

Minnesota Statewide AIS Advisory Committee (SAISAC)

January 25, 2024 Meeting Minutes

Teams Online

Members Present: Will Bement, Shelly Binsfeld, Nick Bluhm*, Charlie Brandt, Beto Garcia, Christine Maxwell*, Spencer McGrew*, Mike Sorensen, Amanda Weberg*, Ryan Wersal

Members Absent: Charlie Brandt, Chris DuBose, KoriiRay Northrup, Chris Magnotto, Carrie Ohly-Cusack*, Patrick Selter*, Maggie Stahley, M. Mahmood Tajbakhsh*

“*” indicates new members starting in 2024

Ex-officio Members Present: Nicholas Phelps, Maddie Hayden

Ex-officio Members Absent: Nicole Lalum, Amy McGovern

DNR Staff Present: Tina Fitzgerald, Doug Jensen, Sascha Lodge, Kelly Pennington

Guests: Megan Weber (MAISRC), Chelsey Blanke (MAISRC), Tom Beppler (Responsive Management)

S. Binsfeld called the meeting to order at 10:03AM.

Motion to approve agenda: First by M. Sorensen, second by W. Bement.

Motion to approve Meeting Minutes from November 30, 2023: First by R. Wersal, second by W. Bement.

S. Binsfeld welcomed new members, all members introduced themselves.

Meeting Summary:

- The Committee learned about the AIS Detectors Program and discussed how the Committee can support and promote utilization of these trained volunteers across the state.
- The Committee learned about the results of a National Survey to Evaluate National Invasive Species Campaigns.
- The Committee learned about the Minnesota Invasive Species Advisory Council (MISAC) and discussed opportunities for coordination and collaboration.
- The Committee learned about the evaluation of implementation of the Minnesota Management Plan for Invasive Species and discussed how the results might be used at the local and state levels.

An Introduction to the AIS Detectors Core Course & Volunteer Program

Megan Weber, AIS Extension Educator, MAISRC

- AIS Detectors is one of many programs led by her team including herself, Dan Larkin, and Michelle Isaacson. It is a partnership between Extension and Minnesota AIS Research Center at the University of Minnesota (MAISRC). Launched in 2017 through a Environment and Natural Resources Trust Fund (ENRTF) grant.

- Core course has volunteer and professional tracks. Foundations set online and skills reinforced live – “flipped classroom” approach. Online 8 hours. Online is now interactive, video, reading, etc. Workshops are hands on and very active.
- Online learning – aquatic ecology, submersed plants, invertebrates, fishes, regulations, reporting and being an AIS detector (community members) OR wetland plants (professionals). Since many professionals take this as professional development, the volunteer aspect wasn’t applicable, so added the wetland topic.
- Workshops – very hands on, doing the same things you learned online, reinforcing it. Identification – target invasives and common look-alikes – plastic and preserved specimens. Reporting. Volunteerism. There is a virtual workshop option, due to COVID. We didn’t know if we could replicate it online but needed to find a way to make it work. It worked so well, we continued to offer it. People get shipped a box, work off of pictures, etc.
- Dead fish samples posed a number of challenges (handling, transport, smell, getting samples, etc.). Hired artist to do sculpting design online, has it 3D printed, then hand paints them in their natural colors. This year, paper artist created plant samples. In the past had presses and epoxy, but they don’t reflect the characteristics very well; and collecting samples is time sensitive and intensive.
- Word cloud of responses to the question “How do you feel about the future of AIS prevention and management in MN?” Hopeful and optimistic are largest words.
 - She did a workshop in South Dakota – the negative words were larger. Shows the overall support in Minnesota and that South Dakota is it newer and has more challenges.
- Volunteerism can be education/outreach, science, program support, stewardship, etc. We don’t prescribe, we let them do what they want. We do offer volunteer activities, not just for UMN, but for any organization. Hope to be resource for anyone that needs volunteers with this base training.
- Numbers: 31 workshops, 468 certified detectors (372 community, 96 professional), 26,414 hours reported = \$910,499 value of volunteer hours. Addresses are spread across the state.
- Updates: minimum service hours are now just 1 hour (was 25 hours) – give reward for 25 hours; improved newsletter; all virtual workshops; group workshops (bought out by an organization for a specific location); expanded scholarship program (reduce registration fee barrier – coupon codes with no application) course is also free for native American tribal members; added detector connectors online meetings.
- Reported hours have not recovered since the pandemic. Don’t know the full story, would like to explore it more. To address this: volunteer focused position on the team, focused evaluation (what is going on in their participation and what they need to be engaged), more ways to connect, getting the word out more (so people know the volunteers exist and are available). We will advertise any volunteer opportunity throughout the state. More!
- 2024 workshop locations in Plymouth, Detroit Lakes, and Duluth. One all virtual.
- Links:
 - Paper flower crafter: <https://www.daydreamflowers.ca/>
 - Get updates about the program: <https://z.umn.edu/AISdetectorsUpdates>
 - Find us on YouTube: <https://z.umn.edu/AIStube>
 - Here's a video about our program specifically: <https://www.youtube.com/watch?v=anm1SEdovlg&t=2s>
 - Here's the link to the ID Guide: <https://z.umn.edu/BuyThisGuide>

Discussion

- **M. Sorensen** is impressed by paper milfoil – who made that? Contact information?
- **N. Bluhm** would like to sponsor a class in Cass County. Steve Henry contacted her. Have done it 3 times already, always good participation. The Band is getting more active, interested in signs and stations. Maybe a separate session or hybrid for them.
- **S. McGrew** has the original handbook.
- **D. Jensen** is not surprised by South Dakota attitudes, their state program is new and small.
- **T. Fitzgerald** asks, what can this Committee do? M. Weber says think about how you can incorporate volunteers into the work you do and things we can share. Ideas for best way to reach folks, so they know this resource is available. She does use the AIS Prevention Aid contact list successfully. Other connections to spread the word. Detector connectors webinars have guest speakers on a specific topic; topics could be something the Committee covers or even have a Committee member be a guest.
- **D. Jensen** via chat says hand painted printed 3-D specimens are wonderful! From my experience, surprisingly, dead things in jars are VERY effective in attracting learners during training and public events, like sport shows, fairs, and festivals. Acrylic specimens are not as effective as learning tools.
- **D. Jensen** adds that volunteerism has dropped across the board, it's not just you. He can help with Duluth workshop.
- **S. Binsfeld** says thank you for all the hard work, she attended the second class you did. Started her on her AIS path and volunteer work. Stepping back and looking at what has happened, how we do pivot in the next direction. Doing well in developing tremendous amount of curriculum. Taken all of it. Rocking it, making it better and better. How much are you seen by SWCDs? Like a link on their website or put out flier at events? They connect with the community, more and more people. Starry Trek is really connected with SWCD, but timing for that is hard because people are usually on vacation. Help volunteers enter their hours more, she has trouble remembering all the things she does, there are more hours than you might actually see. Ask Andy at Sherburne SWCD to repost your social media posts.

