

Minnesota Statewide AIS Advisory Committee (SAISAC)

March 23, 2023 Meeting Minutes

Online Teams

Members Present: Will Bement, Shelly Binsfeld, Charlie Brandt, Pat Brown, Holly Bushman, Beto Garcia, Kate Hagsten, Michaela Kofoed, Mike Sorensen

Members Absent: Bruce Babcock, Chris DuBose, Chris Magnotto, KoriiRay Northrup, Maggie Stahley, Ryan Wersal

Ex-officio Members Present: Meg Duhr

Ex-officio Members Absent: Nicole Lalum, Amy McGovern

DNR Staff Present: Tina Fitzgerald, Doug Jensen, Kelly Pennington, Heidi Wolf

Guests: None

Chair H. Bushman called meeting to order at 10:04AM

Motion to approve agenda: First by K. Hagsten, second by W. Bement.

Motion to approve Meeting Minutes from February 23, 2023: First by M. Sorensen, second by S. Binsfeld.

Meeting Summary

- The Committee welcomed the new DNR Invasive Species Unit Supervisor, Kelly Pennington.
- The Committee reviewed the Online AIS Pledge Program and provided ideas for promoting it in 2023.
- The Committee learned about recent angler behavioral research work that will inform a new Engaging Bait Shops statewide pilot project and provided ideas to support the project in 2023.
- The Committee generated questions and ideas to discuss with DNR Enforcement at the April meeting.
- The Committee learned about infested waters and water appropriation – projects moving large amounts of water need to take AIS steps and takes planning and preparation.

Member Introductions

- **M. Kofoed**, owner of the Aqua Weed Stick Company: Promotes a tool that allows removal of weeds from boats and trailers; helps a lot with high school league youth fishing, it's how she got started; also veterans fishing events – all working to get more people fishing; will work a couple of new events in 2023; working with lake association more by donating one of the Aqua Weed Stick stations to the lake; working with them on aquatic plant control and learning what their goals are.
- **K. Hagsten**, Leech Lake Band of Ojibwe Division of Resource Management: Recently returned from New York Botanical Garden, part of an on-going study looking at Chara species in lakes across the reservation; toured the herbarium (7.8M specimens) with three tribal college students; allowed students to see full picture of what they are trying to accomplish this summer.
- **S. Binsfeld**, Sherburne County SWCD and owner of lakes services business: Involved in a leadership and training group; recently met with three state representatives and DNR Commissioner Strommen, who spoke to her group. Some take home messages from the Commissioner were: 1) She strongly supports One DNR,

2) Seems to be really connected with staff, 3) Expressed appreciation for **S. Binsfeld** volunteering for this committee, 4) Fascinated by roles and positions the Commissioner has been in, 5) Balancing life and work as a working mom, 6) Appreciates great group of staff working with her, which has been instrumental to her leadership, 7) Realizes that she has to be the lead on behalf of DNR (e.g., statements, testify, etc.); before that, **S. Binsfeld** was at the Capitol for SWCD Legislator Day and talked with more legislators there about AIS; this summer, plans to volunteer more with AIS Detectors, really likes the plant identification class; will be developing greater capabilities using GIS software to be able to integrate it more into environmental work for her environmental services company, how mapping can be useful for AIS; appreciates mapping efforts and development of algorithms to help identify priority lakes.

