundation last year. The project includes culvert replacements on the property and replacing a weir. There are a series of scar lakes on the property. It is a unique project completely within the batcher. The project is in the engineering and design phase.

Mississippi and Arkansas both submitted contract fishing proposal for Asian carp funding in FY20. Both states have encountered some difficulties in getting those programs established. There has been low interest from the commercial fishers in their states. Both states are looking at different ways to get these programs up and running. Arkansas is looking at hiring additional staff to catch and remove Asian carp if they can get this approved. Mississippi is looking at providing the incentive to the processors and having the processors provide an increased price to fishermen.

Missouri provided some information on their 5-year paddlefish exploitation study that may be of interest to some of the other states. There are some regulation changes recommended including: Nov 1 – April 15 season, a 32” minimum length limit for both commercial and sport fisheries, and restricting unattended commercial fishing gear to the hours of 4 pm to 10 am the following day. Missouri also provided information on a catfish project completion report.

## Agenda Item 5

Tennessee is not going to complete any paddlefish surveys in 2021 due to COVID.

LMRCC Coordination Office is continuing to identify secondary channel projects and has received funding for three projects. Not sure if any work will be completed this winter, it depends on water levels.

LMRCC was involved in the Lower Mississippi River Resource Assessment several years ago. There were 8 conservation reaches that were identified (30-40 mile stretch of river). The next step was to complete a Feasibility Study for those reaches that would set the stage to look at restoration projects more holistically on the lower Mississippi River. The feasibility studies were authorized in WRDA 2018. The Memphis District included a new start in their FY21 budget for a feasibility study in the Hatchee-Salouza Hatchee reach just north of Memphis. This will be a 3-year study, \$3 million, 50:50 cost share. This is big new development for the sub-basin and we will be busy working on a game plan for getting this study funded and completed.

Ben Batten reported that Arkansas has completed a major renovation of the state's aquaculture regulations over the last 18 months. This was the first comprehensive review since 1960s or 70s. Following is a summary for Asian carp species:

- Only USFWS certified triploid grass carp can be sold within the state.
  - 100% testing, not lot or batch testing?
  - Certification is only valid for 6 days
  - Resulting in no diploid grass carp being shipped in-state or out-of-state from Arkansas
  - Only permitted farmers that meet certain conditions, inspections, etc. will be allowed to produce diploids solely for the purpose of producing triploid grass carp.
- Bighead carp and black carp on the state's conditional species list meaning
  - More strict biosecurity standards
  - Facility subject to more frequent inspections
  - Farms with legally permitted bighead carp on January 31, 2021, may continue to get an annual permit. Permit is grandfathered only to the specific individual and is not transferable to another family member or farm.
- Silver carp are completely banned; no one can possess a live silver carp including fish farmers.

The state worked very closely with the aquaculture industry; industry played a large role in helping to get the changes that were approved. Batten has received multiple letters from large groups requesting the state to tighten its aquaculture regulations since becoming fish chief a couple years ago.

Discussion:

Will the LDWF and LSU intercoastal telemetry project be able to use the same VEMCO equipment that is being used for Asian carp elsewhere in the basin? Yes, they are coordinating with ERDC, MDC, and others that have been conducting Asian carp telemetry work in the sub-basin.

The Memphis District new start is for only one of the eight conservation regions? Yes. We really don't want to do eight different feasibility studies given the expense and time involved with each one. We are hoping this first one can serve as a pilot study to identify kinks and policy changes that may be needed. We hope to bundle the remaining reaches into groups to complete the feasibility studies. The initial feasibility study will result in a list of restoration projects that have the engineering and design work initiated.

Parsons noted that Iowa has found Asian carp spawning in tributaries in the Upper Mississippi River. What did they find with the larval project in the lower Mississippi? They are looking at both the mainstem and tributaries in the Red River and just tributaries in the lower Mississippi River. They are not looking for larval Asian carp in the mainstem lower Mississippi River.

Conover noted that it has been several years since the last diploid grass carp state meeting. At that time, Arkansas, Missouri, and Iowa had discussed coordinating moving forward with triploid grass carp only regulations at the same time. Has there been any further coordination among the three states?

Canaday said that there is an on-going discussion within Missouri, but the issue hasn't been able to get the traction that it needs to move forward yet. Missouri has a smaller aquaculture industry and the agency has been talking with its producers. Missouri producers are concerned about what such a change would mean for their operations. Missouri producers often purchase their fish from Arkansas. However, Missouri will likely have to allow producers to possess diploids to make their own triploids. A couple of large producers have the capability to produce triploid grass carp, but they don't have support for USFWS certification like the farms in Arkansas. Internally, MDC uses grass carp on its facilities and has moved to using only triploids. MDC continues to recommend their use in public waters to combat nuisance aquatic vegetation, especially for species such as Hydrilla. MDC makes their own triploid grass carp but does not produce or use large numbers. It is possible that the state could consider a move to triploid only requirements in 12-18 months. Some of the timing has to do with a capacity issue of Regulations Committee within the Commission. The state held its inaugural elk season this past year. The state may initiate its first black bear season this fall. The Commission has been addressing these issues along with others including CWD and the recent agency reorganization. MDC will work with other states when triploid grass

## Agenda Item 5

carp makes it into the queue for the Commission's agenda. Paddlefish and catfish regulations are also expected to be taken up by the Commission in the near future.

Conover noted an outstanding action item for him to reconvene the triploid grass carp states on a conference call and asked that the states let him know if there is a need to organize a call.

Batten had heard early on that the concern was producers not wanting to make triploid fish because it increases the price compared to diploids. Arkansas producers were not concerned about the additional cost saying that it would be passed along to the consumer. In their case, AGFC found that their biggest concern was not a concern at all. Batten expressed a willingness to talk with other states and Administrations about their experience.

Canaday said the Missouri producers expressed the same concern over the price of fish. Cost does not seem to be the barrier to pond owners, their need is more focused on the technical information. Costs of individual triploid fish is not cost prohibitive to consumers.

In Arkansas, an 8"-10" diploid grass carp will sell for approximately \$2; a triploid fish would likely cost \$3. When considering stocking rates for a pond, this is not a major cost increase for the individual pond owners.

## 6) Missouri River Sub-basin Update

### Habitat

#### *Missouri*

The Missouri Department of Conservation Habitat Assessment and Monitoring Project crew worked with staff from the USACE, Nebraska Game and Parks Commission, and USGS to evaluate areas of interception for age-0 sturgeon. Fieldwork focused on locating and identifying “hotspots”- discrete patches with consistently high catch per unit area (CPUA) of age-0 sturgeon, defined as greater than 10 age-0 sturgeon (<110 mm FL) per 100 m<sup>2</sup>. Missouri Department of conservation staff conducted the biological sampling while USACE and USGS personnel mapped near-bed morphology and hydraulic conditions of these locations. Saline City Bend (MO RM 212.5-216.1) was selected based off past catches of age-0 sturgeon. Sampling began in May and continued through June 9<sup>th</sup>. Sampling resulted in very low catches of age-0 sturgeon so a second location at Salt Creek Bend (MO RM 210.0-212.6) was selected for sampling. Staff performed 108 trawls within Salt Creek bend during June 2020 with 14 trawls yielding >10 fish/100m<sup>2</sup>. This resulted in 696 age-0 sturgeon sampled with sizes ranging from 8-39mm. Genetic samples were taken from all individuals and results are pending. Additional sampling was conducted in August and September 2020 in the identified hotspot areas from June. This resulted in low catches of age-0 sturgeon. For more detailed results see:

Wellemeier, C., K. Winders, A. McDaniel, and T. Boersig. 2020. FY2020 Annual Report, Missouri River Segment 9, 10 and HAMP. Missouri Department of Conservation, Chillicothe, MO.

#### *Nebraska*

The Nebraska Game and Parks Commission Habitat Assessment and Monitoring Project crew participated in collaborative efforts to assess age-0 sturgeon interception metrics in the main stem using intensive biological and physical surveys. Lower Brownville Bend (RM 533.5 to 531.7) was selected for the sampling site based on sampling in previous years that had documented high catches of age-0 sturgeon. NGPC conducted drift net (46 deployments) and benthic trawl (505 deployments) sampling for age-0 sturgeon from June to mid-July 2020. These efforts resulted in the collection of 1,499 larval acipenseriformes. Genetic analysis has been completed for all larval fish collected with drift nets (n=101) and no Pallid Sturgeon were detected. Genetic analysis for the remaining larvae (n=1,398) is dependent on additional funding. All physical surveys were conducted by USACE-KC. For more detailed results see:

Haas, J., J. Hall, R. Ruskamp, and K. Steffensen 2011. 2020 Annual Report, Pallid Sturgeon Population Assessment and Monitoring Program v2.0 and

Habitat Assessment and Monitoring Program. Nebraska Game and Parks Commission, Lincoln, NE.

Invasive Species

*Kansas*

*POPULATION DEMOGRAPHICS, DISTRIBUTION, AND ENVIRONMENTAL HISTORY OF ASIAN CARP IN A GREAT PLAINS RIVER*

Silver Carp *Hypophthalmichthys molitrix*, Bighead Carp *H. nobilis*, and Black Carp *Mylopharyngodon piceus*, collectively known as Asian carp, are a group of invasive fishes in the U.S.A. that have garnered much attention over the last couple decades. Most research devoted to this group of fishes has been focused in the Mississippi River basin with little investigation in the Missouri River drainage, particularly in tributary systems. The Kansas River is a major tributary to the Missouri River that has multiple anthropogenic barriers creating varying levels of connectivity within the Kansas River itself, and with the Missouri River. Information on various life-history traits of Asian carp are needed before a management plan can be formed. Here, we investigated 1) population demographics, 2) distribution with environmental DNA (eDNA), and 3) environmental history using otolith microchemistry of Asian carp in the lower Kansas River. Silver Carp exhibited spatiotemporal differences in population demographics. Individuals captured above the lowermost barrier had longer lengths-at-age, longer total lengths, and occurred at lower relative abundance than individuals captured below the barrier. No Silver Carp nor Bighead Carp were detected above the second barrier on the river with physical sampling or with the eDNA assay. However, Black Carp were detected near the confluence with the Missouri River with the eDNA analysis. Otolith microchemistry results indicated the population of Silver Carp in the Kansas River is comprised of predominantly residential individuals. Few carp exhibited natal origin signatures from the Missouri River. Transient individuals within the population exhibited short durations of signatures indicative of the Missouri River, suggesting that movements into the Missouri River are brief. These results highlight the importance of tributary habitat for Asian carp in the Missouri River drainage. Management efforts within the Kansas River could be an effective means of population control and mitigating secondary introductions. Additionally, management efforts focused in particular reaches of the Kansas River could affect the greater Missouri River population.

Jacob Werner, Mark Pegg, Marty Hamel—University of Nebraska-Lincoln

*Missouri*

The Missouri Department of Conservation started pilot work in preparation for 2 proposed Missouri River Basin Asian carp projects for USFWS funding. Proposed projects revolved around obtaining population demographic information and feasibility of



removal efforts. Both projects are projected to be encompass multiple years. Pilot work was conducted on 4 tributaries to the Missouri River – Grand River, Lamine River, Platte River, and Nodaway River. Initial pilot work focused on electrofishing and netting techniques. Low water hindered accessibility to upstream locations. Overall, 64 samples resulted in 3 Bighead carp, 38 Grass carp, and 929 Silver carp. Silver carp lengths ranged from 20 – 710 mm. Most fish sampled were in the 300 – 400 mm size class. Aging structures were taken from a subset of Silver carp sampled and are still being processed.

Kasey Whiteman – Missouri Department of Conservation

### *Nebraska*

No sampling occurred directed at the Asian carp community, but the Nebraska Game and Parks Commission in cooperation with the University of Nebraska-Lincoln received funding from the FY20 Asian Carp Management and Control in the Missouri River Basin project with sampling planning to start summer of 2021.

### Pallid Sturgeon

#### *Missouri*

The Missouri Department of Conservation (MDC) was contracted to conduct Pallid Sturgeon Population Assessment Program (PSPAP) monitoring in lower Segment 9 and Segment 10, as well as Habitat Assessment Monitoring Program (HAMP) sampling focused on hotspot assessment for the 2020 field season. Ten bends were randomly selected to be sampled in lower Segment 9 and Segment 10 for PSPAP. Lower Segment 9 is the designation for the stretch of Missouri river from Rulo, NE down to the mouth of the Kansas River. Segment 10 is the designation for the stretch of Missouri river from the mouth of the Kansas River to the mouth of the Grand River. This was the second full year of newest version of the Pallid Sturgeon Population Assessment Program. This updated version focuses primarily on increasing Pallid sturgeon recruitment to age-1.

Crews ran 488 trotlines comprising 19,520 hooks between the two segments. This resulted in the capture of 33 Pallid sturgeon (26 of hatchery origin, and 7 of wild origin), 12 Pallid sturgeon x shovelnose sturgeon hybrids, and 2,603 shovelnose sturgeon. Pallid sturgeon capture occurrences for 2020 continued to decrease in Segment 9 from the past five years. However, pallid sturgeon captures in Segment 10 remained comparable to 2019. Intensive broodstock efforts influenced catch of pallid sturgeon in previous years, as effort fluctuated between segments as a result of broodstock efforts. Broodstock efforts were primarily focused in Segment 10 from 2009 to 2014 and lower

## Agenda Item 6

Segment 9 from 2015 to 2017. Under the updated version of the program these intensive broodstock efforts have been discontinued.

Both segments sampled a range of size classes for pallid sturgeon in 2020, with some individuals exceeding 1000 millimeters. All pallid sturgeon over 1000 millimeters in length were of wild origin. Adult size (>799mm) pallid sturgeon comprised 42% of the total catch in Segment 9, compared to 21% in Segment 10.

For age-0 sturgeon sampling, crews completed 642 trawls (58.679 km of distance) between segments resulting in the capture of 2,244 age-0 sturgeon. The majority of random bends (80% in Segment 9 and 100% in Segment 10) had age-0 sturgeon captures in 2020. Higher catch rates in trawls were more widely distributed across sites in 2020 compared to sites age-0 sturgeon were collected in 2019. Bends that produced higher catch rates of age-0 sturgeon in 2019 did not always produce high catches in 2020.

Segment 9 “hot spots” for 2020 sample year were again characterized by slower moving water, in parts of bends where the river curve protected dikes from faster velocity. Many age-0 sturgeon were captured close to shallow sloping banks or were found near ledges below wing dike scours. Catches peaked from 18 June to 25 June in Segment 9 and 11 June to 25 June in Segment 10 with numbers significantly dropping after the first week in July for both segments. This could be indicative of low survival with few cohorts as multiple bends with high catch rates in June were revisited in July to find some of the lowest catch rates of the season.

At this time, genetic results (pallid sturgeon vs not pallid sturgeon) are unavailable for age-0 sturgeon samples from Segments 9 and 10 collected in 2020.

Wellemeyer, C., K. Winders, A. McDaniel, and T. Boersig. 2020. FY2020 Annual Report, Missouri River Segment 9, 10 and HAMP. Missouri Department of Conservation, Chillicothe, MO.

### *Nebraska*

The Nebraska Game and Parks Commission Pallid Sturgeon Population Assessment Project crews completed their second year of sampling under the new project design and protocols (PSPAP v2.0). NGPC is responsible for sampling efforts in Segment 8 and the upper reach of Segment 9 in the upper channelized Missouri River. Standard mark/recapture trotline sampling efforts collected 69 Pallid Sturgeon (wild-origin, N = 18; hatchery-origin, N = 51), which is considerably lower than the previous year (n = 119). The lower catch rates were influenced by colder water temperatures during the

sampling season and an increase in age-1 Channel Catfish that affected bait retention and longevity. PSPAP crews sampled for age-0 sturgeon with benthic trawls in Segment 9 during June and July. These efforts resulted in 381 trawl deployments that collected 391 age-0 sturgeon. Genetic analysis for these specimens is dependent on more funding becoming available. NGPC continued their telemetry effort with river sweeps, spring rise monitoring, and evaluation/implantation of Pallid Sturgeon. NGPC completed four river sweeps in 2020 and recorded 220 fish locations. There were seven documented gravid female Pallid Sturgeon with telemetry tags in the Lower Missouri River. NGPC intensively tracked three females in May and was able to identify 2 potential spawning locations. For more detailed information see:

Haas, J., J. Hall, R. Ruskamp, and K. Steffensen 2011. 2020 Annual Report, Pallid Sturgeon Population Assessment and Monitoring Program v2.0 and Habitat Assessment and Monitoring Program. Nebraska Game and Parks Commission, Lincoln, NE.

## Game Fish

### *Kansas*

#### *POPULATION CHARACTERISTICS AND MOVEMENT OF BLUE CATFISH IN THE KANSAS RIVER*

Blue Catfish *Ictalurus furcatus* is a mobile, large-river species native to the Missouri River and its tributaries, including the Kansas River. Historical data regarding the Kansas River population is negligible, limiting managers' ability to appropriately manage this population. Multiple anthropogenic barriers along the Kansas River create a gradient of connectivity within the Kansas River, and with the Missouri River, possibly limiting Blue Catfish movement. Additionally, the contribution of tributary-reservoir populations to the Kansas River remains unknown. My objectives were to: 1) describe population characteristics and 2) quantify stock contributions from the Missouri River and Kansas River tributary reservoirs to the lower Kansas River population. Relative abundance and condition were variable among years but similar across the gradient of connectivity. Somatic growth in the disconnected reach were greater than connected reaches; however, mean length of adult age groups were consistent across the study area. River segments connected with the Missouri River had lower annual mortality and higher proportions of large fish compared to the disconnected reach. Upstream passage was not documented at the second barrier on the Kansas River, suggesting the population upstream of the barrier is isolated from the Missouri River. Adult fish collected within river reaches connected to the Missouri River displayed relatively equal natal contributions from the Kansas River and Missouri River. Half of adult and juvenile fish sampled in reaches disconnected from the Missouri River originated from Kansas River tributary reservoirs. Our data suggests adopting two spatial scales for

investigating and managing Blue Catfish in the Kansas River, with the second barrier as a point of division. Current statewide regulations are adequate for maintaining high trophy-potential in downstream river reaches. The large number of fish using the Missouri River indicates appropriate management requires a broad spatial scale that incorporates a dendritic river network framework. Future monitoring efforts, particularly for the disconnected reaches, is imperative as large reservoir stock contributions may elicit change in population characteristics.

Quintin Dean, Mark Pegg, Marty Hamel—University of Nebraska-Lincoln

### *Nebraska*

#### *Channel and Flathead Catfish monitoring:*

The Nebraska Game and Parks Commission did not monitor the Channel Catfish, Flathead Catfish, or Blue Catfish on the Missouri River during 2020 and the cooperative agreement with the University of Nebraska-Lincoln ended with the 2018 field season. The future goal is to compile all the historic Channel Catfish and Flathead Catfish data into a single comprehensive report in conjunction with the development of a Management Report. The Management Report will include the integration of Blue Catfish sampling and management strategies for all three species.

Hamel MJ, JJ Spurgeon, and MA Pegg (2020) Catfish population characteristics among river segments with altered fluvial-geomorphic conditions in the Missouri River, NE, USA.

#### *Paddlefish monitoring:*

In 1995, the Nebraska Game and Parks Commission signed a cooperative agreement with the Mississippi Interstate Cooperative Resource Association (MICRA) to participate in their Interjurisdictional Paddlefish Tagging Study. However, during 2020, the Nebraska Game and Parks Commission did not complete any standard adult Paddlefish sampling. Adult Paddlefish were last sampled during 2017 in the Gavins Point Dam tailwater. Additionally, the Nebraska Game and Parks Commission did not complete the standard age-0 Paddlefish sampling. Paddlefish were last sampled during 2018 in Lewis and Clark Lake.

The Nebraska Game and Parks Commission host two Paddlefish seasons. A 30-day archery season occurred in June and a 30-day snagging season occurred in October. Angler creel surveys included postcard surveys during the Paddlefish archery and snagging seasons. The season dates of the Paddlefish archery season was moved from the second Saturday of July up to 1-June in an attempt to increase angler success.

Paddlefish anglers harvested an estimated 168 Paddlefish during the archery season with the majority being in the protected slot size (35 – 45 inches). Shifting the season dates appear to have increased angler success and the number of fish harvested is likely not a concern. However, we will continue to monitor the Paddlefish population as 96 (57%) of the Paddlefish harvested were from the protected slot. The Paddlefish snagging season is mainly a bank angler, Gavins Point Dam tailwater fishery. With the discharge from Gavins Point Dam and the spillway gates open, only an estimated 368 Paddlefish were harvested, the second-lowest number ever harvested. However, we estimate the highest number of trophy (>45 inches) sized Paddlefish were taken. No changes will occur to the archery or snagging season for 2020. For more detailed information see:

Steffensen KD. 2020. Missouri River Ecology. Federal Aid in Sport Fish Restoration, F75R, Performance Report. Nebraska Game and Parks Commission, Lincoln, NE.