Results of a National Survey to Evaluate National Invasive Species Campaigns

Tom Beppler, Senior Research Associate, Responsive Management

- Responsive Management – research firm specializing in recreational issues. Do a lot for state, federal, NGOs.
- Study goals: (1) Evaluation the effectiveness of AIS outreach campaigns with recreation groups that may interact with AIS; (2) explore if AIS campaigns appear to influence conservation behaviors.
- Study methods: Online panel, adult, residents, and 7 water-based recreation activities (fresh and saltwater fishing, boating, non-motor, scuba, snorkel, and waterfowl hunting). Screened for those that participated in one of the activities in the last 12 months. Survey developed with support by ANS, in AFWA regions. 5,000 sample nationally.
- Survey quality control: Online panels have made some strides, but they always include quality measures – attention checker – to make sure they are reading the questions thoughtfully; open ended questions reviewed; survey completion times; reviewed for red-flags; IP addresses.
- Topics: participation in activity, equipment, concern about environmental issues, knowledge about AIS, awareness of laws, information sources, motivations for taking action, constraints to taking action, precepted effectiveness of campaigns, and awareness of campaigns. Presented as an environmental survey

study, not AIS specifically. Full report was provided to the Committee, this presentation just scratches the surface.

Key Takeaways

- Less concerned about AIS than they are about general environmental issues (e.g. water pollution, loss of habitat, climate change).
 - Recommendation: To generate more concern about AIS, connect AIS to water pollution and water quality issues.
 - Example: Study on conservation language – ranked 55 items describing fish and wildlife agencies – testing phrases and terms. Top responses were making sure water is clean, protect drinking water, and protecting lakes, rivers, and streams.
 - Example: Conservation law enforcement – most important issue was polluted water/water quality.
- While concern about AIS is lower, awareness is fairly high. 48% have heard a great deal or moderate amount about AIS. 40% are aware of laws. 26% are very or somewhat familiar with laws.
- Top motivations: wanting to keep AIS of out lakes and rivers. Wanting to follow laws. Personal responsibility to take action. Seeing other people doing it was 5/10.
- Say they are aware of campaigns, but very few are able to recall the specific name of the campaign. 1/3 said they are aware, only 2% could name a specific campaign or program. No regional differences.
 - Recommendation: AIS community should adopt a single overarching campaign theme and tagline and stick with it. Knows that is easier said than done. Showed some examples and can see why people can't name a specific one.
 - Recommendation: Why campaigns and program do not succeed: there are too many messages, and the messages tend to be too complex. They are not implemented long enough. Efforts are not evaluated quantitatively in terms of outcomes and specific goals.
 - Example: Keep America Beautiful – can be applied at all levels. Keep “X” Beautiful, even if the designs are different.
- Some campaigns with highest level of familiarity and strongest effectiveness are state specific campaigns.
 - Top three familiar campaigns are TX (Protect the Lakes You Love), WI (Clean Boats, Clean Waters) and MN (Clean In, Clean Out: 20% very, 19% somewhat familiar).
 - Top ranked “effective” campaigns were TX and UT (STD of the Sea).
 - Recommendation: Look at successful state programs in more detail.
- They are taking some steps. Drain and Clean are top rated for motorboaters.
- The more familiar they are with major campaigns, the more likely they are to always engage in steps. Those that selected “very familiar” with the Stop Aquatic Hitchhikers campaign were 2 to 3 times more likely to “always” engage in prevention actions compared to those that were “not at all familiar.” This suggests that the campaigns are having a positive impact.

Improvements and Thoughts

- Improvements
 - Freshwater fishing and motorboating are taking action, but could be doing it more often. Drain is highest, followed by clean, dry is a little lower. Why they are not always taking action: want to take

action at home rather than in the field. Not having the cleaning or washing tools needed to take action.

- Thoughts on messaging and campaigns to change behaviors:
 - Attitudes based on direct experience may be especially resistant to change. Messaging must take these tendencies into account by anticipating resistant based on direct personal experience amount the target audiences.
 - Motivation, rather than information, is the primary cause of change in behaviors. All recreation is enjoined with the common goal of preventing the spread of AIS and protecting water quality.
 - Messages should avoid depicting problematic behavior as frequent or commonplace, thereby normalizing them and inadvertently encouraging them.
 - Messages communicate achievable, specific actions are more likely to change behavior than messages that use general or vague exhortations.
 - The most effective outreach will come from the community level. Opinion leaders.
 - Looked at DNR website and saw these themes being promoted, which is great.

Discussion

- **S. McGrew** read the report and saw that waterfowl hunters and scuba were the most engaged and prepared to act – how do you explain that? Is it the amount of investment? E.g. waterfowl have a lot of prep. **T. Beppler** says probably yes, the specialized activities you need to learn more, spend more, do more. Non-motorized is more casual.
- **C. Maxwell** for fishing during COVID, saw an influx of new anglers. Are those people easier to train? Or are they the ones not doing it? **T. Beppler** says probably both. They might now know what they need to do, but they also have fewer preconceived notions of how things are done. Seeing that other places too, explosion of people doing outdoor things.
- **N. Bluhm** asks about making the connection about consequence, for example zebra mussels are filter feeders, therefore you'll no longer be able to catch walleye. **T. Beppler** says the survey instrument was already packed to the gills, but that would be great to get some focus groups together. **N. Bluhm** says you have to find what motivates people, find out their hot button issues.
- **C. Brandt** are the results encouraging or discouraging? Comparing other surveys and studies from other subjects (e.g. seat belts, smoking ,etc.)? A great campaign we could learn from? **T. Beppler** says what are people doing now? They are doing some things often, other things less often. Campaign awareness, that is more or less in line with other surveys in other states for fishing etc. They know there is a campaign, but they can't name it. **D. Jensen** is encouraged by the results, consistent with all surveys in Minnesota, based on the first one in 1994. Many of the recommendations, like linking to water quality, are great.
- **B. Garcia** asks about research on the impact of social media, influencers, YouTube, outdoor shows, etc.? **T. Beppler** says nothing that comes to mind. Some are harnessing influencers recently. Interesting, cost-effective, and potential for social influence. **D. Jensen** says Tim Campbell and Bret Shaw did research. **D. Jensen** hired Cheers actor John Ratzenberger in 2000. Melissa Meyers in Wisconsin is a social influencer.
- **C. Maxwell** recently had her pro staff on social media showing the proper way to put back fish and care for them. Trying to educate customers. A lot of positive feedback for that.
- **S. Binsfeld** adds that social media depends on the age. Her kids are looking things up on YouTube to do their math homework, it is their resource. Under 30. Be in that space. What campaigns do you remember? E.g. 4th

graders free to state parks – because I got something from it. Question about putting bait back into the water action – Tom it was a flipped question - if they were doing them, it was a bad thing. Surprised by low decon, in MN we are struggling to have more places for this. Are those numbers realistic in MN? We can ask DNR. Do we have enough stations, given all the lakes we have. Wyoming can have more stations.