- **B. Garcia**, 30 years as a hydrogeologist, worked for various companies, plus owns drilling company: Purchased new watercraft for business; sideline in marine electronics; worked for BioBase as an ambassador; more this summer, working to map harbors with autonomous radio-controlled boogie boards in ways not possible in typical watercraft; also plans to work on 3-D geophysics in East Coast near-coast regions.
- **W. Bement**, White Earth Division of Natural Resources: Has new director, who emphasizes youth education; will be working with students from charter and community schools including head start programs through K-12; will conduct mock watercraft inspections; presenting more on how AIS is impacting culture on White Earth.
- **P. Brown**, Red Earth Nation Fisheries: Will examine, with an intern, stomachs of sheepshead to determine if they ate any zebra mussels as a way to biomonitor.
- **M. Sorensen**, City of Robbinsdale, previously worked for Minneapolis Parks Board: Working to improve Crystal Lake, about 80 acres, 50% surrounded by public land including park space and trails, which is used by lots of people; unfortunately lake is impaired by too much phosphorus and nitrogen, so becomes very green and stinky by mid-July to late August; Shingle Creek Watershed Commission has received large grants, which has allow him to partner to take a more wholistic approach; working to install rain gardens and stormwater ponds to try to mitigate external loads of nutrients into the lake; a flocculant treatment plant operates on shore which cleans lake water; in-lake alum treatments occurred over last two seasons (21-22); more carp work this summer, estimates there are 12,000 carp in the lake, over last couple of years removed 7,500 of them, roughly 60% removal; goal is less than 100 kilograms of biomass per hectare of lake; District found funds to conduct another round of carp removal efforts using electrofishing and box netting – which generates lots of interest by the public, so will explore turning into a community event where people can come and watch removal and learn about the process; overall trying to fix the lake from several different angles all at the same time; hoping the lake looks much better in a few years than it did the last five years. **M. Duhr** responded that an unplanned breakout group happened at the carp workshop last week concerning the need for more public engagement about common carp and will forward a signup link. **M. Sorensen** said that he met a student who is interested in a public education effort as a capstone project.
- **M. Duhr**, Minnesota AIS Research Center: Excited to conduct summer field work and engagement with local partners in Leech Lake / Cass County area on a starry stonewort-wild rice project; hopes to get some good research results; snorkeling early in the season over a wild rice bed is amazing; such important habitat as well as cultural value to the region.
- **H. Bushman**, Le Sueur County AIS Program: Working with Carlie Wagner, DNR, to raise purple loosestrife biocontrol beetles for release on emerging infestations; interested in a public event to promote why managing purple loosestrife is important.
- **C. Brandt**, watercraft retailer: No report.

- **K. Pennington**, new DNR Invasive Species Unit Supervisor: Yesterday, first day in this position; been working on prevention side of management since 2014; excited for this new opportunity to learn; will spend most of summer learning more about our program and what our DNR partners do.
- **T. Fitzgerald**, DNR AIS Prevention Planner: Facilitates this Committee; will be taking maternity leave in mid-May, so the April meeting will be her last meeting until November. **D. Jensen** will be lead facilitator for August, September, and October meetings.
- **D. Jensen**, DNR AIS Prevention Planner: Also facilitates this Committee; Will be on leave beginning April 12 through mid-May, therefore he will not be at the April 27th meeting.

AIS or Pathway of Interest

Members researched an AIS or pathway of interest and shared what they learned

- **M. Kofoed**: As a hunter, wondered about impacts of AIS on waterfowl habitat; found a wide variety of species that impact habitat, but one that really stood out is invasive Phragmites; mostly crowds out native plant communities, but in Louisiana it has been helpful in reducing coast erosion and actually improving waterfowl habitat by providing cover where there wasn't plant cover before; elsewhere Ducks Unlimited is conducting rehabilitation efforts by hand pulling or chemically treating infestations then rehabilitate with native plants. **D. Jensen** asked if the positive outcome of Phragmites in Louisiana areas where wetland plants were not found was due to nutria, an invasive rodent that has decimated native plants in bayou areas? Nutria are rolling back the bayous making them more susceptible to erosion and flooding. **M. Kofoed** was unsure and asked if those are the rodents that are a little larger than muskrats? **D. Jensen** confirmed; bigger than a muskrat but smaller than a beaver. **M. Duhr** found this discussion interesting concerning coastal loss and will look more into it – issue is also impacting channelization in Louisiana helping to increase more rapid discharge from the Mississippi River into the Gulf of Mexico. **B. Garcia** via chat suggests that those nutrients from the Mississippi and Amazon are what is believed to be causing the giant sargassum raft in the Atlantic - it's limited by nitrogen.
- **W. Bement**: Before joining this committee, he was mostly unaware of threats of AIS on wild rice, but because of discussions here, he has a much better understanding, looking into area that might be impacted already; still learning a lot.
- **H. Bushman**: As a graduate student project, been researching reversal of Chicago River discharge from Lake Michigan into the Chicago Area Waterway System, which discharges into the Illinois River; this man-made connection is now a huge issue for bighead, silver, grass and black carp with the potential to invade the Great Lakes. There are barriers in place and the Army Corps of Engineers conducted a huge study; now large effort trying to decide what other barriers should be constructed; situation is a huge concern for the Great Lakes, but she doesn't think the public knows about enough about this threat; wishes that there was quicker action taken because it is only going to get more expensive; goal of her project is to educate more people about this important issue. **D. Jensen** replied that half of the Chicago River water volume as it flows into the Chicago River is treated municipal sewage effluent discharge; there have been some massive improvements in the Chicago River over the years; he has been monitoring this effort for a long time so feel free to reach out to him for further information and resources.
- **M. Sorensen**: Recent yellow iris issues prompted him to look into further; seems like a similar situation to flowering rush where people think it is beautiful, plant it, then it spreads from water gardens to public waterbodies; EDDMapS shows that it is all around the Metro area; learned that it produces an irritating sap so have to use personal protection equipment during management; also found that DNR manages yellow iris