*\*Kansas information submitted by Jeff Koch and Steve Adams. Missouri information submitted by Kasey Whiteman. Nebraska information submitted by Kirk Steffensen.*

Notes:

Kasey Whiteman provided the following highlights from the written report provided in the briefing book.

The basin states are still working with USACE to revitalize the Bank Stabilization and Navigation Mitigation Program that was authorized through several past WRDA bills. The program authorizes USACE to restore habitat along the Missouri River Basin for fish and wildlife, not just endangered species. Approximately 100,000 acres of habitat remains to be restored, but USACE has not had any funding for the restoration work in their budget over the last several years. States are interested in seeing some of that funding restored.

The MRNRC has sent a letter of support to USFWS Regional Director Noreen Walsh regarding remarks she recently made at Missouri River Recovery Implementation Committee (large WRDA authorized stakeholder group) promoting an ecosystem wide focus on river restoration and river works. Introduced WRDA language from several years ago is creating a roadblock to further on-the-ground habitat work and construction due to concerns over previously constructed restoration projects for pallid sturgeon that are raising concerns about flooding, impacts to navigation, and other authorized uses of the Missouri River. For now, construction has been halted due to the WRDA language until further analysis into the human considerations of how these habitats are affecting

## Agenda Item 6

flooding, navigation, etc. This stop to habitat restoration is an on-going frustration within the basin.

A large levee setback project along the Missouri River in northwest Missouri was completed this past year. This was a large joint effort between The Nature Conservancy, USDA, MDC, MO DNR, the levee district, and private landowners that championed the project. The project provides several benefits including flood risk reduction, creating width in the floodplain, conveyance, and floodplain habitat. This was a large project that required a lot of work and ultimately came to fruition with USACE. There is hope that this project will serve as a roadmap for additional levee setbacks. TNC created a nice video promoting and cataloguing the project benefits.

The Missouri River Basin received federal funding for Asian carp work for the first time. The initial projects mostly entail baseline population demographics, distribution, and leading-edge detection. There will be some eDNA work in the Dakotas. Much of the work in Missouri, Kansas, Nebraska, and Iowa will be completed in Missouri River tributaries; not a lot of work will be completed in the mainstem river. Pilot work has already begun. Some initial results indicate there a lot of fish in the 300-400mm range and more in the 600-700mm range, but there are several big gaps in the size classes of fish that have not been detected throughout the Missouri River sub-basin. We don't know if this is related to gear bias, or if this possibly an indication of missing year classes. Aging structures were collected from the samples are being processed and will hopefully inform what is happening.

Kansas worked with the University of Nebraska on an Asian carp project in the lower 50-mile stretch of the Kansas River near (Kansas City). Microchemistry analysis indicated that the natal origin of most of those fish were Kansas River. Results indicated these are resident fish that spent very little time in the Missouri River.

Telemetry work has been expanded from the Mississippi River into the Missouri River to learn more about Asian carp interbasin movements.

The Asian carp partnership has also been discussing data sharing and data management. There is interested in working with states in the other sub-basin to build from what they are already using and to share data.

Missouri recently completed blue catfish and flathead catfish exploitation studies in the Missouri and Mississippi rivers. Results did not indicate over-exploitation. MDC will be looking at some human dimensions work to see if angler attitudes regarding catfish has changed from a more harvest-based to a more trophy-based desire for the fishery

before considering any regulation changes. This project has shown a need for more interjurisdictional considerations for catfish management and regulations.

Pallid sturgeon work has shifted over the last several years to a focus of trying to find age-0 fish. This past year the basin put considerable effort in May, June, and July. Nearly 16,000 age-0 sturgeon were collected that will need to have genetic analysis to determine how many are pallid sturgeon. There have only been two pallid sturgeon detected in the first 2,000 fish analyzed.

The sampling for juveniles and adults showed a reduction in the number of adults that are typically sampled each year. The reduction may be due to water levels or sampling bias, but ultimately some year classes of hatchery fish that were stocked in 2002-2004 that were the majority of fish collected in previous year's samples are starting to vanish from the population in their recent sampling efforts. This is a concern to the basin because these fish appear to be dying out after 15-20 years when they should be living much longer than that. More work to be completed on this front.

Discussion:

There was no discussion following the update.

## 7) Ohio River Sub-basin Update

### Kentucky Department of Fish and Wildlife Resources

#### Ohio River Catfish

- There continues to be a rift between recreational catfish anglers and commercial fishermen over the harvest of catfish, particularly large, trophy-sized catfish (>35”).
- Kentucky Department of Fish and Wildlife Resources (KDFWR) completed trotline and electrofishing sampling in 2020. Hoopnet sampling was not completed due to COVID-19 restrictions at the time.
- Trotline CPUE of blue catfish in 2020 was once again above the historical average and trophy blue catfish were captured in all pools sampled.
- Electrofishing yielded record high CPUE of flathead catfish in 2020 (59.6 fish/hr) and a record high CPUE of fish >35” (1.3 fish/hr).

#### Ohio River Sauger

- Sampling in conjunction with the Ohio River Fish Management Team (ORFMT) states continued in 2020. KDFWR completed sampling in the Markland, Cannelton, and JT Myers tailwaters.
- CPUE was 181 fish/hr in the Markland Tailwater, 342 fish/hr in the Cannelton Tailwater, and 169 fish/hr in the JT Myers Tailwater.
- CPUE of fish >15” were the highest since ORFMT *Sander* surveys resumed in 2014 in the Markland Tailwater (18 fish/hr) and the Cannelton Tailwater (16 fish/hr).
- Growth was impressive, with one YOY being 13.5” at time of capture.

#### Ohio River General Sport Fish

- KDFWR conducted sport fish electrofishing surveys for black bass and panfish in the McAlpine and Cannelton Pool in October 2020.
- Black bass catch was dominated by largemouth bass in both pools. CPUE of largemouth bass in the McAlpine Pool (40.5 fish/hr) increased dramatically from the previous sample in 2016 (11.3 fish/hr). CPUE of largemouth bass in the



Cannelton Pool (21.2 fish/hr) was down slightly from the previous sample in 2016 (25.4 fish/hr).

- Panfish species were not observed in high densities in the McAlpine Pool. Bluegill was the dominant species with a CPUE of 11.8 fish/hr.
- Panfish species were very prevalent in the Cannelton Pool. Bluegill were captured at a CPUE of 174.4 fish/hr, and white crappie at 46 fish/hr.

#### Ohio River Asian carp Evaluation Project

- Spring targeted sampling was unable to be completed due to COVID-19 precautions, although, the previous four years of data indicate that silver carp populations in the Cannelton Pool continue to increase.
- The majority of silver carp in Cannelton have been older (>32"), reproductively viable fish between the ages of five and seven. However, sampling efforts in 2020 indicated that a large number of smaller fish between three and four years old, likely from the Newburgh Pool, migrated into the lower sections of Cannelton during spring floods.
- Catch rates above Cannelton pool remain below levels where definitive increases or decreases in carp numbers can be determined with our current level of sampling effort.

#### Ohio River Asian carp Control and Containment Project

- KDFWR continues to remove fish from Ohio River waters regularly and has augmented removal with a contract fishing program in the Cannelton Pool. Currently, 10 fishers participate in the program and gain access to restricted waters under the surveillance of on-board observers and have increased removal efforts by more than 200% since 2019.
- Through COVID-19 precautions, the total combine removal for 2020 was around 24,500 lbs of invasive carp removed from Cannelton through RC Byrd pool. However daily landings continue to increase through the winter months and are expected to be highest during February and March of 2021.

#### Ohio River Asian carp Telemetry and Dam Passage

- KDFWR assisted USFWS in tagging efforts in the Cannelton, McAlpine, and Markland pools in 2020 to deal with tag loss and have maintained a telemetry array from Cannelton to Markland Locks and Dam.

- Currently, the total number of tagged fish exceeds 400 fish and expansion to the array is expected in 2021.
- Few fish have been recorded traversing main stem Ohio River lock and dam structures above Cannelton pool, however, with downriver expansions to the telemetry array KDFWR plans to determine the level of dam passage from Newburgh into Cannelton annually.

### **Pennsylvania Fish and Boat Commission**

1. Asian Carp 2020 sampling efforts:
  - a. Conducted spring tailwater fish community work (IBI surveys using nighttime Pulsed DC EF) on the Allegheny River Sec 17 (Armstrong Co), Ohio River Sec 02 (Allegheny Co), and Ohio River Sec 03 (Allegheny Co). No Asian Carp were captured during the survey and fish community data is currently being processed.
  - b. Conducted annual summer beach seine surveys at 6 fixed historic sites as part of annual fish community work on the Ohio River Sec 03 (Allegheny/Beaver Co). No Asian Carp were captured. A total of 1141 individuals from 23 species were captured at all sites combined.
  - c. Conducted fall targeted gill net surveys for Asian Carp at 9 sites in the Ohio River Secs 03 and 04 (Beaver Co). Sites targeted included creek mouths, embayments, back channels of islands, warmwater discharges, and areas where previous years eDNA sampling had resulted in positive hits for Silver Carp or Bighead Carp eDNA. A total of 70 individuals from 10 species were captured. No Asian Carp were captured.
  - d. Targeted *Sander* sampling in the Ohio River Sec 03 (Allegheny Co) in November 2020 led to the incidental capture of one Grass Carp *Ctenopharyngodon idella*. The fish was retained and will be measured, weighed, and sexed in the near future. Ploidy testing was not performed due to the timing of sampling and logistics involved.
2. We are in the process of updating our Asian Carp Complex Control Plan.
3. Assessment of Walleye Fry Stocking in the Allegheny River (2015-2020): Staff recently completed a multi-year (2015-2020) Walleye stocking evaluation in three free-flowing sections of the Allegheny River, located in Forest, Venango and Warren counties. The three sections of the Allegheny River within these counties received annual Walleye fry stockings from 2015 to 2019. No marked YOY Walleyes were detected during the entire study, indicating that the current

Walleye population is supported entirely through natural reproduction. During the study, natural reproduction produced multiple strong year classes and, in 2018, produced the two highest Walleye YOY catch rates on record at 157 fish/hour and 245 fish/hour. As a result of this study, stocking of Walleye fry in the Allegheny River was discontinued after 2019. Moving forward, staff will conduct annual monitoring surveys in these previously stocked sections to assess spawning success and recruitment.

4. Three Rivers Catfish and Walleye / Sauger Sampling: Biologists conducted intensive sampling of the Channel Catfish and Flathead Catfish populations in all four sections of the Ohio River and three sections of the Allegheny River from Kittanning, PA (Pool 6) to Templeton, PA (Pool 8) in May to July 2020. Prior to the 2020 survey, limited baseline information has been collected among these Allegheny River sections for the two species. Sampling on the three Allegheny River sections documented a total of 411 fish in 2020, of which 334 (81%) were Channel Catfish and 77 (19%) were Flathead Catfish. The Ohio River surveys resulted in 226 Channel Catfish ranging from 3 to 30 inches and 161 Flathead Catfish ranging from 6 to 43 inches. Staff began annual targeted Walleye and Sauger night electrofishing surveys in late fall on the Three Rivers in 2018 to better assess and manage their populations. In November 2020, three sections of the Ohio River and two sections of the Allegheny River were sampled for Walleye and Sauger. A total of 128 Walleye and 181 Sauger were captured in the Ohio River. Catch rates were higher than average on the Ohio River, particularly for Sauger. High numbers of Walleye (132 fish) were captured at Allegheny River Pool 6 but only a few legal fish were present. No Sauger were collected in Pool 6. The Walleye catch rate of 48 fish on Allegheny River Pool 2 was lower than other stretches of the Allegheny River. Sauger catch of 6 fish in Pool 2 was low. Generally, the Sauger population in the Allegheny River decreases as you move upstream.
  
5. Recent AIS records of note to Allegheny/Ohio basin: 1) Didymo record from Quemahoning Creek in Somerset County PA and 2) European Frogbit (a Class A Noxious Eeed in PA) at Pymatuning

### **Indiana Department of Natural Resources**

- Continued assisting KDFWR with Ohio River catfish trotline sampling in JT Myers Pool.
- Completed Sauger sampling at Newburgh tailwaters.

## Agenda Item 7

- Completed Catfish sampling on the Wabash River via hoop nets and electrofishing to continue to annual monitoring efforts.
- Assisted with spring targeted and fall community sampling in Cannelton Pool as part of the Asian carp evaluation project.
- Conducted targeted Asian carp YOY sampling via electrofishing and surface trawls, and used larval tows as part of the Early Life Stages project to determine range of spawning and recruitment in the Ohio River basin.
- Conducted seven single-day Asian carp removal events capturing 2230 Asian carp totaling 19,180 pounds
- Assisted IDEM with collaborative White River survey which sampled the entire extent of the West Fork and mainstem White River.
- Travel restrictions prohibited us from completing annual spring Shovelnose Sturgeon sampling, but we were able to sample one day during the summer on the Wabash River.

### **ODNR Division of Wildlife**

- Continued work to close of Great Lakes-Mississippi River basin connections (Long Lake most recently)
- Recently launched the H2Ohio Initiative and additional incentives for the Scioto River Conservation Reserve Enhancement Program to construct of wetlands and streamside buffers to improve water quality in the basin
- Provided administrative leadership for Ohio River Fisheries Management Team
- Hosted joint meeting with WVDNR fisheries staff to discuss Ohio River fisheries management and collaboration in August 2020
- Continued participation in Asian Carp telemetry project
- Ongoing telemetry research to quantify catfish movements in the Ohio River
- Currently coordinating a multi-agency river wide angler creel survey planned for 2022
- Conducted standard population assessments of important sport fish populations in coordination with other ORFMT states

Notes:

Dave Dreves is now the acting Fish Chief in Kentucky.

Kevin Irons has moved up to be the Assistant Fish Chief in Illinois, under Mike McClelland.

Discussion:

There was no discussion following the update.

## **8) Tennessee/Cumberland Sub-basin Update**

### Kentucky Department of Fish and Wildlife Resources

(submitted by Jessica Morris and Adam Martin)

- KDFWR continues to promote the harvest of Asian carp from Kentucky waters through routine contact with commercial fishers and fish processors. There are currently four companies in Kentucky that purchase Asian carp from commercial fishers. KDFWR employees conduct ride-alongs with commercial fishers who are fishing within the Asian Carp Harvest Program (ACHP), which allows commercial access to closed waters for the purpose of Asian carp harvest. Most of the commercial effort for Asian carp is on the Cumberland River and its associated reservoir, Lake Barkley. There is some commercial effort put forth on the Mississippi, Ohio, and Tennessee Rivers as well. Commercial effort towards harvesting of Asian carp from Kentucky waters has increased exponentially over the past several years. In 2020, harvest of Asian carp by commercial fishers in Kentucky totaled over 6.4 million pounds; the second year in a row that Asian carp harvest has totaled over 6 million pounds in the state of Kentucky.
- KDFWR has engaged in a Public/Private Partnership between KDFWR and the Kentucky Fish Center in western Kentucky. The primary objective of the Kentucky Asian Carp Public/Private Partnership is to facilitate Kentucky's fish processing industry targeting Asian carp with meeting their current market demands and their desire to significantly expand those markets. This Partnership began in 2019 and the Kentucky Fish Center has facilitated the harvest and sale of over 10.2 million pounds of Asian carp to date.
- KDFWR verified the capture of one Black Carp in Lake Barkley on the Cumberland River, and eleven Black Carp in the Ohio River in 2020. All of the Black Carp reported were captured as bycatch in gill nets by commercial fishers. KDFWR processed the fish according to the Black Carp protocol, and sent samples to the respective laboratories of the USGS and USFWS.
- KDFWR continues to conduct standardized sampling with gill nets for Asian 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 Asian carp in each reservoir. TWRA and other partners in the TNCR Basin are pursuing similar standard sampling methods.
- KDFWR remains actively engaged as a partner with the USFWS to test the Bio-Acoustic Fish Fence (BAFF) at Lake Barkley Lock. A study plan has been compiled, and the BAFF was installed in November 2019. In 2020, KDFWR provided support to surgically implant acoustic transmitters into Silver Carp (404), Smallmouth Buffalo (40), Freshwater Drum (32), and Paddlefish (23) in the tailwaters of Lake Barkley Dam. Movement of these fish will be monitored by the extensive telemetry receiver

array surrounding the BAFF and Barkley Lock throughout testing of the BAFF. KDFWR also assists with maintenance of the telemetry receiver array, including offloading and sharing data, and turning the BAFF components on and off for its scheduled rotation as described in the study plan.

- KDFWR continues to expand the VEMCO telemetry receiver array in the lower Ohio (11), Green (2), Tennessee (23), and Cumberland (18) rivers to monitor movements of Asian carp, in conjunction with partners in the TNCR Basin and throughout the greater Ohio River Basin.
- KDFWR participated in the TNCR Deterrent Strategic Decision Making Workshops hosted by the USGS. KDFWR provided data and perspective from our agency for the discussions and letter that was written containing the groups suggested Asian carp deterrent placement strategy for the TNCR Basin. The letter was submitted to the Tennessee Valley Authority for consideration during the creation of the Programmatic Environmental Assessment of all Tennessee River Dams that is currently being conducted.
- KDFWR maintained the community sampling conducted in the tailwaters of Kentucky and Barkley Dams on the Tennessee and Cumberland rivers respectively, throughout 2020. Data collected through this long term sampling is being analyzed to determine impacts Asian carp may be having on native fish communities in these areas. In 2019, KDFWR conducted a creel survey in the tailwaters as well to monitor impacts of Asian carp populations on anglers fishing in the tailwaters. This survey is on a three year rotation and will be completed again in 2022.
- KDFWR continues to monitor the commercial fishery for paddlefish through reports submitted by commercial fishermen. These reports indicated that paddlefish harvest numbers decreased for the Ohio and Mississippi River systems to the lowest harvest on record in the 2018 commercial license year. Paddlefish harvest in 2019 was only slightly higher. Data for the 2020 license year is still being collected. KDFWR is developing a workgroup to further investigate the decline in paddlefish harvest and associated factors.
- KDFWR will continue its fish community electrofishing survey of the Mississippi River every other year. Additionally, fish community surveys will continue to be conducted on some of our oxbow lakes located in our wildlife management areas.
- Alligator Gar have been stocked in tributaries to the Mississippi River since 2009 and will continue to be stocked for several more years. Alligator Gar have also been stocked since 2009 in the Clarks River which is a tributary to the Tennessee River. In 2020, Murray State University surgically implanted VEMCO acoustic tags into 3 large Alligator Gar which had been held in the hatchery for several years, and have plans to tag several more hatchery fish in the fall of 2021. Wild-caught Alligator Gar collected by commercial fishers will also be tagged if they are submitted to

Murray State staff in good condition.

#### Tennessee Wildlife Resources Agency

- Since the last report TWRA has added five new staff members that will work on Asian carp. Cole Harty now coordinates all the federally funded projects. Three employees will be dedicated to West Tennessee carp projects. One employee will support an east TN reservoir crew as they prepare for carp projects in the upper TN River.
- TWRA and other partners developed a deterrent plan for the Tennessee River to support the TVA's programmatic environmental assessment.
- TWRA's Asian Carp Harvest Incentive Program has subsidized the harvest of nearly 5,500,000 pounds since the start of the program in September of 2018. Tennessee has 3 contractors in the program and no more than 15 commercial fisherman. TWRA provided \$400K of state funds to counties to support carp distributors/processors.
- TTU and TWRA are continuing monitoring efforts to document movement of silver carp and estimate relative abundance of bigheaded carp.
- Larval Asian carp sampling work continued in 2020 in Barkley and Kentucky lakes. To date no larval carp have been identified by visual examination or eDNA of samples. No small YOY carp have been reported from reservoirs on the Tennessee or Cumberland Rivers in TN.
- TWRA continues to stock about 1 million Florida strain largemouth bass in Tennessee River reservoirs: Kentucky Lake, Nickajack, Chickamauga, Watts Bar and Fort Loudoun. This program started in 2015, except on Chickamauga where the program started in 2000.

#### Mississippi Department of Wildlife, Fisheries, and Parks

The Mississippi Department of Wildlife, Fisheries, and Parks (MDWFP) has five Vemco receivers deployed in the TN River and Tenn-Tom Waterway. Receivers are located at the long wall below Bay Springs Lock, Crow's Neck on north end of Bay Springs, JP Coleman State Park and Eastport Boat Ramp on Pickwick Lake, and at Goat Island on Yellow Creek.

To date, MDWFP has implanted sonic tags into 45 adult silver carp with assistance from the Mississippi Museum of Natural Sciences, Alabama Department of Natural Resources, Tennessee Tech University, and TWRA personnel. Silver carp tagged in Pickwick have ranged in size from 708-890 mm with an average length of 784 mm.