Side Conversations in Chat

- **D. Jensen** via chat says that results are not a surprise to him regarding concern of AIS. Many states do not have strong AIS public outreach campaigns, programs, and efforts. Linking to water pollution/quality is key!
- **D. Jensen** via chat says issues related to water quality have a 30-40 year head start, starting in the early 1970s compared to AIS nationally, which really gained traction in the early 2000s.
- **S. McGrew** via chat says he plans to incorporate findings of this study into his 2024 programming!
- **D. Jensen** via chat says that in his opinion, lack of recognition of being able to name a campaign is because many efforts do not use a logo, just words. Research shows that using dual coding theory, both visual and words, creates better memorability. We also know that that boater and anglers not exposed to the *Stop Aquatic Hitchhikers!* logo, 90% knew what it meant. Not using a logo along with prevention messages are obviously a missed opportunity! Consistent messaging is also important for brand recognition.
- **D. Jensen** via chat says *Clean Boats, Clean Waters* was started in MN. It was discontinued in the early 2000s in lieu of *Stop Aquatic Hitchhikers!* *Clean Boats, Clean Waters* has continued along with *Stop Aquatic Hitchhikers!* in Wisconsin mainly because they made a significant long-term investment with community support statewide.
- **B. Garcia** via chat says or at least they say they do (in response to reported action).
- **S. McGrew** via chat says rankings of the preventative actions people reported doing tracks with the investment/time/difficulty of the task. More straight forward to remove drain plug and pick plants off propeller, more involved to do a full decontamination, either at home or at an onsite decontamination station.
- **B. Garca** via chat says he was being somewhat facetious. Very interesting about the effectiveness of campaigns.
- **D. Jensen** via chat says these results are very encouraging nationally with many survey endpoints consistent with several surveys that he has led or helped with nationally, regionally, and in Minnesota.
- **D. Jensen** via chat says saltwater boaters and angler most frequently clean and wash their watercraft and equipment after leaving the access to limit corrosion due to salt water. So, that helps to explain some of the differences with freshwater recreationists.
- **S. McGrew** via chat says we get lots of lake hopping in Otter Tail County, next lake is often only a 5 min drive. People will drop in, troll around and if they feel they won't have success they are back to shore and off to the next one. This is in the context of the wait 5 days before launching at the next waterbody.
- **B. Garcia** via chat says the top four are related to convenience. **D. Jensen** via chat responds that we have observed differences in actions taken in rural vs urban areas concerning washing and rinsing based accessibility to water infrastructure. **B. Garcia** agrees and thinks about the launches he has been to with no staging area to clean your boat.
- **S. McGrew** via chat says that the slide on motivations is great! **D. Jensen** says he has been measuring social norms, motivations, and attitudes re: AIS in Minnesota since 1994. It was one of his first projects.

- **D. Jensen** via chat says that nationally, there has been little AIS outreach to waterfowl hunters and recreational divers, so the results are a bit surprising. That said, it could be a result of the things Tom just mentioned.
- In response to **B. Garcia's** comment, **D. Jensen** via chat says that Tim Campbell, Wisconsin Sea Grant, has conducted evaluation using social media. **M. Weber** via chat says she thinks that a group in Canada that was working with an ice fishing influencer/YouTuber to send AIS prevention messages. She wishes she could remember the specific group now! (Invasive Species Centre below) **D. Jensen** says via chat that WI has enlisted a social media influencer (Melinda Meyers) with their water gardening AIS communication. Register for her next webinar [here](#). **K. Pennington** via chat says that the Invasive Species Centre (Canada) has presented their work with influencers.
- **B. Garcia** says via chat that branding is certainly a recurring topic.
- **S. McGrew** says via chat that in Otter Tail County we are building a relationship with the high school fishing leagues. He wants the student athletes and to teach one another, be accountable to each other, their team, community, natural resource etc. It is an ongoing project. Fastest growing sport in state (along with sporting clays), 500 students participate in our county each year. They are the future of conservation stewardship!
- In response to **S. Binsfeld** comment, **D. Jensen** via chat says the studies he's aware of show that between 15-20% of anglers dispose their unwanted leftover bait into the water. This has not changed much in the past 30 years, despite outreach efforts targeted to change that behavior. If the bait is contaminated with AIS fish or fish diseases, this is a high risk for spread.

DNR Updates

Kelly Pennington, Invasive Species Unit Supervisor

- She mentions the importance in the use of social influencers and displays the first video that did so called, "Stop Exotics, Clean Your Boat," featuring John Ratzenberger, famous as Cliff Clavin from the popular TV hit sitcom, "Cheers". **D. Jensen** co-produced that 11-min video, which illustrates steps boaters, sailors, and personal watercraft users can take to prevent the spread of AIS. He notes that it was used to educate watercraft users in the lower 48 states and most of Canada's southern provinces. MNDNR co-sponsored the video. It is available via YouTube video [here](#).
- **K. Pennington** says the 2023 Invasive Species Program Annual Report which is legislatively mandated, due January 15 each year, is available [here](#).
- Revised Invasive Carp Action Plan has been released. She provided a summary of what is being planned for the next ten years. For the purposes of this report, it refers to four species: grass, silver, bighead, and black carp. When referring to invasive carp, that does not usually include common carp, even though they are non-native regulated invasive species. Invasive carp were brought to the U.S. during the 1970s to control plants, algae, and snails in aquaculture ponds in the South. Due to flooding, they eventually escaped into the Mississippi River and spread to connected waters, including upstream migration into MN waters. Grass carp have been recorded in MN since 1977, bighead since 1999 and silver carp since 2008. Furthest north migration on the Mississippi River is Pool 2 at Hastings, up the St. Croix to Stillwater, and Minnesota River up to the Granite Falls Dam. There are also some in Southwest Minnesota, which have migrated upstream in the Missouri Basin. DNR has installed barriers and deterrents to prevent further upstream movement into

MN. Black carp have not been found in MN waters. They are currently below Lock and Dam 19 on the IL-IA boarder. **D. Jensen** via chat says for geographic reference Lock and Dam 19 is near Keokuk, IA.