as a regulated species and flowering rush as a prohibited species and wondered why? Yellow iris is very beautiful and understands why people want it in their gardens.

- **K. Hagsten:** Since taking this position, her family calls her the invasive species police; when her sister moved, she cleaned flower pots to make sure they weren't inadvertently moving jumping worms which made her think about other unintentional pathways; that led her to learn more about reed canary grass and research findings that it is becoming more aggressive; it made her think about the roadside occurrences and need to inventory both native and non-native locations to understand their distribution; what are environmental changes allowing this to happen? Everything happens for a reason.
- **C. Brandt:** Personally, most interested in curly-leaf pondweed and impacts on lakes; have hundreds of hours fishing near it and believes that it displaces fish like largemouth bass; observed lakes like Minnetonka, which has large areas of coontail and Eurasian watermilfoil, but during first half of the season curly-leaf will take over, displacing many game fishes; interested in finding more research about what it does to fish communities.
- **M. Duhr:** Repurposing common carp biomass has been on her mind; developing new economies for that; at workshop last week, she met an artist who is making carp leather for wallets, etc.; samples were beautiful and soft; remarked about making rain jackets out of carp skins; merging ways to remove carp and use it as protein, leather and biomass; also been thinking about PFAS and how outdoor gear is drenched in it.
- **K. Pennington:** Not sure how much this committee has discussed didymo, but there is some [research by DNR Fisheries](#), in collaboration with Science Museum of Minnesota and University of Minnesota to understand why didymo is showing up in North Shore streams where it hadn't been found before; found densities that are different than reported in other parts of the world; surveys include characterization of habitats and changes to try to understand why those habitats are preferred; conducting study to examine impacts Lake Superior fisheries, especially lake trout spawning areas; interesting study on a species which is probably native to Lake Superior but has displayed invasive characteristics recently.
- **P. Brown:** Interested in how zebra mussels impact larger lakes in Minnesota, in particular walleye lakes; need to know how they effect food web in Red Lake; so far, infestation remains low, but in Cass Lake, walleye and perch are preying on them a lot; fortunately there is lots of preinvasion data for Red Lake to make comparisons. **M. Duhr** posted in the chat [a link to a large lake study](#) by MAISRC which documents impacts due to zebra mussels and spiny waterflea.
- **B. Garcia:** Really interested in learning more about common carp; trapping on Lake Owasso has learned a lot more about the life cycle of juvenile carp and their habitat preferences; wants to help out with this.
- **D. Jensen:** Life cycle of the spiny waterflea is fascinating; during summer, female produce clones (asexual reproduction) by producing three broods per season, between 6-7 neonates (young) each time, and when those hatch, they are identical to their mothers; those grow, and by the end of the season also produce more broods so that is how they can take over a system very quickly; they are unique that in the fall when temperatures fall they go into sexual reproduction and produce males resulting in different kind of egg called an ephippia, that is very leathery and coarse to resist desiccation; ephippia falls to the bottom where it resides until following spring when warming waters triggers them to hatch into females, then the life cycle repeats itself; as recent MAISRC research has confirmed, fishing lines and downrigger cables are the most likely ways they can spread overland to new waterbodies; this validated our outreach messages aimed at prevention: Clean, Drain, Dispose, Dry.

Member Updates

- **B. Garcia** said that dealership is ramping up at water accesses begin opening up.