At least 23 of our 45 tagged carp have at some point gone downstream into Kentucky Lake (in Kentucky waters). A total of 16 tagged carp have at some point been in Barkley Lake. At least 4 tagged carp have gone downstream to Kentucky Lake and then back upstream into Pickwick. One fish has made that journey twice, once last year and once this year within a month +/- each year. At least 5 tagged carp have been detected in the TN or Cumberland Rivers below Kentucky or Barkley dams, one of those fish was killed by a bow angler. Looking at when these fish have been making the moves downstream, it appears to happen from late February to early June. When fish are coming back upstream, it appears to be early June through mid-August. No fish tagged by other agencies have been detected on MDWFP receivers.

MDWFP plans to tag more silver carp in Pickwick Lake in the fall/winter of 2021; efforts in 2020 were halted before due to a boating accident, and no carp were tagged. Efforts may also be made in the Divide Cut and Bay Springs Lake to tag carp.

MDWFP is funding a two-year research project with Dr. Steve Miranda of Mississippi State University to determine the current distribution of Asian carp in the Yellow Creek Arm of Pickwick Lake, the canal section connecting this arm to Bay Springs Reservoir and Bay Springs Reservoir. Objectives of the project also include describing the age- and size-class structures of these populations to evaluate recruitment and its periodicity; estimate Asian carp growth rates to assess environmental suitability; initiate studies into mechanisms that control year-class strength and how they relate to environmental factors such as river flows and associated environmental characteristics; and begin monitoring potential shifts in fish assemblages. The project began in July 2019.

Alabama Department of Conservation & Natural Resources, Division of Wildlife and Freshwater Fisheries

Alabama Project Number: (AL-AC-21-01)

Project Title: Evaluation and Removal of Asian Carp in the Tennessee and Cumberland Rivers

Grant Number: F19AP00187-0001

Project Period: 10/01/2019 – 12/31/2021

Interim Performance Period: 10/01/2019 – 9/30/2020

Study Objectives:

1. Estimate Asian carp relative abundance, and population demographics in the Tennessee and Cumberland River basins to evaluate management actions.
2. Target and remove Asian carp to suppress populations and reduce propagule pressure in the Tennessee and Cumberland River basins.

## Agenda Item 8

### Activity:

Agency efforts in Alabama were expended on staff training, equipment acquisition, evaluation of potential sample sites, communication/collaboration with other cooperators, and collection of Asian carp data for population monitoring. All work was performed within the four (4) Tennessee River impoundments in Alabama, including Pickwick, Wilson, Wheeler, and Guntersville Reservoirs. Work related activities/results included:

### Interagency Coordination:

1. Agency staff participated in virtual meetings and conference calls of the Asian Carp Professionals group on a routine basis.
2. Agency staff participated in virtual meetings related to a structured decision-making process for future Asian carp deterrents on the Tennessee-Cumberland River system.
3. Numerous days were expended on communication and planning with other cooperators regarding Asian carp collection efforts.
4. Agency staff assisted with the modified-unified sampling method for Asian carp removal on the Tennessee River in Kentucky.

### Monitoring, Early Detection, and Rapid Response:

- Numerous days were expended on equipment procurement, maintenance, literature research/review and coordination of activities.
- Thirteen (13) field days were spent on collection of survey data on nine potential gill net sample locations, using bottom sonar.
- Nine (9) field days were spent on biological collections utilizing standardized gill nets (n= 44 sets) in six sample locations from May 2 – July 8.
- Three (3) field days utilized electrofishing samples conducted at four locations on Pickwick and Wheeler Reservoirs.
- Three (3) field days were spent assisting Tennessee Tech University with collections of Asian carp, deployment of Vemco sonic receivers, and electronic data retrieval at Guntersville Lock and Dam.
- Asian carp collections were limited during FY20 field sampling: Silver carp (n = 5) and Grass carp (n = 1). All these fish were collected in Pickwick Reservoir and were subsequently removed from the system.

Date Accomplished: All sampling and analysis will be completed within target dates

Significant Deviations: None

Remarks: None

Recommendations: Continue all work as planned

North Carolina Wildlife Resources Commission

Lake Sturgeon Restoration: The North Carolina Wildlife Resources Commission (NCWRC) continued its ongoing Lake Sturgeon restoration efforts by stocking 102 phase two juveniles into the French Broad River in May and August of 2020. U.S. Fish and Wildlife Service (USFWS) collected eggs and milt from brood fish from the Wolf River in Wisconsin, and the fertilized eggs were provided to the USFWS Warm Springs National Fish Hatchery in Georgia. After hatching and initial growth to the late fry stage, the fish were sent to the USFWS Edenton National Fish Hatchery in North Carolina and the NCWRC's Table Rock State Fish Hatchery for several months of grow-out. Lake Sturgeon were stocked in the French Broad River in Madison County, NC. In 2015, NCWRC joined the Southeastern Lake Sturgeon Working Group which consists of partners from Tennessee Valley Authority, USFWS, Tennessee Wildlife Resources Agency and other state and non-profit organizations in the Southeast. To date more than 24,000 juvenile Lake Sturgeon have been stocked in the North Carolina portion of the French Broad River.

Mud Creek Floodplain Connectivity and Habitat Restoration Project: A landscape scale floodplain connectivity and lateral fish passage project was completed during calendar year 2020 in western North Carolina adjacent to the French Broad River, a tributary in the Tennessee River sub basin near Asheville, NC. The Muskellunge spawning and nursery habitat restoration project included construction of three oxbow sloughs, totaling five acres, and six acres of floodplain wetlands on a 100-acre tract under permanent conservation ownership. The project site historically had extensive ditching and channelizing of the floodplain to route surface water away from crop land. In the current project, oxbow sloughs replaced the linear ditches and were excavated to depths to allow backwater inundation of the constructed habitat features. The oxbow areas were designed to provide lateral fish passage from the river to slack-water habitat essential to the spawning and early life history stages of native fishes, particularly Muskellunge. The oxbow and wetland habitat areas were planted with desirable native plant species including submergent species such as spike rush, eel grass and American pond weed. Levee breaches at 5 locations along mainstem were performed to improve hydrologic connectivity between the river and floodplain during high flow events. Over 1-mile of riparian habitat was protected along the mainstem and 23,000 native riparian plant species were installed. Lastly, upland areas were planted with perennial herbaceous seed mixes that will be maintained in early succession habitat. A supporting Federal Aid in Sport Fish Restoration project to determine Muskellunge use, particularly spawning, of the new habitat is underway and multiple tagged Muskellunge have already utilized the site.

Agenda Item 8

Tennessee Valley Authority

- TVA’s long term Reservoir Ecological Health monitoring program evaluates ecological conditions at 69 sites on 31 reservoirs across the Tennessee Valley.
- In fall 2020, TVA assessed fish and benthic communities at 41 sites in 16 reservoirs.

<b>Alabama</b>		<b>Tennessee</b>		<b>Georgia</b>	
<b>Run of the River Reservoirs</b>		<b>Run of the River Reservoirs</b>		<b>Tributary Reservoirs</b>	
Guntersville	TRM 350.0 TRM 375.2 TRM 420-424	Chickamauga	TRM 472.3 TRM 490.5 TRM 518-529 Hiwassee 8.5	Nottely	NRM 23.5 NRM 31.0
Pickwick	TRM 230.0 TRM 253-259 Bear Creek 8.4	Nickajack	TRM 425.5 TRM 469-470	Blue Ridge	ToRM 54.1
Wheeler	TRM 295.9 TRM 292.9	Pickwick	TRM 207.3		
Wilson	TRM 260.8 TRM 273-274	Watts Bar	TRM 532.5 TRM 560.8 TRM 600-601 CRM 19-22 Emory 2.5 Clinch 1.5 Clinch 4.4		
<b>Tributary Reservoirs</b>		<b>Tributary Reservoirs</b>			
Bear Creek	BCM 75.0	Boone	SFHRM 19.0 SFHRM 27.0 WRM 6.5		
L. Bear Creek	LBCM 12.5	Melton Hill	CRM 24.0 CRM 45.0 CRM 59-60		
Cedar Creek	CCM 25.2	Norris	CRM 80.0 CRM 125.0 PRM 30.0		
		Ocoee No.1	ORM 12.5		

- TVA Partnered with TWRA to survey the Tennessee River from Ft. Loudon/Melton Hill tail-waters downstream to Guntersville tail-water for the presence of Asian carp. The surveys were completed weekly from April to October, 2020. No Asian Carp were observed.
- Conducted FluEgg Modeling on the Tennessee and Clinch Rivers to evaluate potential successful Asian carp reproduction areas.

- Planning to conduct FluEgg Modeling on the Cumberland River, Barkley and Old Hickory Reservoirs.
- Preparing a draft programmatic environmental assessment to evaluate fish barrier deterrent systems at TVA locks and dams for Asian carp.

Notes:

Fiss stated that his report stands as submitted. He had good participation from the agencies providing written updates. There is a lot of good information on species other than Asian carp.

Scott Robinson is now the interim Fish Chief for the Georgia Department of Natural Resources. Thom Litts is now Deputy Director.

Discussion:

There was no discussion following the update.

## 9) Upper Mississippi River Sub-basin Update

The annual meeting last March in Dubuque was cancelled. Iowa will host the 2021 Spring Virtual Meeting March 15-19, 2021.

**Dan Dieterman**, Minnesota DNR Mississippi River Habitat Specialist was awarded the UMRCC Conservation Award, the UMRCC's highest honor this year. Due to the lack of an annual meeting, he was not able to receive the award in person. Dan retired last March. Dan is the epitome of a River Rat, and even grew up near the River in Winona MN. We appreciate Dan's service to the UMRCC and wish him the best in retirement.

**In 2020 the exotic invasive flowering rush (Butomus umbellatus)** made a sudden, widespread appearance in vegetated portions of the Upper Mississippi River. It was first documented on 20 June by Kyle Bales (Iowa DNR LTRM) in Pool 13, and has since been described in at least 20 additional locations in Pools 4, 5, 8, and 13 by LTRM field crews, the USFWS and members of the public. Invaded patches range from just a few plants to thousands of plants occupying several hectares. The largest infestations observed to date occur along Catfish Slough in Pool 4, near Reno Bottoms spillway in Pool 8, and south of Goose Island in Pool 8. Previously, the only known documented occurrences in the Upper Mississippi were in Pool 8, where several plants were detected in 2015 by Ruth Nissen, Wisconsin DNR, and in Pool 13 where over 22 years of monitoring 39 occurrences were recorded between 2009 and 2016. Flowering rush is currently listed as a prohibited species in Michigan, Minnesota, and Illinois, and as a restricted species (but still available) in Wisconsin. Flowering rush, a Eurasian species, was introduced as a decorative plant for its showy pink flowers, and has been in the Midwest since the 1900s.

**In March of 2020**, a commercial fisherman captured over 30 silver carp in Pool 8 near La Crosse. Most previous catches of bigheaded carps have been single or few individuals. In response, the Minnesota DNR, Wisconsin DNR, US Fish and Wildlife Service, and US Geological Survey teamed up to implant four silver carp with acoustic transmitters. The partners are also planning to cooperate on a modified-unified method removal effort this spring. This method has not been tried in presumed low-density fish situations.

**A fish passage letter** developed by the Fish Technical Section was adopted by the Board. The UMRCC supports the construction of the NESP fish passage projects at Locks and Dams 22 and 26, pending thorough reviews of the designs. The UMRCC proposes priority be given to the fish passage project at Lock and Dam 22 because this project may be manipulated to test configurations that promote native fish passage and

deter non-native fish passage. Additionally, these proposed projects are downstream of Lock and Dam 19, a significant barrier to upstream movement, so the threat of increased migration of nuisance species is mitigated.

**The Fish Technical Section** also produced a bowfishing letter intended for fish chiefs to garner support for documenting this quickly rising sport. The Board is considering this letter further and is working on revisions.

**The Water Quality Tech Section** produced a chloride resolution that was accepted by the Board. We will be working on a communication strategy, with the overall intent of reinstating chloride monitoring in the UMR.

**The Minnesota DNR Mississippi River team** toured Reno Bottoms (Pool 9), just south of La Crosse and north of the Iowa border. Silver Maples dominate the floodplains and islands of this reach. This uninterrupted mature tree canopy harbors migrating interior bird species such as Cerulean warblers (species of special concern), that summer along the Mississippi River valley at the western edge of their range. Cerulean Warblers were abundant throughout the Ohio and Mississippi River valleys during the nineteenth century, but they no longer breed throughout much of the area due to habitat loss. While Silver Maples are adapted to periodic flooding in the spring, the trees drowned during the extended periods of summer flooding in recent years.

**Clean water** is the lifeblood of communities situated along and near the Mississippi River. There is wide agreement that investment in the preservation and improvement of water quality results in wide ranging societal and economic benefits. Diminished water quality can have far-reaching effects on the economy and quality of life, impacting tourism, property values, commercial fishing, recreational businesses and reducing regional ability to attract new businesses and a skilled workforce. In 2016-2017, Wisconsin and Minnesota implemented a joint water quality data sampling effort to characterize the status of water quality in the Mississippi River. The findings of this effort <https://dnr.wi.gov/water/wsSWIMSDocument.ashx?documentSeqNo=226465258> will assist Wisconsin and Minnesota to more effectively target water quality improvement actions in strategic locations on the landscape to improve river health. The key findings of this report are:

- Report characterizes important longitudinal trends for numerous water quality parameters over the 160-mile reach between Minneapolis, MN and La Crosse, WI.
- Strong evidence of improvement in metals concentration data.
- Strong evidence that non-point pollution goals/thresholds aren't being met.
- Concerning evidence related to increasing chloride and nitrogen.
- Statistical evidence is provided for tributary rivers to target for non-point pollution reduction efforts (e.g. Minnesota River (MN), Trempealeau River (WI)).
- Report establishes an important

benchmark for pollution reduction efforts moving forward. The report is structured to allow the reader to click on a single parameter of interest (e.g. mercury) to view that section of the report.

Notes:

Parsons noted that the UMRCC report stands as submitted. He thanked Neal Jackson for his work pulling together the newsletters for the UMRCC. Brad uses a lot of information from these newsletters in his updates but will also be requesting information from the UMR states in the future.

He added that Minnesota, Wisconsin, and USGS will be attempting a mini modified unified method in Mississippi River Pool 8 this Spring. The agencies wanted to try it last fall in response to the capture of 30+ silver carp, but they ran into some issues with the USFWS regarding the disturbance of waterfowl on the National Wildlife Refuge. It was a low water fall and would have been the perfect time to try it, but now plan to try it in Spring. They hope to squeeze it in between the flood pulses.

Neal Jackson reported that the Upper Mississippi River Restoration Program that is implemented by the USACE saw an increased authorization in the new WRDA bill that was passed in December. The program had been authorized at just over 33 million dollars until the new WRDA bill increased the authority to 55 million. Similar to yesterday's conversation, there are not currently appropriations for this increase in authority, but the program will begin preparing for potential increases in the future.

Discussion:

There was no discussion following the update.



## 10) AFWA Legislative Affairs Update

### Information item:

Jen Mock Schaeffer, AFWA Government Affairs Director, will join the MICRA Executive Board at 10:00 am (CST) to provide a legislative affairs update. Jen would also like to receive an update on MICRA's interest in pursuing a Mississippi River Basin Fishery Commission, including any suggested funding mechanisms.

### Notes:

Jen will be leaving AFWA at the end of June.

A lot was accomplished during the 116<sup>th</sup> Congress; it was a banner year for conservation. The Great American Outdoors Act included permanent authorization and funding for the Land and Water Conservation Fund. The ACE Act codified the National Fish Habitat Program and work continues to get full funding for the 20 partnerships as well as the Federal agencies that provide technical support and sit on the board. House and Senate bills were submitted to reauthorize the Sport Fish Restoration and Boating Safety Trust Fund. That bill made it out of the House as HR2, which is the House Transportation Bill, and made it out of the Senate in December but did not make it in time to floor time during the lame duck session. Poised to reintroduce during the 117<sup>th</sup> Congress as passed out of Committee. The House majority is very slim as compared to the last Congress, so it will take a strong bipartisan effort to get much of anything done. There is strong interest to get the Transportation bill reauthorized before it expires in September. Looking for a new Democratic sponsor in the House; previous sponsor was not re-elected. The Water Resources Development Act was reauthorized.

The omnibus appropriations bill included great funding for combating invasive species including Asian carp and quagga/zebra mussels. The omnibus report incorporated the House Interior Appropriations report language by reference. So everything that came out of the House Interior Appropriations subcommittee report was included in the omnibus report. The report includes language about the Mississippi River Restoration and Resiliency strategy. Specifically identifies the Mississippi River Basin from Minnesota to Louisiana as a critical waterway of the United States. Calls for federal agencies to work with states to develop restoration resiliency strategies to improve water quality, restore habitat and natural systems, improve navigation, eliminate aquatic invasive species, and build local resiliency to natural disasters. See this as a good step forward to bring attention to the Mississippi River Basin and creates a great opportunity for MICRA and the member agencies to step in and guide some of that work.

Much more to talk about with respect to the omnibus appropriations bill, but not enough time to cover it all. One final note is to know that there was substantial funding and language that creates a fantastic renewed opportunity to address the health and sustainability and resiliency of the Mississippi River Basin as a whole.

For the 117<sup>th</sup> Congress, AFWA is focused on the Recovering America's Wildlife Act and reauthorization of the Sport Fish Restoration and Boating Safety Trust Fund which will again be part of the Transportation Bill. As part of economic recovery, AFWA is advancing an idea about funding state outdoor recreation deferred maintenance backlog (e.g. boat ramps, fishing piers, courtesy docks, marinas, amenities, wildlife management areas, roads, bridges, parking lots, trails, water control structures, habitat maintenance needs, HVAC systems, renovations, roof replacements, breakwaters, etc) for public safety, to protect private property, facilitating outdoor recreation. There are billions of dollars of opportunity to help states budgets by providing states with the opportunity to address these maintenance backlogs. More funding for invasive species remains a priority.

Habitat connectivity for both fish and wildlife resources will be a priority for the Transportation Bill and overall. Great language was included in the Senate version of the Transportation Bill last Congress. AFWA was not as successful on the House side, but they did have very constructive conversations with House Transportation and Infrastructure Committee staff. She is hopeful they will be able to make some improvements on the House side this year.

Climate adaptation legislation will be and moving as part of a package. The Magnussen Stephenson Act reauthorization is highly desirable to move in the House. This is always a challenge; however, bills are already being drafted by members of House Natural Resources Committee. It is unclear what the Senate Commerce Committee will do with this, but they may pick it up as well.

The Senate is now split 50:50 with the Vice President casting the deciding vote. When comes to committee composition, structure, rules, and organization, the majority leader and minority leader are negotiating on process, committee assignments, etc. We were in a similar situation in 2001 with a Republican President. She expects to see the committees 50:50 in their membership composition. Chairmen may not vote unless there is a need to break a tie whether in committee or on the floor. We could see a situation where we have Chairs and Vice-chairs of committees which would be a little different from normal because there is a shared power arrangement that has to occur in this Congress. From a legislative perspective, it means that the crazier things are not likely to get passed and there will be a need to focus on those things with strong

bipartisan support. This creates a lot of opportunity for conservation in this Congress. Economic recovery may be more difficult depending on the fiscal deficit projections, debt ceiling projection, and how budget reconciliation then works. This is the process for budget agreements to be established for FY22 and FY23. COVID could potentially affect how Congress reaches budget reconciliation.

For the first time, AFWA is tackling a new legislative initiative – reauthorization of the Abandoned Mine Lands Act. This Act provides Federal funding for states to deal with abandoned mine lands and the waters that are continuing to suffer from acid runoff contamination, etc. AFWA is in the early stages of building a larger coalition to work on this issue. AFWA had a joint conference call of their Legislative Budget Committee and the Water Resources Policy Committee last week to discuss this topic. More discussions are scheduled this week. It has already come out that states need resources to assess where those abandoned mine lands are and what waters are being affected. This affects a lot of states in the Mississippi River Basin.

Turning towards the Administration, President Biden has a transition website called 'BuildBackBetter.gov'. You can track the Administration's actions (i.e., Executive Orders, Administrative Reviews, etc.) on this website. A lot of campaign promises remain to be addressed like combating invasive species, wildlife corridors, and regenerating the rural economy. Regenerating rural economies can come in the form of rehabilitating fish and wildlife habitat, fish population restoration, and putting jobs on the ground in small communities to help combat invasive species. There are great opportunities here.

Covid-19 is a big priority and will be for a while. AFWA has some great transition opportunities that highlight rural communities, rural economies, fish and wildlife conservation, habitat connectivity, and biodiversity conservation. These things can all be linked together and provide strong opportunities to work with the Administration. The biodiversity conservation discussion can occur separate from climate change discussion which is also very real and challenging. It will take work to make sure that emissions and the clean energy agenda doesn't overrun our fish and wildlife conservation needs when it comes to climate change.