- Included in the plan are fish barriers and deterrents, which are prominent strategies MNDNR is exploring. Plan includes a map showing all locks and dams in MN and southward. These Upper Mississippi River locks have a lock chamber, which allows barges and recreational watercraft to lock through. They also have a spillway. All the Upper Mississippi Dams can open their gates to manage waterflow and during those situations like during flooding, which can allow invasive carp to bypass the spillway. It's like an open river.
- Deterrent systems that are being explored are for lock portion of the dam, where barges and watercraft go through, there is an elevator that goes up and down to raise and lower the water level. Deterrent systems have been developed for the lock chambers including acoustic systems – used because these species are particularly susceptible to being frightened by loud sounds in water. They can be somewhat selective but so far have been found to be only about 50% effective in preventing passage of invasive carp. Electric barriers, which were the ones installed in Southwest MN streams. They can be quite effective in blocking upstream fish passage. Electric barriers are not selective as they repel both invasive and native fishes. In larger river systems, there safety concerns for people getting too close to those electric barriers.
- Main pathway for spread into MN is swimming upstream. They are much different to deal with compared to other AIS which are spread by people. When water levels are low, dams do not open as frequently so that prevents passage of invasive carp upstream. Dams themselves have been very effective in preventing upstream movement of fish, which has been very problematic for migratory native fish with issues related to populations connections. But, for invasive fish, they have been very effective. Probably reason why it took until 2008 for silver carp to reach MN. Recent high water years were 2023 and 2019. In 2020, MNDNR caught 50 invasive carp near La Crosse, which was a record one-time catch for MN. In fall of 2023, MNDNR captured over 400 invasive carp. These captures seem to be directly related to these high-water events.
- Invasive carp are tagged and tracked to understand their movement so DNR can determine where to target for removal efforts. Results are providing evidence that invasive carp are moving past these dams.
- DNR has been working on invasive carp since the early 2000s:
 - Key strategies are tag and trap, which involves putting a tiny transmitter in the fish. Real time receivers have been installed in the river to automatically track them; they can also be manually tracked with a boat with a tracking set up.
 - Contracted commercial fish harvesters have been very successful. MNDNR monitors for all life-stages of invasive carp, there is no evidence of reproduction in MN.
 - Working with partners to improve techniques and capture methods. For example, last fall, MNDNR tested a “jumping net” to capture silver carp, which often jump over the net to escape capture. To exploit that behavior, a net has been developed that lays on top of the water and is attached to another piece of net, which allows them to be entrained in that net to improve capture.
 - Coordinate with partners at state, regional and national scales.
- DNR has had a plan since 2010, updated in 2014, and 2024. Reason for this recent update is because more and more carp have been captured. Increases began in 2012 with large increases after major flood events.
- A decision-making process was used to update the revised plan. It combines technical expertise with stakeholder values to determine how well management strategies work. Experts from 12 organizations were

involved, which took over six months to get through the process facilitated by experts from U.S. Geological Survey. A detailed report on the process is under development.

- No one action is sufficient to prevent and manage invasive carp.
- Strategic decision-making evaluated suites of management options combined into strategies.
 - Expert scores reflected uncertainty about impacts of some actions on objectives – an integrated strategy can mitigate that.
- Actions from highly-ranked strategies are reflected in the Action Plan.
- Action Plan is a ten-year plan 2024-2033:
 - Many of the action are continuation of work that DNR and partners are already doing to prevent and manage invasive carp in Minnesota
 - New actions are categorized as more likely to be initiated in first or second five years
- Funding for this work came from several sources:
 - Funding FY 2013-2023
 - Federal grants (\$2.27M, DNR (\$1.82M, ENRTF (\$1.82M)
 - Legislative appropriation \$1.72M FY 2024-2025
 - OHF \$7.5M in 2012 (through FY 2019) which funded a lot of the barrier work in Southwest MN
- Most current and new actions will require partners
- Partners leverage expertise, funding, and other resources – enable us all to do more than we can do alone
- Plan and actions written with what we know now, informed by structured decision-making
- Implementation of plan actions will depend on availability of resources and the status of invasive carp population in MN
- Actions may not be completed if they are made obsolete by new technologies or changing conditions
- Five elements of the plan:
 - Monitoring to support response actions
 - Prevention and deterrence
 - Response preparation
 - Management and control
 - Communication, outreach, and coordination
- Efforts of the plan:
 - Tag and track
 - Use commercial fishing data
 - Survey for spawning
 - Continue fisheries monitoring
 - Apply eDNA
 - Model abundance and distribution
 - Support research
 - Report detections
- Outcomes of Structured Decision-Making Process:
 - Advance a permanent deterrent at Lock and Dam 19 (currently temporary)
 - Characterize potential watershed breaches, which could apply to other invasive fish species like northern snakehead which are in the Mississippi River but have not reached MN

- Scope feasibility of deterrents at Lock and Dam 5 & 4 (LD 2 & 8)
- Spillway gates – optimize flow to minimize passage
- Research selective deterrents
- Explore native/invasive fish passage timing at Lock and Dam 14 & 15
- Monitor native aquatic communities
- Based on current FY 24-25 appropriation funding, enhance commercial fishing:
 - Increase contracted commercial fishing
 - 38 days of effort in 2023 to at least 100 days of effort by 2025
 - Support agency removal
 - Research long-term control
 - Invasive carp disposal options
 - Protect ecosystems
 - Learn more at www.mndnr.gov/invasivecarp
 - DNR's invasive fish consultant: Grace Loppnow, grace.loppnow@state.mn.us