- **K. Hagsten:** Two applicants for watercraft inspection program; looking forward to Regional AIS Showcase in June, **M. Duhr's** been planning with Raining White.
- **M. Kofoed** is quitting day job to devote more time to family and to Aqua Weed Stick business; got six stations for installation on Lake Vermilion, plus big orders for other counties; been a good spring, just looking forward to open water.
- **M. Sorenson:** Tomorrow will burn non-native Phragmites that was chemically treated last fall.
- **P. Brown:** Working on AIS programming including a permanent decon station installed in Waskish, MN (Red Lake), so should be a good summer.
- **S. Binsfeld:** Covered update during ice breaker.
- **W. Bement:** Hired a wild rice manager for White Earth, hope to go over AIS talking points and ask questions; working on grants to Bureau of Indian Affairs so business as usual.
- **H. Bushman:** Look forward to purple loosestrife biocontrol; getting inspectors ready for season; many lake associations are becoming more active but they are all coming with great ideas all at the same time; wants to look at using a "lake-shed approach" tying together AIS and water quality issues into a more wholistic approach.
- **M. Duhr:** Last week's Common Carp Management and Implementation Workshop went really well; great turnout, talks by presenters and break out groups; needed because management of common carp is really fragmented, not a coordinated system that funds carp management; lots of people dabbling in it, goal was to get them talking to one another; will summarize findings of break out groups and determine next steps; ramping up e-DNA surveillance workshops trialing citizen science approaches using portable filtration units that can be used in the field; will help to validate sampling methods for known infestations; goal: does the citizen science approach yield the same level of detection results for 10 study lakes?; will meet Leech Lake Tribal Resource Council at Cass Lake regarding starry stonewort; MASIRC is reviewing preproposal submissions to potential full proposals and funding.
- **B. Garcia:** Working on a portable mapping package deal that mounts via bracket on a boat or canoe really quickly (e.g., rail, transducer); has lithium ion battery; Lowrance unit in a backpack and package deal on the software for mapping aquatic plants; effort to expand use of aquatic mapping.

Presentation: Strategic Communications Topics

Tina Fitzgerald, DNR AIS Prevention Planner

AIS Pledge

- **Commitments:** From a behavior change science perspective, when people commit to taking an action, they see themselves differently (e.g., blood donor, recycler, volunteer, stop invasive species). They are more likely to take action. There are three levels: Public > Written > Verbal. Public commitment is strongest because other people see they have made the commitment to take action, resulting in more sustained behavior change.
- **Purpose:** Collect commitments to protect Minnesota waters, make commitments public, make it fun, fit multiple communication channels, and create an action-based community to protect Minnesota waters.
- **Development:** What should people pledge to do? How should the page function? What data can we collect? How do we attract people and make it engaging?
- **Pledge:**
 - *"I will always..."*
 - Clean my boat and gear to remove plants and prohibited species

- Drain all water and leave plugs out during transport
 - Dispose of unwanted bait in the trash
 - Never release bait, plants, or aquarium pets into Minnesota waters
 - Dry docks, lifts and rafts for 21 days before moving them from one waterbody to another
- Not required but add more protection: *“I will take these additional steps...”*
 - Decontaminate my equipment – find free stations at mdnr.gov/decon
 - Spray my equipment with high-pressure water or rinse it with very hot water (120°F for at least two mins or 140°F for at least 10 secs)
 - Dry my boat and gear for five days before using in another waterbody
- **Graphics:** Take the Pledge Shield with image of kids having fun in water, hand raised icon and QR code.
- **Website:** mndnr.gov/AISPledge – Enter name, select icon or upload photo, and confirm 18+ years or older (data practices). Confirmation page shows scrolling list of people that have pledged (463 so far) and links for more AIS information.
- **Behind the Scenes:** Staff manually need to review names/photos for inappropriate content and then approve if appropriate.
- **Launch and Promotion in 2022:** brochure, banners and icons on DNR webpages, news release, media interviews, Facebook posts, GovDelivery email messages, shared with county AIS coordinators, and placard at State Fair with QR code.
- **Metrics:** 463 took the pledge, only 30 QR codes scans since May, 2,450 views of scrolling names page, 1,073 views of pledge form page.
- **Take Aways:** People took the pledge. Takes minimal staff time to approve, but not instant gratification. Few people uploaded photos. Limited data collection desired by local partners (e.g. lakes, emails, etc.). No option for youth engagement yet.
- **Next Steps:** Continue promoting the site, e.g. Fishing Regulations Booklet AIS ad, Governor’s Fishing Opener, State Fair interactive display, etc.
- **Other Ideas:** Involve youth/minors? Different ways to promote through social media? Increase QR code use? How can DNR support local partners in promoting use throughout the state?

