

Minnesota Statewide AIS Advisory Committee (SAISAC)

December 2, 2021 Meeting Minutes

WebEx Online Meeting

Members Present: Pat Brown, Justine Dauphinais, Chris DuBose, Kate Hagsten, James Johnson, Holly Kalbus, Michaela Kofoed, Ryan Wersal, Chris Magnotto, Beto Garcia

Members Absent: Brian Gross, Eric Johnson, Will Bement, KoriiRay Northrup, Kelsey Taylor

Ex-officio Members Present: Doug Jensen, Nicholas Phelps

Ex-officio Members Absent: Nicole Lalum, Amy McGovern

DNR Staff Present: Heidi Wolf, Shane Kirlin, Tina Fitzgerald, Jake Walsh, Chelsey Blanke, Ann Pierce, Vanessa Perry

Chair Justine Dauphinais called the meeting to order at 10:04 AM

Motion to approve agenda: First by Justine Dauphinais, second by Holly Kalbus

Motion to approve Meeting Minutes from 10/28/2021: First by Holly Kalbus, second by Justine Dauphinais

Meeting Summary

- Ecological and Water Resources Deputy Director Ann Pierce introduced the Committee to the “Future Funding for DNR” initiative for the agency. The Committee discussed current funding for AIS and opportunities for a more holistic approach to funding. Members are encouraged to participate in the public engagement process for this initiative, which can be found on the [DNR’s website](#).
- AIS Research and Grants Coordinator Jake Walsh outlined the 2022 Control Grants program, which the Committee provided input on at the October meeting. The Committee discussed how to support equity, innovation and adaptive management in the grant program now and in the future.
- AIS Pathways and Plans Analyst Chelsey Blanke reviewed the results and recommendations of recent work the DNR has supported to address invasive organisms in trade pathways. Members expressed strong support for the DNR to continue to address this important issue in Minnesota.

Motions & Actionable Items

- Tabled Vice-Chair Vote until January meeting to allow for more new members to be present and possibly nominated.

New Member Introductions

- **B. Garcia:** Answers to both Beto and Herb. Professional geologist, worked at Barr Engineering for a long time, had his own company for 10 years, license coast guard captain, lake service provider, avid boater (racing sail boats and fishing), lives on Lake Owasso, works a lot with Ray Valley at BioBase on mapping of

aquatic vegetation. Here to lend his expertise. At the giving back portion of his career. Just finished hauling a sail boat from Minnetonka to Florida, which presents a whole different set of challenges for AIS.

- **C. Magnotto:** Upper Cormorant Lake Association (Becker County). Involved with forestry, their lake (cabin on the furthest north lake in the chain) recently was infested by zebra mussels, which drove him to being more involved. Interested in paddling, fishing, ducks (wood duck houses). New to AIS work, background in business, distribution, finance, and hopeful he can contribute.

Member Updates

- **J. Dauphinais:** Funding and budget issues at Anoka County, looking to cut either inspection hours or the grant program. Proposing to use the limited hours more strategically using the MAISRC AIS Explorer Tool. County applied for DNR CBSM Behavior Change grant and rolled out Aqua Weed Stick Stations for five launches in Anoka County, which included some education and outreach. Over 1,700 uses of the weed stick this season.
- **C. DuBose:** Chisago County Commissioner. Continuing the fight with Phragmites and reviewing some staffing vacancies for increasing position to two full time positions for water resources. Trying to balance the tax burden and staffing need.
- **J. Johnson:** Off the lakes, finishing up last few AIS-related reports. Already getting a lot of proposal requests from county grant deadlines. Getting a lot of questions about the DNR grants. Asking a lot about the grants from last year. Discussion with **J. Walsh** today is good timing since people are starting to think about these projects. Been to a lot of lake association annual meetings in the last month and there seems to be a lot more involvement with counties, possibly because of county money available, they have some interesting projects going on with good discussion about future directions with DNR grant funds. Additional assistance is really helping. This is his last meeting, choosing not to reapply, but excited about the new people and ideas.
- **K. Hagsten:** Plant Resources Director for Leech Lake Nation. Found out yesterday that their application for funding to purchase a DASH (Diver Assisted Suction Harvest) system was approved. Funding will also go toward diver certification for staff. Will be working with MAISRC to set up research plots for starry stonewort control. Doing report writing and submitting proposals for funding for 2022.
- **M. Kofoed:** AIS Education for Fishing Tournaments and High School Leagues. Aqua Weed Stick. Disappointed to put the boat away and excited for summer already.
- **P. Brown:** Fishery Biologist for Red Lake Band of Chippewa Indians. Working with state and county partners on an invasive species plan for Red Lake. Going very well and anticipating a product in the next month or so.
- **R. Wersal:** Assistant Professor at Mankato State University, ecology and plant management activities, “kill plants for a living.” Trying to get out of the semester with finals week and end of the semester fires.
- **H. Kalbus:** With Le Sueur County, coordinating and administering AIS program. Wrapping up reporting for the end of the year, went through inspection data and found out they did 5,800 inspections and 3,500 inspection hours and 25 accesses covered—twice the size of last year! Drought meant that some accesses weren't useable, which meant shifting around inspectors. Local county planning for AIS, added quick amendments to grants. Wrapping up CBSM grant work: 21 day dry time for lifts, docks and water associated equipment; incentive based projects for engagement in the program. Got one person to dry for 21 days. Hoping to continue this program, may improve as pandemic improves.