Discussion

- **S. Binsfeld** asks about the acronym ENRTF (Environmental and Natural Resources Trust Fund) and how much funding is dedicated to invasive carp management. **K. Pennington** responds: \$700,000 to \$800,000 for two years. In the 2023 annual report, you'll find that the overall program budget is ~\$10M per year.
- **B. Garcia** asks about the bar graph concerning fish catches, is that for different species? **K. Pennington** answers yes, for each invasive carp species. She posts via chat that the chart of invasive carp captures (with the legend!) is found on p. xvi of the Action Plan. Majority of the fish in those recent captures has been silver carp.
- **B. Garcia** asks if MN is supporting ILs' effort to brand silver carp for commercial sale. **K. Pennington** responds that fortunately MN's captures are orders of magnitudes lower than IL. So, we're not in a place for establishing a sustainable market based on the level of carp that we have currently. One thing that is supported in the plan is commercial fishing so that we can have as a tool and look into additional uses of carp including disposal. **B. Garcia** asks how the carp that have been captured been disposed? **K. Pennington** responds that until recently, there really has not been enough to do anything with. Based on last fall's capture of 400+ carp, MNDNR permitted the Raptor Center to take them frozen. If caught in the summer, that would be another matter. It is something we are going to have to look into more into the future.
- **S. McGrew** asks about movement from infestations from the Missouri Basin to above Granite Falls or Red River. **K. Pennington** responds that there have been watershed assessments concerning these invasive carp, plus another species called Prussian Carp.
- **D. Jensen** via chat wants to clarify efficacy of electric barriers, they are good at preventing upstream fish movement, not as good for downstream movement. In addition to the Southwest Minnesota barriers, 3 e-barriers near Chicago have been successful in preventing the upstream movement of invasive carp into Lake Michigan. Also, there will be an additional deterrent barrier installed beginning this year at Brandon Road Lock on the Illinois River which will use a multi-modal deterrent system at Brandon Roads Lock and Dam. Construction set to begin in 2024 on effort to keep invasive carp out of the Great Lakes. The U.S. Army Corps

of Engineers is slated to begin construction next year on a \$1.1 billion project in Illinois aimed at keeping invasive carp out of the Great Lakes.

- **S. Binsfeld** says she saw media coverage on a new initiative, Get Out More, which includes some AIS funding. **K. Pennington** responds that she is not totally sure on what that will be spent on. She does know that Parks and Trails will be receiving a good portion of it to upgrade priority public water accesses where they can make comprehensive improvements, which may include prevention infrastructure (e.g., pull out areas for Clean-In Clean-Out, cleaning stations). It is in the very early stages for planning for that funding which will be available for several years. **Action Item: Plan to report to committee at later date.**

Coordinating and Collaborating with the Minnesota Invasive Species Advisory Council (MISAC)

Sascha Lodge, Chair of MISAC & Terrestrial Invasive Species Coordinator, MNDNR

- She became involved with MISAC in 2019 and just became chair this month. She thanked **D. Jensen** for contributing to this presentation as he has been involved with MISAC since its inception.
- MISAC is preceded by the Interagency Exotic Species Task force established in 1990 led by MNDNR. Formation of the task force was mandated by the MN Legislature in 1989. It met regularly until the late 1990s. It reformed into the advisory council that it is today.
- Council formed in 2001 in response to:
 - Presidential Order 13112 on invasive species
 - National Invasive Species Management Plan
 - Guidance from the Minnesota Legislature that encouraged state to plan and take action on invasive species
- MISAC does not have legislative authority, receives no funding, and as such is an advisory organization.
- Mission is to provide leadership to prevent the spread and reduce the harmful impacts of aquatic and terrestrial invasive species to Minnesota landscapes, economies, and the citizens of the State of Minnesota by promoting invasive species awareness, prevention, and management through research, education, and regulation in cooperation with local, state, tribal and federal partners.
- Purpose is to promote communication, cooperation, coordination, and integration statewide among member organizations by:
 - Developing the statewide management, which was revised in 2021.
 - Supporting UMISC conferences since 2008 biennially
 - Supporting trainings and field trips
 - Advocating for research and management for species and pathways deemed greatest risk
 - Coordinating outreach on invasive species, including publishing an invasive species calendar
 - Recognizing outstanding and noteworthy work through the Carol Mortensen Award
 - Maintaining the MISAC website to help the public locate invasive species resources
 - Providing letters of support concerning regulatory authority and funding of programs
- Diverse Membership:
 - Over 60 members statewide
 - Federal, state, tribal, and local agencies
 - University Extension and researchers, MAISRC, MITPPC

- Non-profit organizations
- Businesses
 - Initially, it was co-chaired by the MNDNR and MDA
 - Starting in 2012, leadership has rotated among the membership
- MISAC and the State Plan:
 - In 2003, began meeting to develop a framework for an all-taxa state plan for invasive species
 - Criteria subcommittee developed a non-native species decision tree, which guided expert panels to conduct risk assessments on several hundred non-native species across all-taxa that were identified at the time as potentially with invasive species characteristics.
 - In 2005, a statewide workshop was held to gather feedback on the developing plan, based on feedback from a diverse attendance of 70+ stakeholders, MISAC continued to further develop that plan
 - Draft plan was revised based on that stakeholder review, underwent public review, and tribal meeting review
 - Published in October of 2009 along with the species rankings (as approved by the Aquatic Nuisance Species Task Force)
- Why One State Plan in MN? Why not separate state plans for AIS and TIS as other states do? It made sense from the beginning.
 - National Act in 1996 encourage states to develop plans for AIS
 - Plans are required in statute for MNDNR and MDA
 - Provides a common structure for coordinating and guiding state's response
 - Similar goals and strategies for all types of invasive species
 - Created common vocabulary (e.g., detection, inspection)
 - Planning process is an opportunity to strengthen relationships and bring in new partners to collaboratively respond to invasive species
 - Opportunity for sharing lessons learned from aquatics and terrestrial arenas
 - Importantly, this plan was approved by the Aquatic Nuisance Species Task Force which means that MNDNR is eligible to receive federal funding from the U.S. Fish and Wildlife Service through the Great Lakes Restoration Initiative for implementation of the aquatic elements in the plan
 - Plan provides guidance for implementation of the plan
- Plan Update (2023):

Updated by a MISAC subcommittee, which invited input from MISAC membership, tribal representatives, and invasive species partners:

 - Outlined new strategies and actions that are beneficial for addressing aquatic and terrestrial invasives
 - Updated species ratings assessment across all taxa
 - Described various programs and regulatory authorities and identified gaps in authority, funding and program implementation
 - Highlighted priorities for action over the next ten years
 - In 2023, MISAC conducted the first-ever evaluation of the Plan
 - Evaluate plan every four years, determine how people are using it, how different groups are implementing the plan
 - **D. Jensen** via chat says there are 44 approved state plans and 2 interjurisdictional plans nationally.