Discussion

- **M. Sorensen:** Suggests adding a graphic like “I took the pledge,” click on it and share on social media like Facebook; graphic that shows I took the pledge for agency/personal social media use from the confirmation page (e.g., I took the pledge and you can too); suggest adding option to ask for sticker that could be sent to pledgers; stickers placed on boats and trailers could support personal and social norms.
- **H. Bushman:** Need template newsletter articles to help promote and graphics for use in presentations. **T. Fitzgerald** responded that she is working with Creative Services to determine if graphics and images can be used by others in newsletters and presentations by lake associations; intent is to create for the use by others.
- **T. Fitzgerald:** Concerning youth participation, a potential approach would be to just collect initials and have youth-themed icons to pick from. **H. Bushman:** Two separate handouts for youth and adults? Could be distributed at fairs and posters during tournaments (e.g., sandwich board). **T. Fitzgerald** says it could be a single page and then select either 18+ or under 18.
- **T. Fitzgerald:** for events, you have to actively promote it; passive outreach did not work. **H. Bushman:** What about having available at accesses? **T. Fitzgerald** says passive outreach at an access would have the same

challenge, getting people to actually scan it. **H. Bushman** says how about including it in the watercraft inspector survey? **T. Fitzgerald** they could definitely promote it, but it would be difficult to work into the survey that already collects a lot of data.

- **S. Binsfeld:** Sherburne County conducts education with teachers; Pledge efforts could piggyback on youth education efforts through their poster contest; last year, 88 posters were submitted. Pledge program could be paired with it as part of the competition; new topic every year; good way to get information into homes; suggest contacting Franny or Maranda at Sherburne SWCD.
- **T. Fitzgerald** has stickers for the watercraft inspectors that promote actions, but not connected to the online pledge; it's a public pledge sticker that boaters can attach to their winch posts, which in the past has been very popular – these will again be offered to local organizations for distribution; it's another way to get pledges from boaters.
- Do fishing tournament permits go through the DNR or the Counties? **T. Fitzgerald** responded that tournaments with 25 or more boats need to be [permitted by DNR](#). Counties may have more stricter ordinances for tournaments so check with them. Someone suggests to send the pledge to tournament organizers to include it in their tournament registration. Tournament permit holders need to sign a two-page document related to AIS rules. DNR and local governments try to coordinate inspections with tournaments whenever possible.

Engaging Bait Shops

- **Behaviors and Attitudes:** Lots of boaters use live bait, they fish from boats, clean their boats, agree that preventing spread is the right thing to do, and other people are helping to prevent the spread. Knowledge of AIS laws is relatively high, but reported mixed practices.
- **Barriers:** For disposing of bait in the trash it is smell, animal activity, and not wanting to kill the bait. For cleaning and draining boats it is not having the right tools and too much traffic at launches.
- **Motivators:** Helping to prevent spread and having a positive impact were strong motivators for taking action. Knowing it is illegal to release bait was not as strong.
- **Communication Preferences:** Anglers prefer to get their AIS info at boat launches, bait shops, fishing accesses and television. Anglers trust AIS information from the Minnesota DNR (92%), local municipalities (38%), environmental organization (37%), fishing clubs/organizations (37%), and federal agencies (35%).
- **Summary of Results:** A majority of anglers have strongly supportive attitudes towards preventing AIS spread. However, 1/3 of anglers reported releasing bait on past fishing trips. When asked why, half didn't realize that bait could be invasive, they wanted to feed the fish and others didn't want them to go to waste. Anglers don't encounter significant barriers to adopting desired AIS prevention. They are motivated to prevent spread of AIS with the intent to make a positive impact. Some were motivated by regulations and receiving a fine. Anglers like to receive information where they fish and at bait shops.
- **Attention Anglers Card:** This card was created based on these results, aimed at improving angler knowledge of bait handling and disposal. It shows clear, easy steps for prevention actions and how to keep leftover baitfish. It promotes social norms as motivators. It can be distributed at preferred locations including boat launches, fishing accesses and bait shops. Back half provides additional best practices and AIS law information.
- **Bait Shop Poster and Sticker:** Poster is based on a behavior change pilot project led by Liz Anderson with Lake County. Poster visually depicts a bucket of minnows to show that they should stay contained. When posted at bait shops, anglers can sign a minnow as a pledge to protect our waters – this is a public commitment. Sticker is a commitment and reminder to take action – can placed on minnow bucket.