President Biden released a list of political appointees on his first day in office. Of interest is the new Principle Deputy Director of the U.S. Fish and Wildlife Service. Martha Williams was appointed to this position. Ms. Williams was most recently the Director of Montana Fish, Wildlife, and Parks. She left that post December 31 last year following the election of a new state governor. She is no stranger to the Department of Interior. She formerly served in the Solicitor's Office under Ken Salazar. She was a

member and chair of AFWA's Legal Committee. She was an attorney for Montana Fish, Wildlife, and Parks defending the state's authority to manage wolves before she worked for Ken Salazar and then taught at the University of Montana. It appears that we have a colleague at the USFWS.

Shannon Estenoz is the new Principal Deputy Assistant Secretary for Fish, Wildlife, and Parks within the Department of Interior. This is the position within DOI that oversees the National Park Service and USFWS. She has a very strong history working on Everglades restoration in a very constructive fashion with the states and NGOs.

Discussion:

Conover provided Jen with an update on MICRA's efforts to develop a *Joint Strategic Plan for Management of Mississippi River Basin Fisheries* as an initial step in the formation of a Mississippi River Basin Fishery Commission. The final Joint Strategic Plan will be provided to the Directors in February with a request to sign a Memorandum of Acceptance. MICRA plans to focus on the fishery commission concept during their Congressional outreach this year. The goal would be to identify potential Congressional champions for the formation of the fishery commission.

Atlantic, Gulf States, and other commissions are currently funded out of the Sport Fish Restoration and Boating Safety Trust Fund as part of the Transportation Bill. Is MICRA looking at the Trust Funding as a potential source of funding for the proposed Mississippi River Basin Fishery Commission?

The Executive Board has not had a focused discussion on the funding source for a new commission. In general, the board has planned to see what potential vehicles and opportunities were available when the time came to try and move legislation to recognize and fund the new commission. We are just now coming to the point of needing to discuss funding strategies.

Schoenung added that the Joint Strategic Plan and Commission structure are being modeled after the Great Lakes Fishery Commission. In looking at how the GLFC is funded, there was a chunk of money dedicated for Sea Lamprey control. You can draw a parallel with the large amount of funding that is now coming to the USFWS for Asian carp control. In the Great Lakes, the majority of the funding is still directed at Sea Lamprey Control. However, there is a modest amount of funding that is directed towards the GLFC for operations and administration. MICRA is not looking for a huge windfall of Federal funding. In both the Great Lakes and Mississippi River basins, the state and federal agencies use base funding to implement fisheries management actions.

Fiss asked if we know what it would cost to fund the operation and administration of a commission. MICRA has not created its own estimate. Would we be looking at initial funding only to support operation and administration of the commission, or would we also be looking for additional funding to support cooperative management actions and fisheries research needs? Fiss asked Schaeffer if there is a strategy that MICRA should be considering with respect to seeking funding for the commission.

There is a basic level of funding that will be required to support operations and administration so the commission can function, aside from additional project funding. At least for the time being, MICRA should take in an accounting of the funding that is coming in through the various state and federal agencies for projects to determine if that is adequate or if additional funding is needed.

WRDA is reauthorized every two years. Work on the next reauthorization will likely begin late this Congress with the hopes of getting passed next year. More research is needed on the GLFC funding sources. There are many different ways to get something authorized. For starters, there is the annual authorization as part of the Appropriations Bill. This approach does not provide for consistency over time as it would need to be reauthorized every year. More work is also needed to determine the amount of funding that would be needed to stand up and support a new commission. The coastal commissions each receive approximately \$400,000 through the Sport Fish Restoration Trust Fund, that is then leveraged and matched with other partners and states. They all function a little differently based on their unique regional needs. What are those unique needs and opportunities within the Mississippi River Basin? What resources exist in the Basin to potentially leverage with any available funding for administration or projects (e.g. habitat restoration, species population restoration, threatened and endangered species issues, outdoor recreation opportunities, USACE projects, resiliency, Asian carp)?

\$400,000 shared by 28 states is a little more than \$14,000 each. What is the likelihood that the states would support that amount of funding coming out of their Sport Fish Restoration Funding? Are the benefits of having a commission worth that amount of funding from the states? The hope would be that the states would be better organized and use funding more efficiently, which would lead to more federal funding that would cover that \$14,000.

MICRA is currently supported by member dues that fund the operations of the Executive Board. The current dues are inadequate for what MICRA's vision is for the commission. MICRA's current operational budget is less than \$100,000 per year and that includes \$50,000 in Federal funding to support the MRBP.

The Executive Board has been focused on getting the Joint Strategic Plan out to the Directors for their consideration and approval. We have communicated a two-step process to the MICRA delegates. The initial focus being the development of a Joint Strategic Plan that the Directors support and sign-on to regardless of what happens with the fishery commission. It represents an update to the original agreement signed 30 year ago and represents the way the agencies want to work together moving forward. Secondly, the Joint Strategic Plan would set the stage and serve as a foundational document for the new fishery commission. We wanted to get the Joint Strategic Plan and our interest in the fishery commission communicated with the Directors before we focused on external communications with Congressional offices and other partners to build interest and support for a fishery commission. The Executive Board has not yet delved into many of the details such as the level of funding and potential sources of appropriations. The board is just now turning its attention towards authorization and is hoping to talk with you in more detail regarding approach and strategy before conducting their Congressional outreach this year.

By the time MICRA holds Congressional office visits in the end of February, will all of the Directors have signed on to the Joint Strategic Plan and be ready to start working as a commission or will your message be that you are working towards a commission? Knowing what is needed to run the commission administratively, or how you would propose to fund the operation and administration of the commission will be important. The offices will want to know if the states are offering to split or share the cost with the federal government, or if the states willing to use their sport fish money, or if the states are planning to pay for administration costs. If there is interest in trying to carve out a portion of the existing Sport Fish Restoration Trust Fund appropriations that supports the other commissions, this would impact all of the states and would be a different conversation that is needed with the inland boating alliance and the 51 directors. MICRA needs to think through what resources are available, or not, and propose some potential sources or alternatives. Schaeffer can do some groundwork around the Hill to get some thoughts on potential vehicles.

Can MICRA's timeline be flexible? MICRA had hoped to have this conversation with the Congressional offices two years ago and the members are concerned about missing their opportunity. To that end, the focus has been on at least initiating the discussion this Congress. MICRA may not have had a specific timeline, we are just trying to keep it moving.

What does a Hill visit look like right now? If they are all remote, are they punctual? Staffers are occasionally late to conference calls because they are stuck in a meeting with their boss, but they generally are not late to the remote constituent visits. There are



no in-person public meetings right now (since March), everything is done through Teams or Zoom or Skype. There seems to be more comfort and security with Teams. Do they generally generate using their platform or the person requesting the visit? The person requesting the visit will generally arrange it on their platform. Schaeffer will typically ask with platform they would prefer her to use. Sometimes they choose just a standard conference call. It's much easier to get from one meeting to another using these remote platforms. Many staffers are working from home and the meetings have been going fine.

Schaeffer offered to help MICRA thinking through what vehicle and funding options there are and different scenarios if there is interest from the Executive Board. MICRA is planning a call with Schaeffer and the DC team before conducting the visits in late February. It may be good to touch base again ahead of that call. Some directors may have strong feelings about one potential source of funding or another. This would be something else for us to contemplate.

The states have already demonstrated a level of commitment through the use of sport fish dollars to pay annual MICRA dues. A lot of the focus recently has been associated with AIS and Asian carp, as they have emerged as a basinwide problem. Melding these two things together would provide a good foundation to start with.

State budget process are in full swing. There is a significant number of states that feel uncertain about their budgets and if they are going to have spending restrictions from their state legislators to deal with Covid. This could potentially impact the states' ability to financially support something like this right now. Some agencies are running potential budget cut scenarios.

MICRA has had the same membership dues over its 30-year history. States have consistently paid membership dues. The cost of doing business has gone up a lot over those 30-years, so you've lost a lot of your organization's spending power.

## 11) Tennessee Valley Authority Update

### Information item:

Dennis Baxter was invited to provide an overview of TVA's work on a Programmatic Environmental Assessment of deterrent barriers at Tennessee River locks and dams.

### Notes:

Dennis Baxter provided an overview of the Programmatic Environmental Assessment to Evaluate Fish Barrier Deterrent System at TVA Locks and Dams for Asian Carp.

Dennis's slides are provided on the following pages.

TVA is a partner in the effort to control the spread of Asian carp. Last year there was discussion of using deterrent barriers in the Tennessee River valley. TVA decided to begin proactively working on an Environmental Assessment because they can take about a year to be written.

The purpose of the programmatic Environmental Assessment (EA) is to evaluate potential fish barrier options at all 10 lock and dam sites in the Tennessee Valley. This doesn't mean that barriers are planned for all 10 sites but completing the EA for all 10 sites in case any of them are selected for deterrents in the future. The programmatic EA takes TVA locks and dams into account.

Water slows down in the middle portion of many TVA reservoirs allowing eggs to settle out and die. This may be one reason why we are not seeing a lot of successful spawning and recruitment. It is important to understand the potential for successful recruitment when considering the need for dispersal barriers in the system.

TVA has to identify the resources most likely to be affected by the proposed action. Each potential environmental impact is its own section within the EA.

TWRA has provided a lot of current mussel survey data from below the dams. Much of the pre-existing data was several years old. Current data is helpful to prevent delays following the public comment period.

USGS-led structured decision-making process identified the most likely deterrent options to be used will be a BAFF-like system or a BAFF-like system in combination with CO<sub>2</sub>. All five alternatives are discussed for each TVA lock in the EA.

Used existing TVA Hec Ras data (water quality information) to run the USGS FluEgg model for 16 locations to determine most likely locations where Asian carp could



successfully spawn and larvae survive to the gas bladder stage. The six highest risk reservoirs were Kentucky, Gunter'sville, Wheeler, Chickamauga, Watts Barr, and Fort Loudoun.

These results were used by TVA to develop a prioritized list for deployment of deterrent barriers in the Tennessee River system. This list was developed before the USGS-led team discussed the results and the Tennessee River Asian Carp Partnership provided a letter to TVA recommending collaboratively identified priority locations. The TVA recommendations were required internally in early December and the partnership letter was not received until late December. TVA used more than just FluEgg model results to identify deterrent barrier deployment priorities. Aquatic ecology, recreation, economics are all considered in the results of the programmatic EA.

Discussion:

How do we handle the difference between TVA priority list and the sub-basin partnership's priority lists? Watts Barr was not identified as a priority location by the partnership.

Other groups are developing and providing documents to TVA to use in the development of the EA and the prioritization of TVA's recommended deterrent locations. TVA is determining if it is legal for this information to be considered prior to the public comment period. Decisions that are made in the programmatic EA are primarily the contractor's (i.e. NEPA specialists) and TVA's.

Letters will be collected during public comment period and all will be published, including the letter from the Tennessee River sub-basin partnership. Watts Barr is currently in the mix for consideration. There are other groups interested in Watts Barr being considered as a high priority for a deterrent barrier.

When will document be released for public comment?

It was originally planned to be released in mid-January 2021 but there was a delay in the USGS-led structured decision-making process. Even with the delay it was an expedited process that was completed in about 4 months. The normal time frame for this process is over 12 months.

A programmatic EA can be edited or changed with a white paper after it has been sent to the public register. This does require another public comment period.

TVA is now using Hec Ras data to look at the FluEgg model for the Cumberland and Duck rivers to identify other locations where successful spawning is likely.

More information on TVA's field assessments of Asian carp is included in the Tennessee-Cumberland sub-basin update. TVA had done a lot of work to help the partnership to collect data on Asian carp populations.

In the most optimistic of scenarios, when might we see construction on a structure?

The money authorized in WRDA 2020 for construction of deterrents in the Tennessee River will be appropriated to USACE. USACE and TVA will have to establish a Memorandum of Agreement as the first step. TVA and USACE will then develop a plan that details what types of deterrent systems will be installed at which locations and the order of construction of these projects. It is possible we could see construction begin in FY22 if funds are appropriated to USACE.

TVA policy section is already working on MOA with USACE. The programmatic EA is needed by June or July to be used in the MOA with USACE.

It is unclear if the \$25 million authorized in WRDA 2020 has been appropriated to USACE. If these funds haven't been appropriated, that could slow construction beyond FY22.

Several groups have been digging into this question, but there is no clear information on the appropriation yet.

It's not unusual with an administration change like we are currently undergoing for new appropriations to be delayed and reviewed by the incoming administration.

Is there still some negotiation that would be required for the \$25 million to be appropriated or is it just a matter of waiting.

History would suggest that the \$25 million appropriation would not go away entirely, but there could be a rescission by the new Administration. It is not unusual for parts of agency budgets to have a rescission, but major changes are not likely.

There is a difference between the appropriations process for federal agencies and the question here about additional \$25 million appropriation to USACE

authorized in WRDA. It is unclear if USACE received an appropriation increase in FY21 as the result of this new authorization.

The bottom line is we need to hear from USACE to know for sure if the WRDA authorization resulted in an appropriation. At this point USACE has not confirmed the increase yet. It is not uncommon for authorizations to exist with appropriations.



**PROGRAMMATIC ENVIRONMENTAL ASSESSMENT  
TO EVALUATE FISH BARRIER DETERRENT  
SYSTEMS AT TVA LOCKS AND DAMS FOR ASIAN  
CARP**

Dennis S. Baxter  
January 25, 2021

**Purpose**

The purpose of this environmental assessment is to evaluate potential fish barrier options at 10 lock and dam sites in the Tennessee Valley and to consider potential environmental and economic impacts from the installation of Asian carp deterrent systems

State of Tennessee | 1/25/21 | TVA

**Considerations**

Fully consider broad-scale management of fish and mussel resources  
Utilize Existing Modeling i.e. Hec Ras, FluEgg

**Evaluate the potential environmental impacts**

- Water quality
- Aquatic and terrestrial ecology
- Threatened and endangered species
- Transportation
- Land use
- Botany
- Wetlands, visual resources
- Solid and hazardous waste,
- Historic and archaeological resources
- Health and safety along the Tennessee River and its tributaries

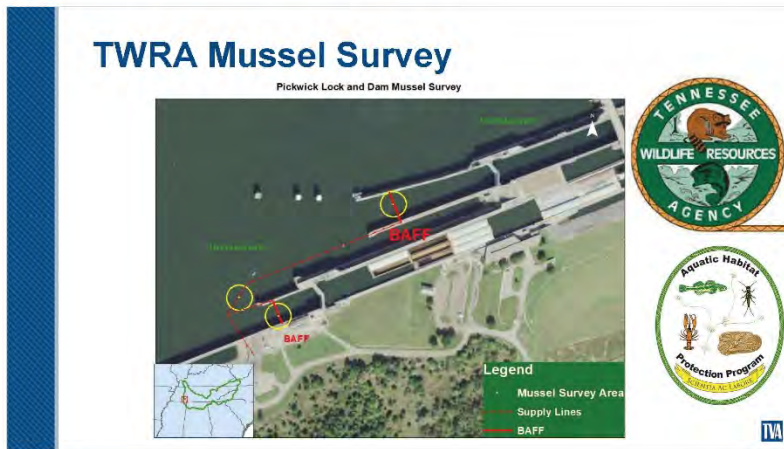
State of Tennessee | 1/25/21 | TVA

The following resources have the potential to be affected by the proposed action:

- Land Use
- Geology, Soils, and Prime Farmland
- Water Resources
- Biological Resources
- Noise
- Air Quality and Climate Change
- Cultural Resources
  - All dams associated with this project are listed on the National Register of Historic Places
- Natural Areas and Recreation
- Utilities
- Waste Management
- Public and Occupational Health
- Transportation
- Socioeconomics
- Environmental Justice

State of Tennessee | 1/25/21 | TVA





### TWRA Mussel Surveys

Species Name	Common Name	Pickwick Reservoir							
		DH-1	DH-2	DH-3	DH-4	MI-1	MI-2	MI-3	MI-4
<i>Anthonia pilcata</i>	Threefinger	2	8	7	8	13	8	19	15
<i>Cyclonema tuberculata</i>	Purple Wartyback	21	-	12	33	29	10	43	16
<i>Polydora corniculata</i>	Singlehorn	12	6	6	6	6	3	6	1
<i>Elaticia lineolata</i>	Butterfly	4	1	3	1	16	4	25	17
<i>Lascomus ebena</i>	Ebonyshell	312	218	182	101	442	230	439	260
<i>Fasciolaria flava</i>	Wabash Flatfoot	-	-	2	-	1	-	-	-
<i>Lamprolaima olivacea</i>	Pink Mallet	-	-	-	-	-	-	1	-
<i>Fraxina fragilis</i>	Fruglio Rajershell	1	-	-	-	-	-	1	1
<i>Ligumia recta</i>	Black Sincshell	3	5	-	5	1	-	5	1
<i>Megalomus nervosa</i>	Washboard	-	1	1	2	2	-	1	1
<i>Obliquaria reflexa</i>	Threeshorn Wartyback	7	4	1	1	23	2	43	16
<i>Pleurobema caradatum</i>	Ohio Pigtoe	-	-	-	-	-	-	-	-
<i>Plectonemus rombeyanus</i>	Bank Climber	-	1	-	-	-	-	-	1
<i>Potomacis diluvii</i>	Pink Heelsplitter	8	5	3	5	6	5	11	1
<i>Potomacis opaca</i>	Flat Footedbook	-	-	-	-	-	-	-	-
<i>Quadrula apiculata</i>	Southern Mapleleaf	-	-	-	-	4	4	7	3
<i>Quadrula macroura</i>	Man Keyface	-	-	-	-	-	-	-	-
<i>Quadrula punctulata</i>	Shingleback	21	6	23	18	58	20	60	68
<i>Quadrula spinulata</i>	Muskeel	4	3	8	-	21	5	21	10
<i>Pygostolus grandis</i>	Giant Flatfoot	1	-	-	-	-	-	-	-
<i>Tringia verrucosa</i>	Pistolgrip	-	1	-	-	-	-	1	-
<i>Trochiloides domingensis</i>	Fawnfoot	-	-	-	-	4	-	2	1
<i>Truncatella truncata</i>	Deertoe	-	1	-	1	4	-	10	6
<b>Count</b>		<b>403</b>	<b>263</b>	<b>248</b>	<b>273</b>	<b>637</b>	<b>251</b>	<b>655</b>	<b>416</b>

### Alternatives

**No Action Alternative – Alternative A**  
 TVA would not install fish barrier technologies at any of the 10 TVA locks to deter the movement of Asian carp through TVA's lock systems

**Action Alternative – Alternative B**  
 TVA would install the BAFF at one or more of the TVA locks

**Action Alternative – Alternative C**  
 TVA would install Acoustic Deterrent System (ADS) at one or more TVA locks

**Action Alternative – Alternative D**  
 TVA would install carbon dioxide system at one or more TVA locks

**Action Alternative – Alternative E**  
 TVA would install an electric barrier at one or more TVA locks

**Action Alternative – Alternative G**  
 TVA would install a combined system at one or more TVA locks.

### Ranking of Reservoirs/Rivers by suitability for nursery habitat

**FluEgg Results**

1. **Kentucky Reservoir**
2. **Guntersville Reservoir**
3. **Wheeler Reservoir**
4. **Chickamauga Reservoir**
5. **Watts Bar Reservoir**
6. **Fort Loudoun Reservoir**
7. Hiwassee River
8. Lower Clinch River
9. Pickwick Reservoir
10. Nickajack Reservoir
11. Elk River
12. Wilson Reservoir
13. Emory River
14. Melton Hill Reservoir
15. French Broad River
16. Holston River

## TVA's Plan

**Table 2-1. TVA Plan for Asian Carp Deterrent System Deployment within the Tennessee River System**

Deployment Location	Priority	Technology
Kentucky	1	BAFF/CO <sub>2</sub>
Wilson	1	BAFF
Watts Bar	2	BAFF
Pickwick	3	BAFF
Guntersville	4	BAFF/CO <sub>2</sub>



## Fish Deterrent Location



Source: Asian Carp (Bleeker) 13

## Chapter 3 Environmental Impact Assessment

### Effectiveness-based Resource Analyses

- Resources include: aquatic ecology, recreation, economics

**Table 3-1. Summary of Effects on Sport Fish Populations**

Reservoir	Alternative	Aquatic Resource Impact Summary																
		In-reservoir Asian Carp populations				Effects of Asian carp on sport fish spawning stock and fish condition				Effects of Asian carp on sport fish reproduction/mortality				Effects of Asian carp on paddlefish spawning history (percent)				
		2020	2025	2030	2035	2020	2025	2030	2035	2020	2025	2030	2035	2020	2025	2030	2035	
Kentucky Reservoir	Alternative A - No Action Alternative	H	H	H	L	M	M	L	M	M	L	M	L	M	H			
	Alternative B - Install the No Acoustic Arch Fence Deterrent System	H	M	L	L	L	L	L	L	L	L	L	L	L	L	L		
	Alternative C - Install the Acoustic Deterrent System	H	M	M	L	M	M	L	M	M	L	M	L	M	M			
	Alternative D - Install the Carbon Dioxide Deterrent System	H	M	L	L	L	L	L	L	L	L	L	L	L	L			
	Alternative E - Install the Electric Barrier Deterrent System	H	M	M	L	L	L	L	L	L	L	L	L	L	L			
Pickwick Reservoir	Alternative A - No Action Alternative	H	H	H	L	M	M	L	M	M	L	M	L	M	H			
	Alternative B - Install the No Acoustic Arch Fence Deterrent System	H	L	L	L	L	L	L	L	L	L	L	L	L	L			
	Alternative C - Install the Acoustic Deterrent System	H	M	M	L	M	M	L	M	M	L	M	L	M	M			
	Alternative D - Install the Carbon Dioxide Deterrent System	H	L	L	L	L	L	L	L	L	L	L	L	L	L			
	Alternative E - Install the Electric Barrier Deterrent System	H	M	M	L	M	M	L	M	M	L	M	L	M	M			





## 12) U.S. Fish and Wildlife Service Update

No written update provided.