- MISAC's Quarterly Meetings:
 - Engagement speakers invited to educate members (e.g., Phragmites management across MN)
 - Updates from committees, including website, DEI, field trip, and advocacy committees
 - Update opportunities from all members, activities, trainings, open job positions, emerging issues or concerns – a great opportunity to make connections with organizations for future collaborations
- MISAC Web site (<http://www.mninvases.org/>)
 - Members and stakeholders use for getting resources, including state plan, species ratings, invasive species of concern, detailed risk assessments on plants, past letters of support, nomination information for the Carol Mortenson Award as well as past recipients
- Carol Mortenson Award
 - Awarded to individuals or teams who have made significant contributions to prevention, management and increased awareness of invasive species in MN
 - Nominations for this year will open next week, deadline July 1, 2024
 - Strongly encourage any nominations that are deserving of this award, recognizing the successes for invasive species management in MN
 - **D. Jensen** adds via chat: Awards will be announced during UMISAC in Duluth, November 12-14, 2024
- Outreach: Invasive Species Calendars
 - Since 2006, produced an educational invasive species calendar highlighting invasive species issues in MN, species already present in MN, problems in other states (a.k.a., watch species), pathways for spread, results from research projects, and invasive species management success stories
 - For 2024, topics include: participatory science, supporting wildlife in your backyard, DNR's rule making process, research on using goats to manage buckthorn, modified-unified method for capturing invasive carp, salt cedar, water gardening pathway, plus other topics
 - Copies are downloadable from the MISAC website (<https://www.mninvases.org/educational-materials>) or email DNR at info.dnr@state.mn.us (or by contacting **D. Jensen** for original hard copies)
- Upper Midwest Invasive Species Conference:
 - Since 2008, MISAC has been a sponsor or co-sponsor
 - It is held every other year in either MN or WI and has grown to be the most comprehensive conference in the world
 - In 2020, it was held online; in 2022 and 2024 held/planned as a hybrid conference
 - 2024 UMISC will be held at the Duluth Entertainment and Convention Center, November 12-14, 2024
 - Call for abstracts, sponsors and exhibitor prospectus are available via conference [website](#)
 - Website contains more information about the conference
- What's Next?
 - This has been an overview of what MISAC is and does, we're all about connections, collaboration, so we try to bring folks from all over invasive species world of MN in order to increase our collective impact
 - She doesn't know a lot about this Committee but hopefully through this presentation, it sparks some ideas on how we could collaborate and do some good; open to ideas and suggestions. What connections do members envision, or what questions you have?

Discussion

Thoughts on how the two committees could coordinate and collaborate together?

- **S. McGrew** says he has read through the plan and report; he may not have known all this if he was not on this committee; nice to have this information so that we can think of ideas.
- **B. Garcia** asks if there are cross over species on which the two committees could focus on? **S. Lodge** responds that she definitely thinks there is potential. MISAC has a wide range of members with all sorts of folks working on a variety of AIS; if there are particular species, we could bring those back to MISAC to do a “push” for certain species. **B. Garcia** says he is thinking about Phragmites as an example; one that is both terrestrial and aquatic, maybe there are other examples like that? **S. Lodge** says it’s a great example. Julia Bohnen, MAISRC, provided a presentation which covered Phragmites management across the state. **T. Fitzgerald** asks if minutes of the meetings are posted on the website so people can read up on those presentations? **S. Lodge** affirms they are posted, except for January’s meeting (in prep).
- **M. Sorensen** really likes this committee because it is a really good cross-section of people who care about AIS and lakes. Members of this committee are boat manufacturers, tackle manufacturers, manage resources every day for their jobs, etc. He wonders if MISAC has something similar with groups coming to their meetings? If no, does MISAC invite those from other walks of life, thinking like intersecting Venn diagrams where people cross-over because they care about invasive species. **S. Lodge** says she is aware of this need and MISAC tries to be inclusive in their approach to membership and invasive species management. A large proportion of members come from various agencies at all different levels, federal, tribal, state, county, non-profits, lake associations, and business. Not a lot of businesses, that is an area that we would like expand. **D. Jensen** adds via chat that getting business representation on state, regional and national task forces has always been a challenge. **S. Lodge** continues that MISAC is constantly looking around to determine who is not at the table, like the Minnesota Pollution Control Agency, because there are some cross-over issues like how AIS impact water quality. Membership is completely open to attendees and members. **M. Sorensen** suggests that **T. Fitzgerald** and **D. Jensen** promote MISAC.
- **B. Garcia** asks if there is a list of species that MISAC is working on that are most troublesome or on their radar? **S. Lodge** responds that there is not a clear list, all of the organizations have their own priorities and are from different areas of the state with different priorities, not really a top 10 or dirty dozen list. **D. Jensen** confirms that sort of list does not exist and adds that the species rankings are not regulatory in nature. The purpose of the lists is to show that MISAC has considered those species, determine whether or not they may have impacts, could become invasive, and need to be addressed. This helps inform regulatory authorities and researchers that high-risk species may need to be managed or more research and outreach conducted.
- **T. Fitzgerald** suggests that she and **D. Jensen** (who is also a MISAC member) will provide the meeting minutes from this meeting to you. **D. Jensen** could send the MISAC meeting notes to SAISAC. This way we can stay connected. **S. Lodge** agrees that this would be a good approach. **D. Jensen** adds that if anyone on SAISAC would like to join MISAC that is another open option. Doing so would help with the liaison effort.
Action Item: T. Fitzgerald and D. Jensen will facilitate exchange of meeting minutes from both groups.
- **S. McGrew** offers that as he was looking through matrices of what is working or needs improvement, he will be able to incorporate those in the future to help him improve his work. It is like a roadmap, it is a plan, he plans on implementing those this year. **S. Lodge** responds that is what it is here for, big picture plan for implementation.

- **D. Jensen** asks if anyone on this committee would object to be added to the MISAC listserv? It would be a great way to keep up to date with MISAC. **T. Fitzgerald** asks that everyone reach out to **D. Jensen**. Many volunteered via chat. **Action Item: D. Jensen will send S. Lodge list of interested SAISAC members.**
- **S. Binsfeld** says this presentation has been great; while we've been discussing, she's been looking at the website with a lot of great resources.
- **D. Jensen** added that MN is one of the few states which has an all taxa advisory council; most other states, if they have one, are just aquatic or terrestrial.
- **S. Binsfeld** asks how frequently does MISAC meet and what does attendance look like? **S. Lodge** responds that they are quarterly, three are Zoom meetings, one in-person each year. Last year, we averaged 32 attendees. **D. Jensen** adds that in-person meetings before COVID there were easily 30-40+ attendees, but like other committee attendance has dropped a little.
- **A. Weberg** really likes the field trips in Duluth and St. Croix – keep them coming!