- **Where Can I Get These Resources?** [Attention Angler Card](#). Poster and sticker will be offered to local AIS program managers for free and in return DNR asks for some evaluative data. Guidance on distribution and evaluation will be provided. Note: The Fishing Regulations Booklet has sections on AIS prevention and bait laws in 5 languages.
- **Evaluation:** Is it feasible and can it result in behavior change? Qualitative and quantitative data should reveal if local coordinators are interested and have the time, if the shops are interested in participating, baseline behavioral data, etc.
- Does this seem like a good way to roll materials out? Feasible for county coordinators? Would other information be helpful to collect? Other things that could make this be more successful?

Discussion

- **M. Sorenson** asks how bait shops are license or regulated? **T. Fitzgerald** states that all harvesters, wholesale, and retail bait businesses are [regulated through DNR](#). All harvesters need to go through AIS training.
- **B. Garcia** asks if materials are being distributed through Cabela's, Bass Pro Shops, Dicks, etc.? **T. Fitzgerald:** No, not yet, intent is to start with smaller bait shops, easier to work with. Corporate businesses are more challenging to work with because they're restricted in what they can post and distribute. But whatever county coordinators want to go out and try, DNR supports that.
- **H. Bushman** assumes that there is a list of all bait shops, but do all of the coordinators know where shops are located? Is there a better way to know where those bait shops are so that coordinators know where to go? This could be a barrier to participation. **T. Fitzgerald** replied that she is wondering if we could access that DNR data and share it. Coordinators wouldn't be required to visit all of the shops in their jurisdiction, just those that they are able to – just give it a try. Many county coordinators are probably already reaching out to the bait shops in their area.
- **W. Bement:** Do any access signs have QR codes? Many locations on White Earth don't have cell phone service. Is that a barrier for collecting information? **T. Fitzgerald:** There are not AIS-related QR codes at accesses, at this time, but it is something DNR is considering such as QR code for decon station locations. Intent of these posters are for bait shops. She emphasized that accessibility is important regardless of access to technology. To that end, there is access to print and online resources. Also, these materials are reaching shop owners, employees and their customers. A potential outcome of this is the development of FAQ factsheet. **W. Bement** adds via chat: people can take a picture of the QR code and store it for later, could put that on the sign/poster.
- **H. Bushman:** Lack of knowledge is a good point, those who are selling licenses don't fully understand the regulations regarding fishing and hunting. A FAQ fact sheet would help break down barriers for both staff and clients. **T. Fitzgerald** stressed that this info is also found in fishing regulations booklets, which hopefully retailers are distributing with licenses.
- **M. Sorensen** asks if the DNR knows the types of watercraft that are being used? Efficacy in the big picture. **T. Fitzgerald** says that Parks and Trails conducted [a study that has that information](#). **W. Bement** reflected that due to COVID there is a lot more non-fishing water recreation in the area. Those individuals have no idea what their risk is. In his area, non-anglers are not being targeted with AIS info.
- **W. Bement** knows about how to get tribal licenses, but wonders how boaters renew licenses like at county courthouses? Is there information available? **T. Fitzgerald** says Water Safety has tons of information and when watercraft are registered or renewed, there is an [AIS affirmation](#) that the owner has to sign that they've read and understood AIS laws. **D. Jensen** said that he led a study a few years ago and a majority were angling from fishing boats, but a limitation of the survey was insufficient sample size for the other types of boats used for fishing.
- **S. Binsfeld** asks if an incentive could be provided? How are bait shops encouraged to distribute materials and talk with customers? **T. Fitzgerald** replies that free materials that they can hand out are an incentive.

Some organizations distribute bait bags which are free. Hopefully, that's enough of an olive branch to get them to help make their jobs easier. **S. Binsfeld** suggested that participating bait shops could have a sticker in the window or door identifying that they're a "DNR helper" or ambassador to help with AIS prevention. **T. Fitzgerald** says that Wisconsin has a similar effort called "Bait Shop Initiative" where their shops post a placard in their window indicating participation in the program and the list of participating shops were promoted various places.