### Notes:

Aaron Woldt provided the following update for the Service.

Region 3 has several new hires of interest that Executive Board members or their staff may start interacting with including:

- Mike Thomas started January 17<sup>th</sup> as the new Project Leader for the Carterville Fish and Wildlife Conservation Office (FWCO).
- Patrick DeHaan started in mid-November as the new Project Leader for the Whitney Genetics Lab in La Crosse, WI.
- Nick Frohnauer will start on February 1<sup>st</sup> as the new eNDA and early detection coordinator.

Region 4 has hired lead Asian carp field biologist for the Lower Mississippi River FWCO. This will give the office a field presence to work with the sub-basin partnerships to help fill in gaps as needed. Evan Boone will be starting in this position in April. Another position will be advertised soon to assist with Asian carp sub-basin partnership coordination in the Lower Mississippi River and Arkansas-Red-White sub-basins.

The new Administration started on January 20<sup>th</sup>. There has been a lot of Executive Orders, policy, and other actions coming from the new Administration. At this point, there are no changes to report until we get Departmental and Agency guidance.

There is good news on the budget for FY2021 that started on October 1. A budget for the full fiscal year was signed by the President on December 27, 2020. It was an omnibus package that included all 12 funding bills for the Federal government. Woldt highlighted a couple of items of interest regarding the Service's FY21 budget.

- Change in budget process to NFHAP program
  - Previously was about a \$6.5 million program within the agency.
  - Americas Great Outdoors Act was passed by the previous Congress. As part of the Act, the NFHAP program management and the bulk of NFHAP funding, project selection, and monitoring was moved from under USFWS to the NFHAP Board. This change has been in the works for several years.
  - FY21 will be a transition year as Service works with NFHAP Board and individual partnerships to shift to the new program management.



- By October 1, 2021, the Service will have a much reduced role and it will become a NFHAP Board run program. Essentially the Service will only be helping to manage some of the grant processes and environmental compliance that is required of projects funded with Federal dollars.
- Asian carp budget remains at \$25 million, same level as FY20
  - FY20 included a \$14 million increase for Asian carp
  - \$13.9 million was transferred to state partners to implement projects in support of the National Asian carp Plan.
  - Approximately \$11 M of \$14 M increase in FY20 went to states
  - Woldt expects the Agency will have budget numbers in about 60 days, then HQ will pass along budget information to the different Regions in approximately 30 days.
  - The Service is working through internal processes to determine how the \$25M will be administered in FY21. Woldt expects funding levels for sub-basins to be the same as last year, this will be confirmed once the budget is received by the agency.
- The only change in for the \$25 million appropriation for Asian carp is language directing \$500k more to commercial fishing, up from \$2.5 million in FY20 to \$3 million in FY21. States exceeded \$4 million in commercial fishing projects in FY20.
- WRDA 2020 included Asian carp authorizations
  - \$4M authorization for FWS commercial harvest, but no appropriations
  - \$25M authorization for USACE deterrents, not clear if these funds were appropriated
  - Report to Congress changed from annual to an every other year report, however, now required to include data for all six MICRA sub-basins
  - FY 2018 report has been submitted to HQ and is under review
  - Next report will be for 2019 and 2020. Request for data will be issued to states soon.
- Overall Service Budget was very constant with FY20 and remains essentially flat
  - Hatchery operations nationally increased approximately \$1.3M
  - Hatchery maintenance essentially unchanged.
  - Overall, the Service's Population Assessment, Cooperative Management, and AIS budgets were basically flat on a national level.

Great Lakes Action Plan develop by the ACRCC

- FY21 expected to be cleared through OMB by mid-February
- Will be publicly available after it is cleared by OMB

## Agenda Item 12

### Asian Carp Inter-basin Coordination

- Executive Board discussed the need for a collaborative and coordinated approach across all sub-basins at the last face-to-face meeting in 2019.
- There is specific language in the Service's funding bill that directs the Service to lead the multi-agency management and control effort throughout the Mississippi River Basin, including all of the sub-basins.
- Agreed in concept to next steps for a basin-wide discussion.
- Since that meeting, the Service has developed a draft Monitoring Framework to frame up the discussion.
- The intent of the Monitoring Framework is to initiate a discussion with partner agencies to coordinate our efforts across the sub-basins so that all of the work in support of the National Asian Carp Management Plan meets the Congressional directive of being coordinated in a cohesive approach.
- The Service is at the point of wanting to begin sharing this document and working with state agency biologists to discuss inter-basin coordination.

### Discussion:

Was the \$4M authorized for the Service in WRDA 2020 targeted for states in the southeast?

The bill states that priority will be given to states in the Tennessee River and Cumberland River watersheds, but it is not exclusively for those areas.

This is another example of the benefits a Mississippi River Basin Fishery Commission. In this case, the Commission could work with the Service at administering these types of efforts.

### 13) U.S. Geological Survey Update

No written update provided.

#### Notes:

Rip Shively provided an update on the USGS FY21 budget and recent Columbia Environmental Research Center (CERC) activities.

#### USGS Budget

- Projected to receive level funding with FY20
- \$3M dedicated to grass carp in Great Lakes
- No direct appropriations guidance on remaining funding but anticipate USGS to direct approximately \$2M to support the six Mississippi River Basin partnerships and \$5.6M to support Asian carp work in general - primarily focused on the Great Lakes in the past but much of that work is readily transferable to other parts of the country.

#### Research Activities

- Crews in Barkley and Kentucky Lake since Nov
  - Primarily working on tagging fish and using hydroacoustics to look at the response of fish to sound and electricity boats.
    - Trying to get a handle on how far fish are responding to sound and the utility of sound to drive fish.
    - Investigating efficiency and utility in support of large-scale removal efforts like the modified unified method.
  - Modified Unified Method
    - Contractor hired (Silverfin) did not clear landing areas well; a lot of debris was encountered which hindered harvest efforts
    - Pre-scans of a bay did not have large numbers of fish
    - Learned a lot, but not from a science perspective
    - Returning in mid-February to do another event

Mark Gaikowski provided an update on recent Upper Mississippi Environmental Science Center (UMESC) activities.

UMESC is in the process of moving forward the installation of an acoustic deterrent at Lock and Dam (LD) 19.

- LD19 was identified as a potential pinch point for migration and was selected for evaluation because fish can only pass upstream through the lock chamber.

## Agenda Item 13

- There is also a much larger population of Asian carp below the dam than above it.
- USGS and partners have been able to track fish movements in and around lock 19 for several years.
- Status of acoustic deterrent evaluation:
  - Initial project planning started around October 2019
  - More dedicated and focused planning moved through the design process in calendar year 2021
  - Final construction contract awarded in December 2021
  - Construction began in early 2021 and proceeding relatively smoothly
  - Some delays due to winter weather making construction unsafe
  - Anticipate construction to be completed by the end of the channel closure on March 15
  - Additional tagging of Asian carp scheduled for April
  - Site visit scheduled for the May-June timeframe dependent on the pandemic situation and the ability of people to travel.
  - Video and still photos of the project construction are being collected. Will share with partners.
- Collaborative project with USACE and states of Illinois, Iowa, and Missouri

### Delivery of CO<sub>2</sub> as another deterrent system and general piscicide

- Working with USFWS to develop on-line label management system to allow users on-line access to the label
- USFWS new e-permits initiative is rolling out a web-enabled label request process where users can electronically register, describe the application, request the label, and report any problems or adverse effects
- On-line tool will allow USGS to report out on use of carbon dioxide under this permit

### Expanding CO<sub>2</sub>-carp registered use

- In the process of adding to the registration of CO<sub>2</sub>-carp to allow the use of dry ice to expand out applications of CO<sub>2</sub>
  - Recently completed work looking at the use of CO<sub>2</sub> to prevent the attachment of zebra mussels in and around native mussels that are being reared for propagation purposes. Will have information to share soon.
    - Nice results demonstrating that zebra mussel veligers do not want to attach and adhere in the presence of CO<sub>2</sub>, with minimal impacts to native mussels
- Several states with active registrations of CO<sub>2</sub>-carp: IL, IA, MI, MN, OH, TN, WI. Pending registrations in AZ and IN

- The registration can be expanded out as other states express interest in CO<sup>2</sup> as a piscicide for reclamation projects.

Working with USACE to develop CO<sub>2</sub> deterrent system for installation at electric deterrent barrier in the CAWS. The system would be used to clear fish from the barrier system in the event of any unplanned outages. The design will then be available to be applied at other locations.

Wrapping up reports on CO<sup>2</sup> work at Kaukauna lock and dam on the Fox River in Wisconsin. Report on engineering aspects is nearly complete. Top line take-aways are:

- System develop was easily able to achieve the target lock concentrations within 5-10 minutes.
- Monitored native mussel mortality in and around the area; no mussel mortality was observed.
- No consequential changes to air quality.
- In the process of integrating the fish behavior results into this work.

Lethal pesticide work

- Acquired the rights to Antimycin
  - Using in lethal baits and microparticle work
  - Moving forward with registration
  - Last step in registration process is to identify a manufacturer
    - Manufacturer selected in 2020 pulled back due to pandemic
    - Hope to have a contract with the manufacturer in FY21 to complete the registration package
  - Will be moving forward with a new pesticide registration for Antimycin as a liquid formulation that would be available in 2022 or 2023 for use by management agencies.
  - Working with the University of Wisconsin-Madison to ferment and produce the antimycin as they are working with the manufacture to produce on a more industrial scale.
- Lethal baits for grass carp
  - Several different lethal baits have been developed.
  - In the process of working with Michigan and Ohio to implement a grass carp bait test using a non-lethal formulation of the baits in 2021.
- Evaluation of USEPA registered pesticide that has been identified as species specific piscicide for grass carp.
  - Actively look for locations to conduct field trials.
- Next steps

## Agenda Item 13

- Interested in collecting information from the MICRA members regarding these different technologies that are being developed to help USGS prioritize locations where we might obtain registrations and ways to make the tools most accessible and available.
- One challenge, especially working through Antimycin registration, has been understanding how we will fund the procurement mechanism and how we're going to manufacture and distribute the product.

### Asian carp modeling work

- USGS is working closely with FWS and other partners
- Modeling work will be presented to the UMRCC Fish Technical Section in March 2021 with some additional outreach regarding efforts to expand the modeling work to the Upper Mississippi River
- Also interested in expanding to Ohio, Tennessee, and Cumberland river because of the data and congressional interest in these areas.

### Discussion:

Indiana has approximately 22 units of old (alcohol based) antimycin available to USGS if interested.

Manufacturing is one of the challenges. It is very expensive to produce. USGS will follow-up with Indiana to obtain the supply.

## 14) Joint Strategic Plan

### Decision item:

The Joint Strategic Plan drafting team will meet to discuss final revisions to the draft Joint Strategic Plan. A call with the MICRA delegates was held on October 29 to discuss the draft Joint Strategic Plan, and final comments from the delegates were provided by November 13<sup>th</sup>. The drafting team held a conference call on November 19<sup>th</sup> to discuss the delegates' comments and final revisions. A final revised draft was provided to the drafting team on December 3<sup>rd</sup>. Appendices 1 and 2 were since revised along with Problem Area 4 (provided below), and a final draft was provided to the drafting team on January 21, 2021. The drafting team will discuss the final revisions, including Appendices 1 and 2, and Problem Area 4, and decide if the Joint Strategic Plan should be approved as final by the MICRA Executive Board.

The Executive Board will decide on next steps to finalize the Joint Strategic Plan or to share the final document with the MICRA Delegates and to seek approval of the plan from the agency directors.

### Notes:

The drafting team discussed the revised Joint Strategic Plan that was updated and shared with the drafting team members following the All Delegate meeting and the follow-up drafting team meeting to discuss the delegates' comments. The revised document had previously been shared with the drafting team members in December and January. The only new changes since the last time the revised document was shared with the drafting team was the date on the cover was updated to February 2021 and Problem Area 4. Problem Area 4 was updated based on email approval of proposed revised text. Remaining needs are to confirm approval of Problem Area 4 and discuss the two appendices.

### Discussion:

Appendix A address the 'Definition and Concept of Consensus'. The drafting team members discussed the need for a citation for the definition of emergent consensus and clarifying the content provided in the questions and answers in the appendix. Rather than trying to clarify how to handle situations where consensus is not reached, we should make it clear that there the Commission will focus on those areas where there is consensus? Will the final guidelines on consensus be part of the future governance structure or do we want the definition and concept presented in the appendix to be considered final?

## Agenda Item 14

There was discussion about the idea of “the specter of public revelation” and the recommendation that differences among the agencies should be kept internal and not use public revelation to pressure a member agency into consensus. There is a difference between using public revelation to reach consensus and public revelation being an option after an agency pulls back from a previous consensus decision. Agency positions can change when new administrations take charge regardless of previous consensus decisions. Could there be a situation where an agency decides it no longer wants to participate in a previous consensus decision? The in-the-weeds part of arriving at these decisions is best left to the individuals that are at the table and vested in what that decision looks like. It is too complicated and too nuanced on a case-by-case basis to try to nail down the details in this document. Can we request that an agency provide written notice and justification as to why they have reached a decision that they can no longer participate in a consensus decision? Written notice would be beneficial. Discussion and negotiation can then occur in-house to try and bring the agencies back into consensus. We may want to stress the importance of communication and participation at the sub-basin level. There is strength in being part of the decision-making process; having investment on everyone’s part helps to make it harder for an agency to just back out. Not having one or two states participating in a consensus decision should not result in the other states not moving forward together. There is value in keeping this document simple and concise. While valuable, requiring notification, continued negotiation, and other details may be best left to the governance document. The more we put into this document, the more likely we are to have an agency find something wrong with it that they are not willing to sign-on to.

The draft Memorandum of Agreement (MOA) in Appendix B was discussed. Fiss noted that in his state and MOU or MOA has to be reviewed by TWRA’s legal department. He offered to have his legal department review the draft MOA as a test run to see if they come back with any concerns. That will not mean anything with respect to the other states, but it would at least provide us with some initial feedback. It may be useful to discuss with AFWA to learn how they handle getting the states to all sign-on to agreements. Is the plan to mail the physical document to each of the 28 states to sign? We can have each state sign their respective line individually and then compile into the final electronic document. Missouri Director is lawyer by trade and president of AFWA. Canaday will discuss the MOA with her and request advise. One strategy may be working with the AFWA legal staff? What kind of time frame will this require? Hopefully we can get a response within a matter of a few days.

No concerns were expressed with the wording of the MOA.



Parsons motioned that the Executive Board tentatively approve the Joint Strategic Plan as final pending revisions to Appendix A as discussed during the meeting. Moses second the motion. The motion passed unanimously without further discussion.

The Executive Board agreed to wait until the MOA has been reviewed and adjusted before sending the final Joint Strategic Plan to the Delegates and requesting them to seek their Director's signatures.

The All Delegate meeting was held in late October. The delegates were informed then that the Executive Board would plan to provide the final version of the Joint Strategic Plan by January. A short note to the Delegates to update them on the status of the document might be warranted.

- ! Conover will revise Appendix A based on the drafting team's discussion and provide the revised Appendix to the Executive Board for review and comment. A reference to the Great Lakes Fishery Commission's process will be added and the reference to the Encyclopedia Americana will be deleted. The idea of emergent consensus will be linked to the Great Lakes Fishery Commission. Bullet 3.b) that references "the specter of public revelation" will be deleted.
- ! Fiss, Canaday, and Moses will provide the Memorandum of Agreement in Appendix B to the legal staff in their states to review the document and provide feedback.
- ! Conover will update the dates in the recitals of Appendix B in the Joint Strategic Plan.
- ! The Executive Board tentatively approved the Joint Strategic Plan as final pending revisions to Appendix A as discussed during the meeting.
- ! The final Joint Strategic Plan will be distributed to the MICRA Delegates once Appendix A is finalized and Appendix B is reviewed and modified as needed based on the preliminary legal department reviews.
- ! Schoenung will send a brief update to the MICRA Delegates to inform them that the Executive Board tentatively approved the Joint Strategic Plan as final and will provide them the final document once the Memorandum of Agreement has undergone review.

#### Problem Area 4: Limited Public and Stakeholder Involvement and Support

The Mississippi River and its tributaries comprise one of the largest and most valuable ecosystems in the world. Public use and awareness of river resources varies throughout the basin. Due to the vast infrastructure and publicity devoted to navigation, flood control, shipping, and business activity, many people view the basin purely in terms of economic importance. Many outdoor recreationists and those living near the Mississippi River have not fully recognized nor appreciated the value of the natural resources and recreational opportunities the basin provides. Society has largely neglected the health and sustainability of the natural resources of the basin.

Cultural differences, river access, and public perceptions regarding water quality and general safety of river related recreation all have a major impact on public use and awareness throughout the basin. It is difficult for people to recognize the value in organizing and working cooperatively when they do not realize they share common problems and opportunities. Realization of these common factors can lead to an increased appreciation of basin natural resources and empower stakeholders to view their actions as having an impact beyond themselves and their local community. Considering such helps people realize that by working in collaboration and in a coordinated manner they can have a positive impact on such a large ecosystem from which many stakeholders will benefit.

Many cities and towns along the basin's rivers are working to showcase the river as a major asset and provide a natural connection for their residents and tourists to the recreational opportunities that it provides. Mayors from 124 cities and towns along the main stem Mississippi River recognized their collective need to protect and restore the Mississippi River as a natural system that can support human culture and economies, as well as the river's unique ecosystem and wildlife ([www.MRCTI.org](http://www.MRCTI.org)). As a result, the Mississippi River Cities and Towns Initiative was formed in 2012 to revitalize the river, attract more river related recreation, and create more jobs to develop sustainable economies within their communities.

A lack of adequate resources in terms of funding, personnel, and staff time has constrained inter-agency coordination and interjurisdictional management of fishery resources in the basin. The long-term management of self-sustaining interjurisdictional fishery resources in the basin will require a commitment among state and federal agencies to collaboratively prioritize fishery management needs, develop shared management objectives, and coordinate implementation, data sharing, and evaluation of management actions. Inter-agency collaboration must focus beyond just the state and federal agencies. Increased public awareness and perceived value of the resource are crucial, as are increased stakeholder involvement and support, to the success of the agencies' collaborative management efforts. Effective stakeholder involvement provides

a method for identifying public concerns and values, developing consensus among affected parties, and producing efficient and effective solutions through an open, inclusive process.

Interjurisdictional management of shared fisheries throughout the basin would benefit from:

- Basin-wide plans that prioritize fishery management needs and identify mechanisms for the development of shared management objectives and collaborative implementation, data sharing, and evaluation of management actions.
- Improving communication, coordination, and collaboration among state and federal agencies and NGOs to identify shared priorities, interests, and opportunities to address significant problem areas affecting long-term management of self-sustaining interjurisdictional fishery resources in the basin.
- Promoting partnerships (working and funding) among governments, the public, and NGOs to promote economic and environmental security and stability along the Mississippi River and its tributaries.
- Effective non-technical communication resulting in increased public awareness and improved public perception of the economic, social, and cultural value of the basin's natural resources.
- Effective stakeholder involvement practices to identify public concerns and values, develop consensus among affected parties, and produce efficient and effective solutions through an open, inclusive process.

## Appendix A

### Definition and Concept of Consensus

As the “consensus” process is critical to this plan, it is imperative that all member agencies operate under a singular concept and definition.

The Merriam-Webster dictionary defines consensus in the following way:

1. General agreement; the judgement arrived at by most of those concerned
2. Group solidarity in sentiment and belief

~~The *Encyclopedia Americana* identifies three forms of consensus. The definition of emergent consensus seems particularly relevant.~~

~~*Emergent consensus results A consensus can develop from the crystallization of opinion after all points of view have been heard in the market place of ideas. In theory, each individual weighs the evidence and then draws a rational conclusion. The accumulation of judgment constitutes public opinion. If the emergent majority is forceful enough, the minority adopts its view and the result is consensus.*~~

The following is provided for further clarification.

1. Q. How do you achieve consensus?
  - A. Issues will be discussed by the member agencies until there is broad agreement on a decision or course of action.
2. Q. How do you know you have consensus?
  - A. When no member agency objects to the decision. A member agency may have a dissenting opinion without objecting and preventing a consensus decision.
3. Q. How do you ensure adherence to the consensus decisions?
  - A. You cannot; however, you can provide inducements to adherence by:
    - a) Having the consensus formalized through the signing of a public document by a chief executive officer
    - b) The specter of public revelation
4. Q. What happens if a consensus decision cannot be achieved?