Overview of the 2023 Evaluation of Implementation of the Minnesota Management Plan

Chelsey Blanke, Ecological Researcher, MAISRC

- In her previous role at DNR, she took the lead in revising the state plan. Because of her deep knowledge of the plan, she volunteered to lead this evaluation. She is also a MISAC member, so it just made sense.
- Evaluation was conducted to determine how MN organizations are using and implementing the plan.
- A couple of key sections of the plan:
 - Section 6. Program Monitoring and Evaluation:
 - Evaluation of the plan every four years
 - Desire to conduct evaluation within the year to keep up the momentum that revision of the plan created
 - Idea to conduct evaluation came from the plan itself
 - Section 4: Elements, Desired Strategies and Actions:
 - Major elements: Prevention; Early Detection; Response and Containment; Management; and Leadership and Coordination
 - Large list of strategies with actions to be implemented for each strategy; actions listed in table are grouped into smaller chunks
 - Section 5: Priorities for Action:
 - New to the plan revision
 - Priorities: Aquatic and Terrestrial Species Management; Specific to AIS Management; Specific to Terrestrial Species Management
 - Priorities are big picture, high profile priority items which are currently being addressed
- Evaluation Process I, II, III, IV:

This process is not set in stone, we agree to give it a try, adjust in the future as needed

 - Major components of evaluation:
 1. Survey of organizations statewide asking partners to rate how we are doing, help identify what they are implementing

2. Formation of Element Committees which looked at all of actions (I, II, III, IV) and rated how we are doing, then met to discuss to reconcile what each individual thought, then came up with a final rating for the strategy under each element
 3. Priorities for Action Progress Summaries: Evaluation involved bringing in content experts requesting a brief summary of progress for addressing each of the priorities for action
 4. Everything was compiled into a summary report and posted on website
- Partner survey delivered to hundreds of individuals in March 2023:
50 organizations completed survey
 - Organization affiliation
 - Which aspects of the plan are you implementing and how?
 - Rate progress for each action
 - Opportunity to describe why an item “Needs improvement”
 - Has your organization implemented SMART goals associated with invasive species program?
 - Element Committee reviewed I, II, III, IV actions, met and reconciled and committee chairs summarized
 - Each committee member selected a category: Needs Improvement, Average or Excellent
 - Priorities for Action Summaries drafted by content experts
 - Report Finalization: Report compiled, distributed to MISAC members, and approved
 - Issues to Address Next Time:
 - Further Define Ratings Categories – difficulty with interpretation, broaden to:
 - Needs Improvement
 - Average
 - Above Average
 - Excellent
 - Strive for geographic diversity in Element Committees
 - Local to state (e.g., some committee comprised of only local representatives which made it difficult to rate actions at the state level)
 - **D. Jensen** comments via chat: Chelsey's points re: defining categories and greater diversity are good ones. He would like to add, as you review the summary report, you will find that the self-rating "needs improvement" may be lower than you might expect. Some were lower than he expected. That said, from his perspective which includes regionally and nationally, even a mediocre rating from MN is much higher than it would be in any other state. So, this is important thing to keep in mind.
 - Simplify the survey (too long, took some >1 hr to complete, made data difficult to interpret)
 - Strategies only, not ask about all actions
 - In summary, the plan provides guidance along the first-ever evaluation which provides insights into the state of the state for MN. We recognize it is not perfect, but it is something that can be built upon for the future.
 - **D. Jensen** via chat says first ever evaluation of any invasive species state plan! Yay, MN!

Discussion

- **S. McGrew** appreciates results of the survey. Ratings seem to be on point. Likes how the survey identifies gaps but also things that are working. He will be using it for his program this year for AIS management. **C. Blanke** is excited that it will be used! MISAC does not hear much about how the plan is being implemented.

T. Fitzgerald says maybe we can pick **S. McGrews'** brain a bit to see how we can get more counties to implement the plan, 84 counties receive AIS prevention aid funding. Maybe create a road map for future work, integrate at the local level, either in a separate meeting or a future SAISAC meeting. **S. McGrew** is totally on board! He is willing to contact county partners about this. **D. Jensen** via chat – that would be awesome **S. McGrew** and again expresses his gratitude to **C. Blanke**: Revision and evaluation of the plan would not have happened without your leadership and expertise! **Action Item: Follow up with S. McGrew.**

Committee Member Updates

- **A. Weberg** shared that they are getting ready to hold their second brewery event next summer. Last summer, Rusty Crazy Hazy beer made its debut at Voyaguer Brewery. This year, it will feature a knotweed beer lager during the summer solstice weekend, a boat festival will be held in Grand Marais Harbor, so will be really fun! **S. Binsfeld** comments that does sounds really fun! **A. Weberg** says she is adopting the approach from PA Sea Grant. **D. Jensen** adds via chat: Sarah Stahlman, PA Sea Grant, started a partnership with a brewery in Erie, PA. So, pleased that it has served as model for Cook Co partnership!
- **N. Bluhm** shared that the big effort in Cass County will be continuation of AIS tool sign installations. About 50 were installed last year. Leech Lake Band wants to install 13 on Winnie. About 35 will be installed at Forest Service access locations. It will be a busy summer – may need to buy more signs. Maybe we can share on a statewide basis what we have been able to achieve.
 - Because Association of Cass County Lakes is a non-profit, they were able to save 50% for purchase of materials. Buying in volume helps get a price discount too. If others want to engage boaters to take cleaning actions, this is the way to do that.
 - He has spoken to **A. Doll** and **D. Jensen** about getting pictures of the stations in fishing and boating regulation booklets to encourage watercraft users to use the tools. Research shows that there is a 30% increase in compliance when watercraft users use the tools. Low incidence of theft – just one location where all four tools were taken twice, three other locations where the brush was taken.
 - **S. Binsfeld** asks what is the size of the sign? **N. Bluhm** responds ~2'x3'. He will be discussing this project at an upcoming Off-Season AIS Local Partner Workshop online, but could also present at an upcoming SAISAC meeting. DNR has sign standards, but we went with a 0.4" thick, rather than a 0.8", sign to save on costs. Saved \$50 per sign. Bemidji company did the die cut for 100 signs. At the bottom of the sign includes the partner logos. Complete installation is \$104, including sign, post, paracord, and hardware. Cass County paid \$52, Association of Cass County Lakes kicked in \$12, and the lake association or resort pays \$40. They do the installation themselves.
 - **S. Binsfeld** asks how you are navigating sign fatigue? Having any difficulties with that or are the signs by themselves? **N. Bluhm** responds there are several different signs with different messages at a DNR access. They work with the Parks and Trails supervisor, the partner puts a stake in the ground for approval. They may also need to call Gopher One Call to determine if there are any electric utilities, cable, or telephone lines in the area. Concerning sign fatigue, **D. Jensen** via chat says based on all surveys I've led, been a part of, or reviewed, AIS signs are one of the top sources of information for recreational boaters and anglers. To my knowledge, there is no evidence of sign fatigue despite claims that there is. He can talk more about that if you wish.