- **B. Garcia** suggests a sticker for pledge members. **T. Fitzgerald** says yes that there is a sticker that can be distributed to anglers. There is not one for the bait shop. She also stressed that DNR cannot promote one bait shop over another, but what could be done is provide a list of all bait shops and asterisk those that participate to help provide recognition – potentially a next step. First, need to see if they'll give out any type of information. **S. Binsfeld** says that might pair well with taking the online pledge with a link to all of the bait shops including those who have taken the pledge. People are motivated to provide business to those that are like minded. Thinking of ways that could deepen the partnership. **D. Jensen** says that based on his experience with bait shops from Cloquet to Grand Portage, they've shown overwhelming support in the past for distribution materials and information in the past – there's no reason to believe that has changed.
- **W. Bement** mentions that there was discussion of bait bags. **T. Fitzgerald** says that participating counties are distributing free pre-printed bait bags purchased through Wildlife Forever.
- **T. Fitzgerald** thanks everyone for their comments and input. Our intent is to roll this out before fishing opener this year.

DNR Updates

K. Pennington:

- News release: DNR contractor commercial fisher caught 30 silver carp in Pool 6. Will be following up with more netting.
- MUM (Modified Unified Method for capturing invasive carp): 24-28 April – Pool 5A, 6 and 8. Depending on high water issues for spring. We welcome visitors.
- State carp plan revision – contract and RFP for getting that process underway.
- Staffing: Felix is back as the south AIS Trainer and we're working on hiring the Northern AIS Trainer. Invasive Species in Commerce Planner was posted a couple days ago.
- AIS surcharge increase is including the omnibus. Will keep the group advised.
- Submitted our Great Lakes Restoration Initiative (GLRI) application through the U.S. Fish and Wildlife Service (USFWS). Asking for watercraft inspections, specialists, organisms in trade position, non-native Phragmites, and AIS prevention behavior assessment on a priority pathway.
- Working with DNR Fisheries on bait harvest pilot project to allow minnow harvesters to use traps in zebra mussel infested waters. DNR Fisheries is also working with anglers and harvesters concerned about bait availability.
- Common carp workshop hosted by MAISRC was effective, had a good breakout, was well organized, and covered a lot of progress and challenges with common carp management in Minnesota.
- **M. Duhr:** Asks, could you put in context the carp capture? How bad is it? **H. Wolf** says, what does this mean? We don't know. Fish were processed by USFWS and were all from one age class in 2016 that traveled up in 2019 during flooding. No evidence of recruitment or reproduction, so overfishing would be effective control. Commercial harvesting is a typical thing we do. We will be doing more netting and are interested in tagging to track fish. Not the largest capture. **B. Garcia** asks, what is done with the ones that are captured? **H. Wolf** says we would like to tag them quickly if they are in good condition, otherwise USFWS process them for age, sex, etc.

D. Jensen:

- Hosted four online workshops and helped with watercraft inspection workshops. Had an in-person meeting scheduled for yesterday but had to pivot that online, about 39 people. Intent was to have in-person to building relationship and networking. But did get a lot of good information on what they are doing and hopefully they made some connections. Chanhassen postponed to April 10th. Helping with showcase in June. Boundary Waters AIS Coalition – working on proposal to submit for federal funds for tools at water accesses in northeast Minnesota.

Legislative Action Items

- Keeping an eye on the AIS surcharge increase.
- There is a hearing today on Lock and Dam 5 barrier proposal.
- When would a letter of support be most helpful? It would be sent to the chairs of the environmental groups. We can look at what was done in the past, we have an example from last time.
- A walk through of the environmental omnibus may happen next week, but changes may happen before that. **H. Bushman** asks, so wait until next week? **K. Pennington** says yes, will coordinate with Committee Chairs and DNR staff if needed.