- A. If consensus cannot be achieved, a member agency may seek advice from within the sub-basin committee or request the fishery commission to arrange/facilitate a forum for information exchange, arrange third-party mediation with any resolution accepted only by a consensus of the affected member agencies, or provide a mutually acceptable third-party intermediary to make a nonbinding recommendation.
- B. A decision may remain unresolved until such time as the member agencies agree to further discussion, negotiation, or mediation.

## Appendix B

### Memorandum of Acceptance of the Joint Strategic Plan for Management of Mississippi River Basin Fisheries

**THIS MEMORANDUM OF ACCEPTANCE** made and entered into this 1st day of February 2021, by and between the states of Alabama, Arkansas, Colorado, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Minnesota, Mississippi, Missouri, Montana, Nebraska, New York, North Carolina, North Dakota, Ohio, Oklahoma, Pennsylvania, South Dakota, Tennessee, Texas, Virginia, West Virginia, Wisconsin, and Wyoming, hereinafter "States", through or along which the Mississippi River and its interjurisdictional tributaries flow.

#### **RECITALS:**

WHEREAS, the parties hereto have long desired to adopt a Joint Strategic Plan for Management of Mississippi River Basin Fisheries, and

WHEREAS, the Mississippi Interstate Cooperative Resource Association prepared such a Joint Strategic Plan for Management of Mississippi River Basin Fisheries after years of efforts, deliberations, and consultations, and

WHEREAS, the parties hereto have had the opportunity to develop, review, and change the drafts of the Joint Strategic Plan for Management of Mississippi River Basin Fisheries, and

WHEREAS, the parties hereto have agreed that the Joint Strategic Plan for Management of Mississippi River Basin Fisheries, dated December 2020, represents the final product of the best efforts of the parties and serves the best interests of the parties hereto and the peoples of their states.

NOW THEREFORE, in consideration of the mutual benefits to be derived herefrom, the parties hereby covenant and agree as follows:

1. The Joint Strategic Plan for Management of Mississippi River Basin Fisheries, dated December 2020, is hereby accepted and adopted by each and every party signatory to this Memorandum of Acceptance.

2. The parties hereto pledge their support to the Goals set forth in the Joint Strategic Plan for Management of Mississippi River Basin Fisheries and commit themselves to resolving the Mississippi River Basin Fishery Issues raised in the Plan by jointly, severally, and individually adopting the Strategies for Mississippi River Basin Fisheries Management set forth in the Plan.

3. The parties hereto agree to develop a governance structure, institutional arrangements, and responsibilities for implementation of the Joint Strategic Plan for Management of Mississippi River Basin Fisheries and agree that changes to, or modifications of, the Joint Strategic Plan shall be accomplished by consensus, utilizing procedures similar to those used in developing and adopting the Joint Strategic Plan.

4. The parties hereto agree to adopt and execute the Strategic Procedures set forth in the Joint Strategic Plan for Management of Mississippi River Basin Fisheries and commit themselves and their agencies and instrumentalities to carrying out these procedures to the extent practicable within fiduciary and personnel constraints.

5. Nothing in this Memorandum of Acceptance shall be construed as infringing on the sovereignty of any state signatory to this document, but shall rather be construed as a commitment of the sovereign power of such states to carrying out the Joint Strategic Plan hereby adopted.

IN WITNESS WHEREOF, the States have hereunto executed this Memorandum of Acceptance, as of the date first written.

ALABAMA DEPARTMENT OF CONSERVATION & NATURAL RESOURCES

\_\_\_\_\_  
Director Date

ARKANSAS GAME AND FISH COMMISSION

\_\_\_\_\_  
Director Date

COLORADO PARKS AND WILDLIFE

\_\_\_\_\_  
Director Date

GEORGIA DEPARTMENT OF NATURAL RESOURCES

\_\_\_\_\_  
Director Date

ILLINOIS DEPARTMENT OF NATURAL RESOURCES

\_\_\_\_\_  
Director Date

INDIANA DEPARTMENT OF NATURAL RESOURCES

\_\_\_\_\_  
Director Date

IOWA DEPARTMENT OF NATURAL RESOURCES

\_\_\_\_\_  
Director Date

KANSAS DEPARTMENT OF WILDLIFE & PARKS

\_\_\_\_\_  
Director Date

KENTUCKY DEPARTMENT OF FISH & WILDLIFE RESOURCES

\_\_\_\_\_  
Director Date

LOUISIANA DEPARTMENT OF WILDLIFE & FISH

\_\_\_\_\_  
Director Date

MINNESOTA DEPARTMENT OF NATURAL RESOURCES

\_\_\_\_\_  
Director Date

MISSISSIPPI DEPARTMENT OF WILDLIFE, FISHERIES, AND PARKS

\_\_\_\_\_  
Director Date



MISSOURI DEPARTMENT OF CONSERVATION

\_\_\_\_\_  
Director Date

MONTANA DEPARTMENT OF FISH, WILDLIFE & PARKS

\_\_\_\_\_  
Director Date

NEBRASKA GAME & PARKS COMMISSION

\_\_\_\_\_  
Director Date

NEW YORK DEPT. OF ENVIRONMENTAL CONSERVATION

\_\_\_\_\_  
Director Date

NORTH CAROLINA WILDLIFE RESOURCES COMMISSION

\_\_\_\_\_  
Director Date

NORTH DAKOTA STATE GAME & FISH DEPARTMENT

\_\_\_\_\_  
Director Date

OHIO DEPARTMENT OF NATURAL RESOURCES

\_\_\_\_\_  
Director Date

OKLAHOMA DEPARTMENT OF WILDLIFE CONSERVATION

\_\_\_\_\_  
Director Date

PENNSYLVANIA FISH AND BOAT COMMISSION

\_\_\_\_\_  
Director Date

SOUTH DAKOTA GAME, FISH & PARKS DEPARTMENT

\_\_\_\_\_  
Director Date

TENNESSEE WILDLIFE RESOURCES AGENCY

\_\_\_\_\_  
Director Date

TEXAS PARKS & WILDLIFE DEPARTMENT

\_\_\_\_\_  
Director Date

VIRGINIA DEPARTMENT OF GAME & INLAND FISHERIES

\_\_\_\_\_  
Director Date

WEST VIRGINIA DEPARTMENT OF NATURAL RESOURCES

\_\_\_\_\_  
Director Date

WISCONSIN DEPARTMENT OF NATURAL RESOURCES

\_\_\_\_\_  
Director Date

WYOMING GAME & FISH DEPARTMENT

\_\_\_\_\_  
Director Date

## 15) Fishery Commission Initiative Next Steps

### Decision Item:

The Executive Board members will discuss the next steps for advancing the Mississippi River Basin Fishery Commission concept. The board will need to consider internal and external next steps, including messaging during the February 2021 Congressional office visits. The MICRA Policy Coordinator has recommended sharing the Joint Strategic Plan with AFWA and the Congressional Sportsman's Foundation (CSF), and developing a coalition to support this initiative. CSF is interested in supporting the proposal for a Mississippi River Basin Fishery Commission and assisting with Congressional outreach. The board should consider next steps with other groups that MICRA has recently worked to develop working partnerships with such as National Wildlife Federation, American Sportfishing Association, and B.A.S.S.

### Notes:

Ashlee Smith joined the Executive Board for a discussion about Fishery Commission Initiative next steps and MICRA's 2021 Congressional Outreach planning. The discussion of the two topics were somewhat interwoven during the meeting but are separate out here in the notes to the extent possible.

### Discussion:

Smith informed the Executive Board that there is a lot of support for the Fishery Commission concept and outside groups are ready to push the idea on the Hill. The Congressional Sportsman's Foundation (CSF), ASA, and NMMA are all interested in this initiative and are frequently requesting updates from Smith on MICRA's progress.

Even though the Mississippi River Basin Fishery Commission is being modeled on the Great Lakes Fishery Commission (GLFC), the GLFC does not provide a model for authorizing language as it was the result of an international treaty and multiple pieces of legislation. Smith has been looking at the coastal marine fisheries to get input and ideas for developing draft legislation. One hold-up to her outreach has been the Joint Strategic Plan that they want to include in the authorizing legislation as the basis for the Mississippi River Basin Fishery Commission. Smith has had offers from CSF to help get the document in front of directors for them to sign. There was also some discussion of having AFWA share the document with the directors. Since the document is still not final, can we still move ahead with the draft legislation. The legislation would only reference the Joint Strategic Plan, it would not include the document itself.

## Agenda Item 15

Schoenung provided an update on the status of the Joint Strategic Plan. The Executive Board is a little uncertain about the process for getting 28 state agency directors to sign on to the document since all the agencies now must get the Memorandum of Agreement reviewed and approved by their legal departments.

Parsons said he was surprised to hear how much interest there is outside of MICRA and that there could be a draft bill so quickly. While that is likely a good thing, he doesn't have the facts that MICRA is definitely going to go in this direction or the potential for federal legislation in the near-term on his director's radar. His director is aware of the Joint Strategic Plan and the state has experience with the Great Lakes Fishery Commission. He doesn't expect too much concern from his agency, but he said he has some homework to do.

Fiss asked if we can bring in an external partner from ASA or a local Wildlife Federation if the state fish chief isn't able to participate. Smith informed the group that the National Wildlife Federation passed a resolution last year supporting the formation of a Mississippi River Basin Fishery Commission. The Delta Council (multiple states) has tentatively said that they would be willing to help push it. Several state Wildlife Federations in the Mississippi River Basin would be happy to push it because all the states voted in support of the national resolution. Smith wants to make sure that if we put together this large coalition of partners to push the fishery commission, that there is not a MICRA rep that pops up and says we are not all in yet. Even if they don't passively advocate for it and just passively let it happen, we should be fine. But we can't have any states objecting. Fiss commented that if that happens, we have other problems. He was referring to states that as a rule won't let their folks do any sort of Congressional outreach, not a case where a state chooses not to participate because they don't support the fishery commission.

Parsons said that it would help him to have a list of the groups that are supporting this effort. Smith said there aren't many in the upper part of the basin that she has been in contact with yet because it feels like MICRA is in limbo. She has mentioned it while talking to people about other initiatives, particularly the MRRRI.

Schoenung said the he doesn't feel like we would be putting the cart before the horse if we get the final Joint Strategic Plan out to the delegates in the next couple weeks with a request that they discuss it with their directors, and then we are talking to Congressional offices a couple of weeks after that. He asked for more clarification on what it means to have bill language and the timeline. Jen Mock Schaeffer asked Schoenung yesterday where MICRA expected the money to come from. That is not something that the Board has spent time discussing. Could you also talk about different funding mechanisms?

Smith said that we have been very clear that the money for the Fishery Commission could come from existing appropriations because so much has been added over the last two years. The states have not been able to spend all the funding and some has been sent back. We have estimated that MICRA would need \$400-\$500k to establish the Commission and the administrative function. The fact that this doesn't need to be new money is a very big selling point to members of Congress. The USFWS is administering all the Asian carp appropriations that are flowing to the states and they are taking 70% of the funding. MICRA is really just asking for a different form of management and administration of these funds. Smith said that when people ask about taking all of that funding away from the Fish and Wildlife Service, she informs them that the agency is not making money off of this and we would not be taking the field work away from them. The Fish and Wildlife Service would still be doing the field work for us. It is just the redirection of funds for the administrative aspect of this.

Conover stated that it was unfortunate that the USFWS rep wasn't available to be on the call this afternoon to participate in this discussion. He suggested that the Executive Board needs to work through the talking points regarding the purpose of the commission. In particular, the discussion regarding the appropriation and administration of the Asian carp funding will create a major rub with the Service who is a member of the MICRA partnership. That is a slippery slope if that is what MICRA uses as its key talking point. The Joint Strategic Plan spells out the need for the Commission and the commitment for the joint approaches to management. That is the key need that has been discussed within the Executive Board as the basis for establishing the fishery commission. If MICRA is proposing \$400-500k of the Asian carp funding to be used for the annual operations of a commission to improve coordinated Asian carp management and control in the basin will likely be looked at much differently than all of the Asian carp funding being directed to a fishery commission that would be responsible for directing those funds. Between the Service and the Executive Board, we need to come up with some consistent talking points that both groups are comfortable with and can support. That will be critical. We don't want MICRA to come out of the gate talking about the need for a fishery commission and have the Service pushing back immediately that they are completely opposed. Of the \$14 million increase in the Service's Asian carp funding in FY20, approximately \$11.9 million was passed through as grants to the states. As funding has increased, a larger percentage of the funding has been provided to the states. Conover mentioned that he has also heard concern about the length of time it takes to get the money out to the states each year. We need to get this group back together with Aaron to talk through MICRA's talking points to make sure that both groups are comfortable with the messaging and supporting each other's messages.

## Agenda Item 15

Smith said that the Commission would be housed with the Department of Interior and that it needs to be made clear that we do not want to lose the Service's expertise or field support. It would be useful to get on a call with the Service to work out these talking points. The first question she typically gets is "how does the Service feel about this?"

It was interesting to hear the Service's update regarding the loss of the agency's role administering the Fish Habitat Partnerships to the Fish Habitat Board. As a state agency, I never felt that the Service was fully invested in the idea of fish habitat partnerships nor did they seem to put a lot of emphasis on them. Yet it sounded like the agency was hurt by the change in the program's administration.

As far as the bill language, that is just a matter of crafting it to include what you want with respect to a commission. If you search the web for Gulf States Marine Fishery Commission establishment, you can pull up the legislation that established that commission. The Mississippi River Basin Fishery Commission legislation would likely look similar except that it will be based on MICRA's priorities. You already have a lot of language developed that could be used in the draft legislation.

Last year we asked Congressional members for their tentative support. This year, MICRA will want to secure sponsors for the bill who will push it forward and try to get it passed. It could get combined with another piece of legislation or it could go forward by itself. A lot of times when you introduce something like this, the first year is about building support within Congress and then a hard push to get the bill passed occurs the following year. It is possible that we could get it passed this year if MICRA really wanted to push hard, but that is not the sense that she is getting from the Executive Board. Smith recommends that MICRA work on lining-up several really strong sponsors this year and then target getting the bill passed next year. There is the potential to get it passed this year and there are some partners (i.e., TWF) that are chomping at the bit to get a commission established as quickly as possible. This is a good idea, it is not controversial, and people like it. It is also not a lot of money, nor is it a request for new money. She thinks that other groups are latching on to this because they see it as a potential win, but she is following the Executive Board's lead. We do not want it to be passed before the states are ready and have it flop because it wasn't the right timing.

Why would it be a flop this year? Are the states ready to staff up and begin operating as a commission?

Will the states be able to spend all the money that is coming this year? We already are. Some states are struggling due to Covid-related budget holds, hiring freezes, restrictions on field work, etc. States that were not already staffed up to do this work will

likely be impacted more than those that already have staff and equipment. This is not a good time to try to build infrastructure.

Conover informed the Executive Board that Allan Brown was on the last TWF Asian Carp Partnership call and heard Ashlee talking about the Fishery Commission concept. He contacted Conover following that call to express his concerns about how Ashlee was presenting the Service and justifying the need for the Fishery Commission. Schoenung and Conover had a call with Smith to discuss a change in her talking points to 1) justify the commission based on resource management needs, not funding administration needs, and 2) not to justify the commission by making the Service look bad. It sounded like Ashlee understood and agreed at the time, but she was back to her old talking points during this conversation with the Executive Board. MICRA is on course to have immediate opposition from the Service with the current messaging.

One key to MICRA's messaging might be to focus on the Commission's ability to prioritize needed actions across the basin. The Great Lakes Fishery Commission play a critical facilitation and prioritization role. Smith seems to be primarily focused on the funding aspect. The Commission can also help with coordination to support other large initiatives in the Basin such as the MRRRI.

How does the Service feel about getting this Asian carp funding? Was it even an option for them? Were they prepared to handle that level of funding or did it put the agency in a bind? The Service's messaging has been all along that as Asian carp funding increased, higher percentages of that funding would be made available to the states. Would the Service be happy to not be responsible for administering all this funding to the states?

The Service has been communicating since the beginning that the agency is working with MICRA to help identify funding priorities in the basin. The inter-basin coordination and facilitation role that the Commission can provide is a strong link to assisting the Service meet their Congressional mandate. The Commission would assist the Service with inter-basin coordination and the states with their ability to plan, implement, and evaluate Asian carp management and control actions.

I would be cautious to say that MICRA could give the money out any faster. We don't know how hard that is or have the mechanism in place to move money to all these different state agencies. As cumbersome as it is, at least they are getting it done. As far as getting it out faster, the funding comes to the states at about the same time every year and the states are in a rhythm with the funding cycle. Getting funding sooner in a new fiscal year could create problems. The timing is largely driven by the federal budget

## Agenda Item 15

cycle, not the speed by which the Service is transferring the funding to the states. There are some exceptions with states like West Virginia and Pennsylvania where the Service has been slow to get the states their funding.

If the Commission is distributing funding, that changes your roles and responsibilities as an organization that comes with many fiduciary responsibilities e.g., grants administration, financial audits, etc. The Service has four sub-basin coordinators that are helping the partnerships pull together the funding proposals every year. That is a role that we would like to have the Service continue providing. There is also a large workload associated with grant administration that it is best if the Service were to continue providing. MICRA is not positioned to perform either of these roles any faster. Administration for these funds is an inherent federal role since these are federal resources.

How does it work if a Fishery Commission is established under the Department of Interior? Would the Commission be a federal entity? No, the Great Lakes Fishery Commission is not a federal entity. The commission would be hosted by a federal agency. Federal funding for the Commission would need to flow through a host federal agency. Department of State is the host agency for the Great Lakes Fishery Commission because of the international boundary waters. The Mississippi River Basin Fishery Commission could potentially be hosted by Department of State or the Department of Interior. In the Great Lakes, a large amount of funding comes through the Commission to the Service and USGS. This is might be because funding comes from both the US and Canada federal governments. But the administration of funds is not the purpose that MICRA is focused on. Our role is to communicate the benefits that the Commission would provide to improved resource management, including the control of Asian carp and other AIS in the basin.

- ! Conover will schedule a follow-up conference call for the Executive Board to discuss the fishery commission talking points with the Service to make sure that both groups are comfortable with the messaging and support each other's messages.
- ! Smith will send a copy of the National Wildlife Federation's resolution supporting a Mississippi River Basin Fishery Commission (and other such documents from other organizations) to Conover to share with the Executive Board members.
- ! Smith will send a list of organizations talking with Ashlee about supporting the Mississippi River Basin Fishery Commission concept to Conover to share with the Executive Board members.



- ! Smith will send her draft bill language to establish a Mississippi River Basin Fishery Commission to Conover to share with the Executive Board members.

## 16) 2021 Congressional Outreach

### Decision item:

The Executive Board members will be updated on progress planning for February 2021 Congressional visits. Board members will need to discuss and decide on key talking points and strategies for MICRA's 2021 Congressional outreach.

### Discussion:

MICRA will have a little more flexibility with scheduling and participation in the 2021 Congressional visits this year because the offices are conducting all meetings remotely. There will be no face-to-face meetings for these visits this year. This will hopefully help MICRA to have broader participation and should be easier on the core team since there will not be a week of travel dedicated to the visits. She hopes to schedule an in-person Congressional briefing as early as June if possible. We can consider a webinar for the briefing if we are still unable to hold an in-person briefing.

Ideally, Smith would like to have the state fish chief or ANS coordinator participate in each visit. If we cannot have local participation, then we should have a sub-basin rep from a neighboring state that can participate.

How long will it take to nail down the committees that we want to talk to and the states we will want to pull fish chiefs/directors in from? We already know are key committees, those don't really change from year-to-year. We have had more committee turnover this year than last year, including committee leadership. Once the committee membership is set, it will not take long to pull a list together. The Senate is working on a lot of big items right now, so we have time to get these meetings scheduled. The appropriations language is the biggest concern. It is more important to schedule the visits with the right person in each office, than to squeeze all of the meetings within a specific week or two.

How many people would you like from MICRA to participate on each of these calls? Ashlee is fine with just the local fish chief, ANS coordinator, or the sub-basin rep. Is there any benefit to having one representative from each sub-basin in all the meetings to state that we are all in this together and we all want this to happen? Only for certain members like Rep. McCollum that control major purse strings and hear from constituents all around the country. It is vital that we have someone from her state on that call. She is trying to pull off something big with the Mississippi River Restoration and Resilience Initiative (MRRRI).

There's not really a need for a core team from Ashlee's perspective. She would rather have the ability to pull in the fish chiefs from each state. In the past, MICRA has made

an effort to mix delegates with experience with new delegates. The Executive Board was considering a similar model this year so that any fish chief that participates would have a sub-basin rep with DC experience on the call that can lead the discussion. We think this will help us get additional participation from new fish chiefs. There is no process that the fish chiefs need to know, just what the asks are. Smith is comfortable handling the meetings with just the individual fish chiefs but will work with a larger group if that is what the Executive Board wants. It helps to have the larger group for the in-person visits just for the congeniality, but you don't get that with Zoom meetings anyway. They just want to see someone from their state on their screen.