- **N. Bluhm** continues that MNDNR has been supportive of swapping out signs in tie-down areas, will move an existing sign, and install the new one. He has given a presentation at MNCOLA and had seven counties follow up with him. Biggest question he is getting is where can they get the materials now? If DNR could create a large contract, order these materials and dole it out, that could accelerate the effort greatly. **S. McGrew** is very interested.
- **N. Bluhm** says Bemidji PBS came down to take some pictures for show coverage. **D. Jensen** says via chat that he watched the TV coverage – terrific!
- **N. Bluhm** says would be pleased to give a 15 min presentation, he has all of the statistics, a list of vendors and prices that he can share. **T. Fitzgerald** responds that would pair well with a presentation on an observational study of boaters using tools at accesses that the MNDNR has done via contract. Report has been finalized and would like to share with this committee. **Action Item: Coordinate with Nick for presentation at a future meeting along with the DNR observation study results.**
- **S. McGrew** updates include presenting his annual report his county AIS task force and to the county board of commissioners in March, posting for watercraft inspection hiring soon – lots of retention, they are motivated and like it, so it’s quite competitive. Sheriff’s department has some staffing problems, usually there is a deputy assigned – hoping that they hire to support his summer watercraft inspectors. Ordering materials. He has really leaned into the *Stop Aquatic Hitchhikers!* campaign and found the survey presentation interesting. Looking forward to the best year yet! They are thinking about permanent decontamination stations like at Red Lake along with self-service stations. They have a station that provides ambient water from a lake which became infested with zebra mussels, so they received a cease and desist order to shut down the station. Solution was to run a water line from the city. His theme this year is “tools”.
 - **S. Binsfeld** asks how many inspection hour are logged? **S. McGrew** responds about 11,900, about 1 inspection/hr, a lot different than like Gray’s Bay on Minnetonka at 8+ inspections/hr. **S. Binsfeld** is impressed that you have such a dedicated workforce, which is somewhat unique compared to other counties. **S. McGrew** responds that their inspectors conduct inspections based on routes, more like a beat cop, they are located at one location all day. They spend ~2hrs at each location. He doesn’t micromanage and he is on the hiring team, so candidates are handpicked. HR is not surprising him with candidates. **S. Binsfeld** responds that many counties, like Sherburne, outsource to hiring firms.
- **B. Garcia** updates include working the Lake Restorer, exploring using nanobubbles to halt the spread of AIS at boat ramps, maybe do some studies with MAISRC to determine their toxicity to zebra mussel veligers, spiny waterflea, other invasive zooplankton, as well as adult zebra mussels. He knows there is research already conducted, but that was using ballast water tanks, not in a natural environment.
- **M. Sorensen** has three things: 1) North American Lake Management Society (NALMS) is a professional lake management society that folks may be interested in joining. Metro area professionals have started a MN Lake Management Society, a local chapter of the national society. On February 6th, they are holding a 1-d symposium at the Landscape Arboretum, Chanhassen (site link: [here](#)). Session will be more technical for day-to-day professionals. **D. Jensen** adds via chat that NALMS is a great organization supporting AIS and related topics. He co-hosted a session with MNDNR when the national meeting was held in Minneapolis. 2) Summer hiring is beginning soon for summer water quality technicians for storm water, beach, bacteria, cyanobacteria monitoring, aquatic plant surveys – the best job to get experience in many areas. Minneapolis Park Board is initiating an outreach effort aimed at educating the public about how an organization is

working to keep lakes clean as places to enjoy. A video series called the Day in the Life of a Water Quality Specialist. Follow along with Minneapolis Park and Recreation Board's Water Quality staff as they prepare for winter water quality work in Minneapolis waterways. He is going to use the video as a marketing strategy to get candidates to apply for these jobs. YouTube video found [here](#). Please send candidates to him.

- **R. Wersal** says he is mostly focusing on teaching, lab is finishing up on projects on flowering rush, Cuban bullrush, which thankfully is not here. He has one graduate student but will be looking for three more. Over the next few months, he will be working on species which are not here yet and hopefully they will not. He will be developing management strategies to prepare for, if and when, they do arrive. He will be working with a plant physiologist – there really is nobody conducting this type of work currently – looking to strengthen those capabilities at Minnesota State. **M. Sorensen** offers to send some potential candidates his way.
- **W. Bement** is working to get a fulltime AIS staff hired. White Earth holds a fishing tournament which last year attracted a thousand people. This winter, they will again host booths which feature everything they do, forestry, wildlife, invasive species, etc. Packages of materials are prepared for kids with lead-free tackle, lots of partners and volunteers are helping. Planning for summer efforts. Bait harvesting season is coming up, so he will be meeting with them to go over protocols on how to transport including equipment like leech traps.
- **S. Binsfeld** says that she does not have anything specific, she is always learning, just appreciates being a part of this committee, and welcoming new members and what projects you are working on. You'll find the **T. Fitzgerald** and **D. Jensen** are really dedicated, finding great speakers, and co-facilitate really good meetings. Five-hour meetings sounds like a lot, but we pack it so that it does not seem long. In future meetings, try to get your questions ready for our guest speakers, we appreciate them sharing their knowledge, expertise, and learning about the projects they are working on. She really likes the question, "how can we help you?"

Ex-Officio Committee Member Updates

- **M. Hayden** says that 1) MAISRC held their 10th Anniversary Celebration last year, it was well attended, and they received a lot of positive feedback. Several new projects started January 1st including biocontrol, carp genetics, zebra mussels and others, exciting projects that will help future management. 2) Gretchen Hanson has an eDNA project involving volunteers who sampled known infested waters across MN. Purpose is to compare quality of results of volunteers to researchers. Her webinar is February 16th, this is an exciting opportunity for volunteers to help science. Webinar register is [here](#). 3) Alex Bajcz released PI Charter 2.0 App with the goal of collecting all of the PI surveys conducted across MN to create an open database, which may be tool useful to you. 4) AIS Explorer has two news that were added: a) Intervention Impact Tool which compares different prevention strategies to help determine what could be the best to implement in that situation. b) Collaboration Tool helps managers to collaborate among counties. 5) MAISRC's RFP was released to fund next year's funded projects focused on prevention, impact areas for prioritization management, etc. 6) Lab to Lake Initiative aims to develop implementable plans in two different systems for common carp. A job posting for this project is [here](#).

Adjourned at 3:06 PM

Next Meeting to be held ONLINE ONLY on February 22, 2024.