DNR Enforcement Topics of Interest

- **T. Fitzgerald** will pull ideas from a recent meeting where the Committee discussed some enforcement questions while reviewing the [Invasive Species Annual Report](#) and share those ideas along with what we'll discuss now with DNR Enforcement. DNR Enforcement will be at the April meeting to discuss these topics.
- Fees. Efficacy of fees as a prevention tool – what is their opinion? Useful, functional?
- Qualitative sense – tone of conversations changed over the past 5,10 years? More or less hostile? More or less educated?
- Any legislative actions to support enforcement?
- Check stations – target number? Expected launch date? **H. Wolf** says it depends on local support and other factors, but generally do some throughout the state annually.
- Any issues that can assist law enforcement officers for AIS? E.g. training, WREO funding, etc. DNR Enforcement gets \$1 million a year from AIS program.
- Our officers can train other enforcement officers on AIS laws. Any peace officer can currently enforce AIS laws, but they need additional training to give certain types of citations. Would a tribal conservation officer need it? No, but the training could be voluntary/educational.
- On page 27 of the annual report, it mentions competing work priorities. Is that OK or should we be concerned?
- How the hours are determined, how the regions are split up, and what hours go to where.
- Number of citations seems really low and warnings are going down. Is that because they are not catching people? Less officers? Less violations? People don't think they will get a ticket, so they are willing to risk it?
- Citations: who is giving them out? DNR Conservation Officers? Local law enforcement? How does it split out? If local is low, then how can we increase? Do we have any information on local efforts?
- Do we know who or how many local officers the DNR has trained?
- A list of trained officers would be helpful, so locals could contact them if they are having issues.
- Are county enforcement officers giving out citations? Is there reluctance? Are they being followed up by county attorneys for prosecution?
- **H. Bushman** will try to reach out what they track in her county and report back.

Presentation: Infested Waters and Water Appropriation

Kelly Pennington, DNR Invasive Species Unit Supervisor

- **Take-aways:** To reduce risk – infested waters are managed differently. Projects moving large amounts of water need to take AIS steps – this takes planning and preparation – talk to DNR.
- **Preventing the spread:** clean, drain, and dispose at every waterbody – required for everyone. Special regulations in infested waters: If it contains AIS that could spread or is connected to body of water where AIS is present.
- **Bait harvest:** AIS-specific restrictions on infested waters – different for different species. Tagged gear – required for all infested waters; tags are specific to permit, lake and species. Closed season and gear restriction in zebra mussel waters – in general, hard sided gear is not allowed to use; closed season during warm season to reduce risk of moving zebra mussel adults/veligers.
- **Commercial fishing:** tagging and limited to use in specific water bodies
- **Water movement:** DNR permits these activities and depends on volume of water being moved. Water use permit required for 10K gallons/day or 1 million gallons/year. Infested water permits required to divert to other waters, transport, or move away from riparian property. For example, St. Paul water system to prevent zebra mussels has operated for over a decade.
- New water movement requests are emerging and have become more of an issue recently – associated with high water in water bodies with limited outflow. Climate change is impacting this through more rainfall events, being warmer and wetter, etc. Shared graph of DNR climate trends. 2019 was a high-water year – started seeing more requests to move water from landlocked water bodies.
- **Reducing risk of moving AIS in water:** Permit as a mechanism, includes precautions such as filtration, land application (e.g. but 2019 land didn't need more water), seasonal or timing restrictions (e.g. zebra mussels are not reproducing in colder months; would include monitoring), or other things such as pumping in a different part of the water body. Can use in combination to reduce the risk. Also open to other ideas.
- Filtration is different for different species: Plants are 1mm and zebra mussels are much smaller at 35microns. Projects require planning and costs.
- **Activities managed by general permit:**
 - Fire departments: For training purposes. Emergencies exempt (very low risk). Dispose onto a fire, into the same water, or on land.
 - Water quality sampling: Dispose in sanitary sewer or on land. Fairly small amount of water, but the drain plug law requires no transport of water. The general permit allows it and specifies steps to follow.
- Questions/comments/concerns? None from the Committee.

Unfinished Committee Business

- Get a letter drafted and ready for AIS surcharge increase. Waiting until next week or if needed.
- Get enforcement questions to **T. Fitzgerald/D. Jensen** in the next week or two.
- Who plans to attend in person in April? A majority on the call do. The process worked for pivoting from in-person to online this time. **T. Fitzgerald** reminds members to fill out the poll for in-person meetings.
- April topics include a panel of county coordinators and DNR Enforcement.
- Ice breaker questions were nice – send more fun ideas along if you have them!

Adjourned at 2:23PM. Next Meeting to be held in person at the DNR Sauk Rapids Office with online option from 10AM to 3PM on April 27, 2023.