Smith asked if the Executive Board is okay with her reaching out directly to the fish chiefs and scheduling visits once the talking points are finalized. She was asked to keep working with Schoenung and Conover to develop a game plan for engaging the MICRA delegates. A follow-up conference call for the Executive Board with USFWS representation was recommended to finalize the talking points. The Service has been on board with the fishery commission concept, but it is going to come down to how the need for the commission is being messaged as well as the administration of the Asian carp funding. We need to make sure that we make the Service look good, or at least not look bad. Everyone will likely be on board with the idea of the fishery commission and \$400-\$500k of the Asian carp funding going to support staffing and coordination. The Service has already been tasked with finding a way to integrate everything that is going on throughout the Basin as it relates to Asian carp. This fits nicely within that concept. MICRA has served this coordination role in the basin for the last 30 years. If we move beyond that to a discussion about administration of the remainder of the Asian carp funding, that is where we are likely to have some contention.

Smith was asked if she planned to develop draft language for a bill establishing the commission to provide during the MICRA visits. She has a draft started, but it needs more work. Smith will provide the draft text to Conover to share with the Executive Board members. Don't worry if the draft feels choppy or rough, anything will be helpful for the Board members to start getting a sense of what is needed.

- ! Smith will develop a list of key committee members and offices for MICRA's visits to identify which fish chiefs will need to be invited to participate in the meetings.
- ! Schoenung will contact the fish chiefs in the MICRA states where MICRA will be conducting office visits to invite and request local participation in the meetings.

## 17) 2021 Policy Coordination Contract Renewal

### Decision item:

In 2020, MICRA established an agreement with Mississippi Wildlife Federation (MWF) and Ashlee Ellis Smith for policy and government affairs services. The contract was for the 2020 calendar year at a cost of \$2,000/month plus an additional \$5,000 travel budget. MWF and Ms. Smith are interested in renewing the contract with the same terms for 2021. The Executive Board will discuss MICRA's need for continued contract assistance with policy coordination and decide whether to renew the contract with MWF for 2021.

### Discussion:

Based on what we heard from Ashlee Smith yesterday, it sounds like she is keeping busy. We still have a need for that support again this year.

We are going to need this type of continued support if we are going to continue to move forward with the Commission.

Parsons made a motion to renew the policy coordination contract at the level of \$29,000 for 2021. Fiss second motion. Motion passed unanimously.

It was recommended that Schoenung have a conversation with Ashlee Smith prior to signing the 2021 agreement regarding the need for MICRA to develop fishery commission talking points and the need for Smith to communicate MICRA's talking points regarding the commission rather than those of other parties.

- ! The Executive Board approved a motion to contract hire policy coordination support in 2021 for an amount not to exceed \$29,000.
- ! Schoenung will talk with Smith regarding the need to develop and use MICRA talking points when discussing the proposed Mississippi River Basin Fishery Commission.

## 18) Review of MICRA Planning Documents

### Discussion item:

The Executive Board will review and discuss the following three planning documents that were developed to identify and communicate MICRA priorities, as well as to assist with MICRA's coordination and communication efforts.

1. AIS Action Plan

This document was completed in 2010. Is it still current and relevant? Review the milestones listed under goals 1 and 2.

2. Aquatic Habitat Action Plan

This document remains to be finalized. Next steps and a timeline for finalizing need to be developed.

3. MICRA Priorities 2019-2023

The Executive Board developed this document with the intent of reviewing it annually and using it to guide the development of annual work plans for the Executive Board and standing committees.

### Notes:

Due to other agenda topics running longer than expected during Session 3 on Tuesday afternoon, this topic was not covered. During Session 4, Conover quickly reviewed the list of plans above and the status of each. These three documents were intended to inform MICRA's communications and work activities. At the last Executive Board meeting, the members discussed tracking progress of the MICRA Priorities document annually and using the annual review to establish annual work plans for both the Executive Board and standing committees.

### Discussion:

This topic was tabled until the next meeting and there was no discussion.

## 19) Mississippi River Economic Profile

### Information item:

Bryan Hopkins, Missouri DNR, will brief the Executive Board on discussions about revising an economic profile for the Mississippi River. The proposed revision would include the entire mainstem Mississippi River and be somewhat similar to the profile LMRCC produced for the Lower Mississippi River in 2014.

### Notes:

Angie Rodgers introduced and welcomed Bryan Hopkins with the Missouri DNR. Hopkins is a member of the LMRCC Executive Committee and LMRCC Past-Chairman. He has been instrumental in working through this concept and Rodgers reached out to ask Hopkins to provide the Executive Board with an update.

In 2014, the LMRCC published an updated economic profile for the Lower Mississippi River. Enough changes were included in the updated profile that it was essentially a new approach to how the previous economic profile was conducted. The report and a 2-page brochure are available on the LMRCC website. The 2-page brochure may have been the most important product of the 2014 study (see below). The study looked at all the economic drivers in the counties surrounding the river. This study was focused. It was limited to the river valley and pretty quantifiable sectors (see brochure below). For example, when trying to quantify ecosystem services things can get spun into hard to swallow analyses quickly. The numbers for the lower river study in 2014 were \$151 billion in annual revenue as a result of the river's economic contribution. and jobs. That is a powerful number, but the study was focused enough that people were taking the study seriously.

Collin Wellencamp with the Mississippi River Cities and Towns Initiative (MRCTI) used the lower river profile during Congressional visits in DC. He informed Hopkins that the economic profile brochure changed the tone of conversations for the positive. Rodgers and Hopkins presented the economic profile to the Upper Mississippi River Basin Association (UMRBA) along with a suggestion of similarly updating the economic profile for the upper river. UMRBA worked on an update profile. Although a final report has not been published, they did get the updated numbers and developed a two-page fact sheet similar to the LMRCC brochure. On the upper river, \$345 billion in annual economic benefit are generated for almost the same sectors in the LMRCC analysis. The approach between the two studies was not 100% the same, nor were they completed at the same time. The IMPLAN data used in the two studies was separated by about 3 years. Upper river used a two-county footprint while the downriver study used congressional districts.

This brings us to the need for a new economic profile that uses consistent methodology, scope, and timing for the whole river. The LMRCC is working with a professor at the University of Tennessee (UT). The UT professor and Hopkins will be discussing this idea with the states during the closed session of the upcoming UMRBA meeting. The hope is to reignite interest in a new economic profile for the entire Mississippi River. The UT professor thinks he can complete the full study for about \$150k using a modular approach. For modest increases above the initial \$150k cost, would allow for a web-based study that could be updated with new IMPLAN data periodically for only the cost of the database. Brochures could also be developed for download and print. Eventually the LMRCC and UMRBA will be looking for funding to help support. The anticipated need is approximately \$120k. In the past, the Walton Foundation helped fund the lower river study and the USFWS Division of Economics assisted with the upper river study. The Walton and McKnight foundations have indicated that they will be moving funding to larger-scale and climate focused studies. They are looking for ideas on potential funding sources to cost share the new study.

One of the benefits of completing this study in a consistent and defined way is that it becomes a turn-key example of what can be done in other parts of the Mississippi River Basin e.g., Ohio, Missouri, Illinois rivers. We would have the ability to bring in these large tributary systems so that we can begin to look at a basin-wide footprint. It may be better to communicate sub-basin economic numbers than basin-wide numbers because the economic numbers are likely to become so large that people will struggle to grasp or may simply roll their eyes. Having specific, focused, and powerful numbers for each sub-basin may be most effective.

Hopkins concluded by asking people to follow-up with him and/or Angie with suggestion on potential funding sources.

Discussion:

Fiss asked for clarification on the data source. Hopkins will have to look up to verify, but believes it is IMPLAN. Most data were derived from the IMPLAN data set, but some data on ports and navigation were not available and other data sources were used to augment the IMPLAN data set.

*Note: A quick internet search produced a possible match. See <https://blog.implan.com/understanding-implan-application-and-data>.*

Fiss clarified that there was no on the ground survey work involved with the study. Hopkins replied that he does not know how INPLAN develops their data set.

## Agenda Item 19

Fiss is working on a similar project for Tennessee. The study is for a much smaller area, but they are asking for almost 3x as much funding. For a study with a smaller footprint you may need much finer resolution. It would be good to have the Tennessee-Cumberland basin study conducted in the same methodology as the Mississippi River study. From MICRA's perspective, there would likely be interest in being able to add sub-basins to the Mississippi River economic profile.

Conover asked if there is a target timeline for completing the new economic profile. It has been a shifting target. With a new Administration change, we need to wait and see what the new paradigm is. We want to come back and reignite this discussion, including a desired timeline.



## 20) Review of Standing Committees

### Discussion item:

MICRA currently has five standing committees:

- AIS/MRBP
- Gamefish
- Habitat
- Native Mussel
- Paddlefish and Sturgeon

The Gamefish committee has been inactive for years. The Native Mussel committee's long serving chairman, Don Hubbs, retired from TWRA in 2020. The committee is currently without a chairman. The Executive Board began discussion about a Habitat committee in 2010 and established the committee in 2014. The committee has held one in-person meeting and several remote meetings but has not been active since providing the Executive Board with a near final Aquatic Habitat Action Plan in October 2018. Only one of the two committee co-chairs remain active. The MRBP and Paddlefish/Sturgeon committees remain active.

The MICRA Priorities document was intended to inform Executive Board and standing committee work plans but has not been used to regularly to guide meeting agendas or workplans. The Executive Board has not provided the standing committees with direction in several years beyond the Priorities document. An in-depth review of the need to maintain each of the standing committees along with developing guidance for the committees is proposed for the summer Executive Board meeting.

### Notes:

Conover had organized the agenda so that the previous session would end with a review of MICRA's different planning documents to set-up this discussion about the standing committees. However, the meeting got behind schedule yesterday and the Executive Board was not able to review MICRA's planning documents prior to this agenda topic. His intent was to use this time to set-up a more detailed review of the standing committees at the Executive Board's summer meeting.

Conover quickly stepped back to Agenda Item 18 to review the status of three recent planning documents and the Executive Board's intent to annually review and track progress of the MICRA Priorities Document to establish annual work plans for both the Executive Board and standing committees.

## Agenda Item 20

Conover then quickly reviewed the status of the five standing committees as provided in the briefing book above. He asked for initial input on the recently vacated Native Mussel Committee chair position, and the idea of having a more in-depth discussion of all the standing committees in conjunction with a review of the priorities document during the summer Executive Board meeting.

### Discussion:

Parsons said that MICRA helped get the Freshwater Mollusk Conservation Society (FMCS) up and running. We have not seen much come from the Native Mussel Committee since the FMCS was established and wonders if the committee is redundant at this point. The UMRCC has a very active mussel committee that could participate in a MICRA committee if there is a purpose and added benefit.

Conover noted that Don Hubbs basically served as a liaison between the FMCS and the MICRA Executive Board. He would provide annual updates on the FMCS and request funding to assist with an upcoming FMCS symposium or training event. Conover does not recall any activity within the MICRA mussel committee, nor any direction being provided by the Executive Committee.

Are any remaining needs for a MICRA mussel committee or if it is perhaps time to consider decommissioning this standing committee?

I would expect all these committees to be working on an Executive Board or delegate driven need. I am not hearing that for this committee in particular and it sounds like the states needs are being met by the FMCS.

Several years ago, when the last Gamefish Committee Chair stepped down the Executive Board decided that gamefish needed to remain a priority for the MICRA partnership. Rather than decommission the Gamefish Committee, the board members decided to maintain it but make it inactive.

It sounds like the board members agree that there is no need to rush to find a new committee chair for the Native Mussel Committee.

Is there interest in looking more closely at all the MICRA standing committees at the next Executive Board meeting?

We came up with the concept for the habitat committee and solicited people to participate, but the board never provided them with our guidance and direction regarding work priorities. Until we get some of the high priorities worked out, we do not

need to be soliciting other things that require our attention. We did well for a while with the Habitat Committee, but it did lose its priority as the Executive Board got focused on the Commission concept and Joint Strategic Plan. I would be less comfortable not continuing with a Habitat or Paddlefish committee than I would the Gamefish and Mussel committees. There seems to be less inter-subbasin coordination needs for gamefish issues. We can handle most of our inter-state coordination within the sub-basin. Paddlefish, sturgeon, and habitat seem to be issues that involve multiple sub-basins. Catfish issues are one potential exception where we have similar issues in multiple sub-basins.

Does it make sense to look at the priorities we have laid out in our Joint Strategic Plan to make sure that whatever committees we have moving forward are in line with that document? We also need to look at the specific charge for each of the committees. There was agreement that future discussion is needed.

It is hard to keep a committee active and engaged if they do not have a specific objective to be working on. We are seeing that within the Paddlefish Sturgeon Committee right now. There is a sub-set of commercial harvest states that are working on a specific objective, but the broader committee does not. They seem to be more meeting for the purpose of just coordinating and communicating across a group of biologists. Overall participation seems to be down because they are not working on specific objectives. That group would benefit from more direction from the Executive Board.

- ! The Executive Board agreed to review the Joint Strategic Plan and MICRA Priorities Document and then discuss MICRA's standing committees at the summer Executive Board meeting.

## 21) ASA Government Affairs Committee

### Discussion item:

Larry Pugh attended the ASA 2018 Sportfishing Summit in October 2018. Larry's report and recommendation following that meeting are provided below. MICRA has not had a representative attend the Sportfishing Summit or the Government Affairs – Freshwater committee meeting since 2018. MICRA has met with ASA's Inland Fisheries Policy Manager, Chad Tokowitz, during DC visits and conference calls. Chad is a champion of Asian carp issues and is very interested in partnering with MICRA. Conover attempted to attend the virtual ASA conference this year, however participation was restricted to ASA members. Should MICRA consider joining ASA or reaching out to ASA regarding other options for MICRA engagement with the Government Affairs committee?

### Notes:

Conover attempted to remotely participate in the ASA 2020 Sportfishing Summit in October 2020. Registration was required to participate and only ASA members could register for access to the virtual meeting. Conover was unable to find information on the ASA website regarding annual membership dues.

This raised questions regarding the Executive Board's interest in MICRA partnering with ASA. Is the board interested in an ASA membership to gain access to the Sportfishing Summit and Government Affairs Committee meetings? Pugh reported in 2018 that he learned that only ASA members are allowed to participate in the committee discussion. The Executive Board has had very little discussion regarding ASA since Pugh attended the 2020 Sportfishing Summit to represent MICRA and provided his report back to the board. Conover had planned to attend the 2019 Sportfishing Summit. The meeting was held in Oregon and would have been quite expensive to attend. After failing to get time on the agenda, Conover did not attend the meeting. Conover had several conversations with Chad Tokowitz, ASA's Inland Fisheries Policy Manager, and feels like MICRA has established a good relationship with him. The MICRA DC team has met with Tokowitz once or twice. He has expressed a strong interest in working with MICRA, AIS and Asian carp control in the basin, and how MICRA's and ASA's interest align. But other than Tokowitz, Conover said he does not believe MICRA has made much progress connecting with higher levels within ASA.

Conover asked the Executive Board members if they have an interest in MICRA being represented as an ASA member and being more active in their meetings and discussions? Or is the board satisfied with the current level of engagement and continuing to work primarily with Tokowitz as part of MICRA's Congressional outreach

efforts? Should Ashlee Smith be MICRA's primary contact with ASA as long as she remains on contract with MICRA?

Discussion:

What is the cost for ASA membership? Conover was not able to find the cost on-line, even after creating an account. He reached out to their membership coordinator and this past month Tokowitz sent an email to their membership coordinator to introduce Conover as the MICRA Coordinator. Conover did not get a response from the membership coordinator either time.

Batten said that he believes AGFC belongs to ASA and that annual membership is in the \$1,500-\$2,000 range. Canaday chatted that Missouri is a member of ASA and Fiss chatted that TWRA is not a member of ASA. It's possible that Executive Board members can participate in the ASA meetings through their agency's membership.

Fiss offered that he has good experiences working with Tokowitz and that Tokowitz recruited him to speak at an ASA event. MICRA may be able to benefit from more engagement with ASA, but he is getting some level of engagement through Tokowitz. They also are engaging with the Tennessee Wildlife Federation. ASA seems to be engaging in a positive way in Tennessee, at least at Tokowitz's level.

MICRA has had a difficult time engaging with anyone above Tokowitz. MICRA had a meeting scheduled with Mike Leonard, ASA's Vice President of Government Affairs, a couple of years ago, but Leonard cancelled that meeting at the last minute. We have not had any good interaction with Leonard, but not from a lack of effort.

What does it mean for MICRA to be a member of ASA? The group is involved with a lot of advocacy. Perhaps MICRA's membership is best handled through the individual MICRA member agencies memberships. The perspective of the board members that have been part of the Congressional visits is important with respect to the value of MICRA building relationships with ASA and other stakeholder groups.

The ultimate benefit of MICRA being aligned with ASA in some shape or form is access to Congressional things that we didn't have before? It is more about MICRA having a voice when the industry partners are meeting and discussing issues important to interjurisdictional fisheries management. These industry partners and other stakeholders are meeting and sharing ideas, but MICRA is not represented and does not have the opportunity to participate in the discussions. For example, we heard yesterday how Ashlee Smith's perspective of the fishery commission has evolved (e.g., USFWS is keeping too much Asian carp funding and the commission is needed to

## Agenda Item 21

administer the funds to get them out more quickly than USFWS) and how that is being influenced by her discussions with ASA, TWF, and other stakeholder groups. Those conversations are occurring without MICRA being a part of the conversation. The value is bringing MICRA's voice and the states' perspectives to those types of conversations. We want to find opportunities of common interest to advance MICRA's interests. An alternative is for MICRA to continue to work with individual ASA representatives like Tokowitz.

Gene Gilliland, B.A.S.S., reached out and was interested in getting MICRA engaged with ASA because he was hearing these conversations taking place, was aware of the shared interests in AIS with MICRA, and thought that MICRA should be a part of those conversations.

Parsons said that he sees value in MICRA being more active with ASA, it's just a matter of how we do it. Could we set-up a meeting with Tokowitz and the Executive Board? Conover thinks that Tokowitz would be very willing to join the Executive Board to discuss potential opportunities for partnering.

Tokowitz followed up with Canaday several times with questions and a lot of interest after his presentation on the Mississippi River Basin Fishery Commission at the AFWA meeting in St. Paul. Canaday continues to have periodic communications with Tokowitz. He believes that Tokowitz is actively trying to stay involved in a number of these issues. Several states are represented in ASA, but it might be worth following up on the cost for a MICRA membership so that we have another voice (and a MICRA voice) in some of these conversations. He does see value in the partnership and membership, at least from a Missouri standpoint.

Ashlee Smith has had multiple conversations with Tokowitz. There would likely be benefits to having him connected more directly with the Executive Board and more members individually like he has with Fiss and Canaday.

If Tokowitz was following up with Canaday regarding the Fishery Commission, perhaps we use that as the focal point for a discussion with him. We can provide him with an update on the Fishery Commission, MICRA's next steps, and continued partnership with ASA. That would provide Tokowitz with the opportunity to hear from the Executive Board as a whole regarding the purpose, need, and benefits of a fishery commission. This type of communication was recommended whether or not the board decides to pursue ASA membership for MICRA.

Canaday said that it is not clear to him if this interest is stemming from Tokowitz's personal interest to build relationships with the states for his work through ASA or is the topic of AIS one of operational priorities for ASA. There is high interest within the industry, so it is likely that there is a shared interest in AIS.

Parsons supports having a call with Tokowitz to discuss the fishery commission and suggested that we may want to organize a standalone call rather than waiting for the summer Executive Board meeting. Getting ahead of ASA's Congressional outreach would be advantageous.

This is an opportunity to make MICRA relevant to a broader audience and to highlight some of the things that we are doing. As subject matter experts, our participation in the AIS conversations should be highly valued. MICRA is equipped to provide a unique perspective. There is a lot of misinformation out there that MICRA could help to dispel.

It would be interesting to hear his perspective on similar interests and opportunities for partnership beyond just Asian carp or AIS. We definitely want to make sure that ASA and others understand MICRA's broader scope with interjurisdictional fisheries management.

- ! Conover will invite Tokowitz to a call with the MICRA Executive Board to discuss MICRA's interest in a Mississippi River Basin Fishery Commission and opportunities for partnering with ASA more broadly. This discussion will be scheduled after the Executive Board works with the Service to develop talking points regarding the purpose, need, and benefits of a fishery commission.

ASA Sportfishing Summit Summary for MICRA Executive Board – Provided by Larry Pugh, October 2018

- Four other state resource agencies attended: Jim Fredericks (Idaho Fish Chief); Dirk Miller (Wyoming Asst. Chief of Fish); Ross Self (SC Fish Chief); and Florida Fish and Wildlife Conservation Outreach Staff. Several big-name industry folk are based out of SC, which is why SC DNR attends each year.
- Participated in several committee meetings – 60/60 (R3); Government Affairs; Advocacy
  - 60 in 60 was ASA's main theme for the meeting (60 million anglers in 60 months)
- Government Affairs (GA) Committee – Day 1
  - Lots of discussions on CA water issues, Modern Fish Act, and Everglades. Not much opportunity to deviate from the agenda in terms of Asian Carp (AC) discussions, and the Committee chair will let you know that at the start of the meeting.
  - The GA committee had their saltwater committee meeting in the afternoon, which meant Pugh was looking for another committee meeting to attend.
  - The Advocacy Committee seemed to be the best choice, and finally some discussion on Asian Carp. Most of the discussion from Committee members centered on the Great Lakes, but I was able to interject (along with help from Dave Washburn with FLW Outdoors) that Asian Carp issues were not just a Great Lakes issue. Positive feedback from a few members of this Committee on MICRA messaging. I also got to know Liz Ogilvie, the ASA representative to the Advocacy Committee. She should be able to provide some direction for us in the future.
- The next day was the Government Affairs subcommittee meetings (freshwater and saltwater subcommittees) – Pugh selected the freshwater side, not that I did not want more updates on Red Snapper.
  - The freshwater committee chair is from the Great Lakes Fishery Commission, so I sat quietly why he spoke at length on the importance of keeping AC out of the Great Lakes. He whined quite a bit about GLRI reductions in funding, but I guess you can do that if you are the Committee chair.
    - One thing to note is that if you are not on the agenda in these committee meetings (and sitting as an observer like me), then you cannot speak unless you are recognized by the Chair.
  - Interestingly, ASA staff met with USACE at the Pentagon two weeks ago to discuss Brandon Road; wanted to speed the project up and get an update. How does MICRA get a meeting at the Pentagon? Haven't been there yet.



- A huge shout out to Gene Gilliland with BASS for asking the Chair to recognize me and give me a few minutes to talk about who MICRA is and what we have been doing in the BASIN. I also spent some time talking about our DC educational trips and the recent success we have had. I had lots of exchange with several committee members over the next 10 minutes; however, the Chair believed it was in the Committee's best interest to move on with the agenda, especially when GLRI cuts were brought up 😊.
- ASA established some sort of coalition during the summer to discuss AIS. There is lots of misinformation in this committee about Asian Carp issues in the BASIN. There was much discussion (among Committee members and not observers) on commercial removal. Committee members do not view this option favorably. I did ask several members for their cell numbers that I could provide to recreational anglers in the TN River. This request was unsuccessful.
- Other discussions were on the Lacey Act – legislation introduced in July should “fix” the issue with AIS movement between states (I am not familiar with this; ask AFWA), and on centralized AIS boat inspections in MN (Wright County, MN I think) – Brad may be up to speed on this. I certainly was not.
- Post meeting thoughts
  - Very expensive to attend this meeting, just like ICAST
  - There are opportunities here --- I met lots of industry folk and shared the MICRA message (BASS, FLW, Shimano, Yamaha, St. Croix, Z-Man baits to name a few, plus outdoor writers that want to follow up about AC issues). Several of these individuals are familiar with the same issues MICRA is working on and are very active politically in DC.
  - Spent time with a new ASA Government Affairs Director – his name is Clay Crabtree. We discussed meeting in DC during the next MICRA delegate trip. ASA and MICRA have similar concerns with respect to AIS; we need to all be on the same page with messaging in DC. At minimum, we need to reach out to Clay prior to the trip and let him know what issues we will be discussing during the trip. His email address is [ccrabtree@asafishing.org](mailto:ccrabtree@asafishing.org); (703) 519-9691
  - Should we attend next year----yes, but only if we can get on the Government Affairs' freshwater subcommittee agenda. Clay can help with this. A brief PPT presentation on who MICRA is and what we have been doing (include Commission formation activities) would be very beneficial to the committee members. I believe industry folk would be very supportive of MICRA and what we want to do once they understand who we are. I am not sure if I can recommend attending again only as an observer (and thus not being able to say anything during committee meetings).

## Agenda Item 21

- Next year's Summit is October 8-11 at Skamania Lodge on the Columbia River in Stevenson, WA.
- Challenge to think about – I received an invitation to attend the Summit because MDWFP is an agency ASA member. The summit is by invitation only. So, I'm unsure how we get on the agenda in the future. Either a delegate is already an ASA member and gets an invitation, or MICRA consider becoming a dues paying ASA member. Clay Crabtree should be able to help with this.
  - I would also like to discuss having a few business cards for MICRA Executive Board members to have for meetings like this. I hand out my agency business card that has MDWFP on it. I would suggest a better fit is to have MICRA on the card; that is why I was there, not as a state agency representative.

## 22) River Champion Award

### Decision item:

The Executive Board awarded two inaugural River Champion Awards during the MICRA All Delegate meeting on October 28, 2020. The board members will decide when to publish a call for nominations for the new River Champion Award.

### Notes:

Canaday reviewed the Executive Board's previous decision regarding the new River Champion Award. This recognition will not necessarily be awarded annually, but he recommended that the Executive Board plan to discuss it annually or establish sometime of cycle. There is value reminding the membership about this award annually, so they keep it in mind and continue to consider nominations. Managing the award was proposed as a task for the immediate past chairman, i.e. – soliciting nominations, compile and share with Executive Board, work with Coordinator to obtain the physical award, etc. Canaday recommended that the Executive Board send an annual reminder with a request and deadline for nominations to the delegates for at least a couple of years to gauge interest. The Executive Board will review the nominations and make a decision each year that nominations are received.

Is there support for sending out a request for nominations this spring or summer to recognize someone at the summer or winter meeting? Or is there another cycle that would be better?

### Discussion:

Schoenung commented that he does not recall this being discussed as an annual award, but something that would be awarded when we have a candidate or candidates that the Board would like to recognize. It seems like a nice opportunity to recognize Ron Brooks for what he has done for MICRA and the Basin.

This could just be something that is discussed periodically by the Executive Board members. That is how Bobby Reed and Jerry Rasmussen were identified for the inaugural awards. We might want to add something to the website to provide documentation of the award, past recipients, and a nomination form to pick up individuals that may not be on the Executive Board's radar.

At some point, we are going to want to do some kind of an open call. It sounds like we have one well supported nomination, so maybe we wait another year before making a

## Agenda Item 22

call for nominations. There are people out there that deserve recognition that we do not know about.

It would be nice to get pictures of Rasmussen and Reed with their awards to put on the web page. We should include a short narrative or their nomination on the webpage. Rewards and recognition are important to people and I don't want to see this fall of our radar.

Moses said he will try to get a photo of Reed with the award. He was very appreciative of the award.

- ! Conover will add information on the River Champion Award and the inaugural winners to the MICRA website.

Reed asked Conover to hold on to his award until his house is rebuilt. He can ship it to Moses to deliver to Reed when he is ready for it.

- ! Moses will talk with Bobby Reed and make arrangements to get him his River Champion Award and to get a photo of Reed with the award for the MICRA website.

This could be part of our external communications. We could develop a press release, but I don't know who would pick it up. This is part of a broader issue that we recognized in our communications plan.

There may not be a lot of good external outlets, but there are professional outlets for something like this, e.g. AFS state chapters and divisions.

Neal Jackson requested information on Jerry's nomination to include in the UMRCC newsletter.

Conover can put whatever information the board members choose on the website. He voiced doubt that putting a nomination form on the website would result in nominations from other delegates without regular reminders of the award that direct them to the nomination form. The Young Professionals Travel Stipend has its own page on the MICRA website that includes the nomination form, but the Executive Board has not received any nominations for this award for a couple of years. An active communication effort with the membership will be needed to get nominations for either of these awards each year even if the information and nomination form are available on the website.

We have a recommendation for Ron Brooks to be considered for the River Champion Award and then to seek additional nominations after that recognition is given. Reed and Rasmussen received the inaugural awards in October 2020. Does the Executive Board want to plan on October 2021 for Brooks if the award is approved? Other options are the Executive Board's summer 2021 or winter 2022 meeting. Fiss was asked if he would develop a nomination for Brooks for the Executive Board to consider.

Fiss provided a letter of support for Brooks for a nomination for a SEAFWA award but he did not write that nomination. He will check with Paul Wilkes to see if he has a draft that can be used to develop a River Champion nomination.

- ! The Executive Board decided to consider a nomination for Ron Brooks as the next River Champion award recipient and potentially seeking nominations from the membership in early 2022 for future recipients.
- ! Fiss will develop a River Champion nomination for Ron Brooks to share with the Executive Board for consideration before October.

## 23) Young Professionals Travel Stipend

### Decision item:

The last Young Professionals Travel Stipend was award in 2018. The annual deadline for application submission is January 1. No applications have been received for the 2021 award. The Executive Board will decide whether or not to remind delegates about the availability of the travel stipend in 2021 and to include funding in the 2021 budget.

Information on the Travel Stipend is available on the MICRA website, although it may need to be placed more prominently.

### Notes:

The travel stipend was briefly discussed during the River Champion award discussion.

Conover had noted that the Young Professionals Travel Stipend has its own page on the MICRA website that includes the nomination form, but that the Executive Board has not received any nominations for this award for a couple of years. An active communication effort with the membership will be needed to get nominations for either of these awards each year even if the information and nomination form are available on the website.

Parsons had recommended not making a request for nominations for the Young Professionals Travel Stipend until at least midyear due to the on-going pandemic and the transition to virtual meetings. He would like the Executive Board to revisit that award and how it is advertised soon but it is not something that we need to worry about now.

### Discussion:

- ! The Executive Board decided to revisit the 2021 Young Professionals Travel Stipend during the summer meeting.

## 24) 2021 Operational Budget and Workplan

### Decision item:

The Executive Board will approve an operational budget for 2021. A proposed budget for 2021 is provided on the next page. Line item changes from 2020 are highlighted grey.

### Notes:

Conover walked through the proposed operational budget on the following page, noting changes from the past several years. 2020 membership dues are on course to remain consistent with the past several years, so the same level is projected for 2021. Of note, MDC is providing an additional \$5,000 in membership dues for the second year in a row to help cover the cost of the Policy Coordination contract.

Many discretionary expenditures related to travel are projected to be lower in 2021. Policy coordination is proposed in the 2021 budget. Ashlee Smith is interested in renewing her contract in 2021. That contract is budgeted at \$2,000/month plus an additional \$5,000 for travel. The Young Professionals Travel Stipend is funded at \$1,000 in the proposed operational budget for 2021. A small amount of funding is budgeted for awards (sufficient to purchase two River Champion awards). The Freshwater Mussel Committee did not request funding support for the Freshwater Mussel Conservation Society in 2020, but \$1,000 is budgeted again in the 2021 proposed budget. USFWS funding support for hosting the MRBP was increased in FY20 back to the original funding level of \$50,000. That level is expected to be received again in FY21. No specific projects are budgeted for in the proposed budget. With the additional membership dues from MDC and the travel related reductions, the proposed budget has a projected surplus just over \$3,000.

### Discussion:

Fiss made a motion to approve the budget as presented. Parsons seconded motion. Motion passed unanimously.

- ! Conover will send Parsons a new invoice for 2020 membership dues with today's date.

Agenda Item 24

<b>Proposed Annual Budgets</b>						
	2017	2018	2019	2020	2021	
<b>Beginning Projected Balance</b>	190,613.29	169,395.59	182,547.73	199,082.15	187,480.76	
<b>Projected Income</b>						
Membership Dues	38,000.00	38,000.00	43,000.00	43,000.00	43,000.00	
MRBP Funding	40,000.00	40,000.00	46,000.00	50,000.00	50,000.00	
Member Support for Policy Coordination					5,000.00	
Interest Income	78.00	78.00	78.00	78.00	48.00	
<b>Total Projected Income</b>	<b>78,078.00</b>	<b>78,078.00</b>	<b>89,078.00</b>	<b>93,078.00</b>	<b>98,048.00</b>	
<b>Projected Expenses</b>						
<b>Fixed</b>						
Legal and Professional Fees	3,180.00	3,180.00	3,180.00	3,180.00	3,180.00	
Bank Fees	150.00	150.00	150.00	150.00	25.00	
Dues and Subscriptions	75.00	75.00	75.00	75.00	75.00	
Website	1,000.00	3,000.00	3,000.00	700.00	500.00	
Computer, Internet, and Software Expenses (Adobe, Zoom)			2,500.00	200.00	1000.00	
<b>Total Fixed Expenses</b>	<b>4,405.00</b>	<b>6,405.00</b>	<b>8,905.00</b>	<b>4,305.00</b>	<b>4,780.00</b>	
<b>Discretionary</b>						
Executive Board Meetings and Travel Support	6,700.00	3,500.00	3,500.00	3,500.00	1,500.00	
MICRA Coordinator	9,000.00	9,000.00	9,000.00	9,000.00	6,000.00	
Hill Visits / Summer Congressional Briefing	9,000.00	10,000.00	12,000.00	12,000.00	6,000.00	
Policy Coordination				29,000.00	29,000.00	
Young Professionals Travel Stipened Awards	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	
Freshwater Mussel Committee	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	
Gamefish Committee	0.00	0.00	0.00	0.00	-	
Habitat Committee	0.00	500.00	0.00	0.00	-	
Paddlefish Sturgeon Committee	0.00	1,000.00	1,000.00	1,000.00	-	
MRBP (AIS) Committee	32,400.00	36,000.00	41,850.00	45,500.00	45,500.00	
<b>Total Discretionary Expenses</b>	<b>59,100.00</b>	<b>62,000.00</b>	<b>69,350.00</b>	<b>102,500.00</b>	<b>90,150.00</b>	
<b>Total Discretionary Expenses without MRBP</b>	<b>26,700.00</b>	<b>26,000.00</b>	<b>27,500.00</b>	<b>57,000.00</b>	<b>44,650.00</b>	
<b>Annual Projects</b>						
All Delegate Meeting				10,000.00		
North American Sturgeon and Paddlefish Society			1,000.00			
Joint Strategic Plan Meeting/Travel			6,500.00			
<b>Total Annual Projects</b>	<b>0.00</b>	<b>0.00</b>	<b>7,500.00</b>	<b>10,000.00</b>	<b>0.00</b>	
<b>Total Projected Expenses</b>	<b>63,505.00</b>	<b>68,405.00</b>	<b>85,755.00</b>	<b>116,805.00</b>	<b>94,930.00</b>	
<b>Projected Yearend Balance</b>	<b>205,186.29</b>	<b>179,068.59</b>	<b>185,870.73</b>	<b>175,355.15</b>	<b>190,598.76</b>	
	+/-	14,573.00	9,673.00	3,323.00	-23,727.00	3,118.00



<b>2020 Budgeted vs Actual Income and Expenditures</b>					
	2020	Actual	Projected	Difference	2021
<b>Projected Income</b>					
Membership Dues	43,000.00	20,000.00	18,500.00	(4,500.00)	43,000.00
MRBP Funding	50,000.00	-	50,000.00	-	50,000.00
Member Support for Policy Coordinator		5,000.00	-	5,000.00	5,000.00
Interest Income	78.00	70.48	-	(7.52)	48.00
<b>Total Projected Income</b>	<b>93,078.00</b>	<b>20,070.48</b>	<b>68,500.00</b>	<b>(4,507.52)</b>	<b>98,048.00</b>
<b>Projected Expenses</b>					
<b>Fixed</b>					
Legal and Professional Fees	3,180.00	3,180.00	-	0.00	3,180.00
Bank Fees	150.00	23.99	-	126.01	25.00
Dues and Subscriptions	75.00	75.00	-	0.00	75.00
Website	700.00	1,043.80	-	(343.80)	500.00
Computer and Software Expenses	200.00	931.91	-	(731.91)	1,000.00
	4,305.00	5,254.70	-	(949.70)	4,780.00
<b>Discretionary</b>					
Executive Board	3,500.00	1,139.83	-	2,360.17	1,500.00
Coordinator	9,000.00	-	-	9,000.00	6,000.00
Hill Visits / Summer Congressional Briefing	12,000.00	8,486.72	-	3,513.28	6,000.00
Ellis Smith Policy Solutions	29,000.00	27,377.52	-	1,622.48	29,000.00
Young Professionals Travel Stipened	1,000.00	-	-	1,000.00	1,000.00
Awards	500.00	210.83	-	289.17	150.00
Freshwater Mussel Committee	1,000.00	-	-	1,000.00	1,000.00
Gamefish Committee	-	-	-	0.00	-
Habitat Committee	-	-	-	0.00	-
Paddlefish Sturgeon Committee	1,000.00	56.21	-	943.79	-
MRBP (AIS) Committee	45,500.00	8,369.37	37,130.63	0.00	45,500.00
	102,500.00	45,640.48	37,130.63	19,728.89	90,150.00
<b>Annual Projects</b>					
All Delegate Meeting	10,000.00	-	-	10,000.00	-
<b>Total Expenses</b>	<b>116,805.00</b>	<b>50,895.18</b>	<b>37,130.63</b>	<b>28,779.19</b>	<b>94,930.00</b>

## **25) Schedule Spring Conference Call and Summer Executive Board Meeting**

### Decision Item:

Executive Board members will schedule a spring conference call and a summer Executive Board meeting.

### Discussion:

Zoom meetings are working well and most people do not currently have the ability to travel.

- ! The Executive Board decided to schedule quarterly Zoom meetings for 2021. Meetings will be rescheduled or added as needed. Scheduling an in-person meeting will be revisited later in the year once we begin to see agencies lifting travel restrictions.
- ! Conover will send out doodle polls to schedule quarterly Executive Board Zoom meetings for 2021.

What schedule do we want to use for the sub-basin updates? Is once a year for the winter meeting sufficient? That schedule should be up to the sub-basin reps. We did not use to have these written updates provided by agency reps in each sub-basin. Prior to these written updates, the sub-basin reps would provide notes from a recent sub-basin meeting (e.g. UMRCC, LMRCC, ORFMT) or just discuss items of interest from within the sub-basin. Written notes or a list of topics is requested in advance for the briefing book, but these do not need to be written updates from each agency.

## 26) Other New Business

### Discussion item:

Executive Board members will address additional business items not on the agenda and brought to the board's attention during the meeting.

### Notes:

No new agenda items were identified during the meeting.

### Discussion:

It may be prudent for the Executive Board to begin considering what the Fishery Commission would look like should that concept move forward. For example, what does staffing look like, what role would the Executive Board serve as part of the Commission or how would it integrate into the Commission. We need to all be on the same page and more prepared to take action should there be an authorization and funding available to make it happen. We have always talked about it conceptually, but now we have not put more concrete thought into how it would be structure.

- ! Executive Board members were asked to give some thought to the process for standing up the commission, including how the Executive Board would integrate, and to be prepared for a more in-depth discussion of this topic during the next meeting.

Ashlee Smith seems to think we can get it done this year. Will we be any more prepared if it happens next year?

This seems like a good next step now that the Joint Strategic Plan is finished, and it is out for the Directors to approve and sign on to. With the DC team and other partners starting to talk more about the fishery commission concept, the next step for the board should be to begin discussing details concerning how this would happen and what it would look like.

It would be good to get perspective from agency staff (e.g. Minnesota and Indiana) working with the Great Lakes Fishery Commission regarding what about the structure works well or doesn't work well, and what would you recommend doing differently, etc. Some of that will depend on the amount of funding that is available. The GLFC is international in scope so there is additional nuance that would not apply to the Mississippi River Basin. Thinking about it broadly, we would need an executive director, policy person, communications person, and what would be needed for support

## Agenda Item 26

personnel. The GLFC has a number of people that facilitate meetings and keep things running smoothly. That is a valuable function that we would want to have with the Mississippi River Basin Fishery Commission.

Who would hire the first person for the commission, the Executive Board? There is a lot of work to be done to figure out the process for forming the commission.

What kind of time frame would we be under to stand up the commission and begin spending a budget? Generally federal appropriations are made as 1-year, 2-year, or no year money. 1-year money has to be spent out by September 30, 2-year money generally has to be spent down by April or May of the following fiscal year.

Maybe we would identify an interim director or another alternative. It may not be necessary to identify all the details in advance.

Parsons informed the Board that he was nominated for 2<sup>nd</sup> vice president of AFS. This will not affect his commitment to MICRA as chair-elect and chairman. He has been told that the commitment to AFS gets busy about year 3 or 4, by which time he will be finished or nearly finished with his term as MICRA Chairman. He is also planning on retiring around that same time. He has not been elected yet, but he didn't want Executive Board members to see his nomination and wonder about his commitment to MICRA. He has made it clear to his leadership and AFS that he wants to maintain his commitment to MICRA.

Moses thanked Angie Rodgers for all of her work managing the Asian carp project proposals and grants for the Lower Mississippi River and Arkansas-Red-White Asian carp sub-basin partnerships. That was a huge workload and a short time frame to get that work accomplished and she did a great job.