- **N. Phelps:** Director of MAISRC at the University of Minnesota, faculty member in Fish and Wildlife Department. New projects will be starting on Jan 1, so if you're interested in work on common carp and multi-beam sonar for zebra mussel detection, those will be continuing on in the new year. Updating research priorities over past couple months, drafting a new RFP, and will be issuing it in the first week of January for new projects. Research Highlight: Keep your eyes open as researchers are digesting summer field data, will be in the newsletter and Detector Webinars. If there's any specific interest, please reach out to me or the new Chair for presentations for this Committee.
- **D. Jensen:** Minnesota Sea Grant at the University of Minnesota-Duluth, extension educator and AIS program coordinator, serves in a leadership role at a number of different levels to align goals (Aquatic Nuisance Species Task Force (ANSTF), Information and Education Committee for the Great Lakes Panel, this Committee, and the Minnesota Invasive Species Advisory Council (MISAC)). Projects underway: trying to protect boundary waters, lake associations and lakes in the boundary waters don't have an advocate—Boundary Waters Coalition for signs at water accesses and trail heads, producing prototype signs for focus groups, advisory committee will choose a sign that Wildlife Forever will design and produce. ANSTF meeting last November, Great Lakes Panel in October—Have meeting notes that are available. Working on funding for projects and internship program. MISAC: Revising state plan that was first approved back in 2010, hoping to approve updated plan in spring meeting. Phragmites Canada Day: First annual seminar talking about Phragmites and control nationwide, will be this winter, Doug sent out a notice/email. Would be a good conference to attend since Minnesota is focusing on non-native *Phragmites* right now.

DNR Updates

- **T. Fitzgerald:** AIS Prevention Planner with the Minnesota DNR, located in Central Office. Provides technical assistance to local governments for AIS work in the state, linked to the AIS Prevention Aid program that disperses funds to all counties for AIS work. Also administers the CBSM Behavior Change grants and program. No specific updates. We're recruiting again for this Committee, applications open now through 12/15. Looking for a diversity of perspectives to serve on the Committee.
- **H. Wolf:** Invasive Species Unit Supervisor at DNR, started in 2000, been in current position since 2014. Minnesota has been one of the states involved in the Brandon Road carp barrier project, multiple day long meetings and committees to pursue full federal funding for the project. Non-native Phragmites update with wastewater treatment plants: The Minnesota Pollution Control Agency, Minnesota Department of Agriculture and University of Minnesota and DNR met on the issue—there are still some treatment plants that use it as a part of their dewatering process, so we're working with them. Working to get it put on the prohibited species list and finding a replacement for wastewater treatment plants. Let her know about potential applicants for SAISAC.
 - **T. Fitzgerald:** We've received 59 applications for the new SAISAC members so far, expecting about 100 or so.
- **Major S. Kirlin:** Division of Enforcement at DNR, been there since February 2001. Not a whole lot of updates, waiting for fishing activity with the ice-on season.

Presentation: Future Funding for DNR

Ann Pierce, Deputy Director of the DNR's Ecological and Water Resources Division

- The DNR is undertaking a new project to look at “Conservation and Outdoor Recreation in Minnesota: Funding Our Legacy and Our Future.” **V. Perry**, one of our project leads on this, is joining this meeting as well. Commissioner Sarah Strommen mentioned this at the DNR Round Table last year, and it’s been in the beginning stages over the past few months.
- Video: Commissioner Sarah Strommen asks for help for building a sustainable future for DNR funding. Foundational investments in natural resources can’t meet the growing demand for outdoor experiences and natural resources. Grateful for existing programs and funds, but they’re not enough. Use of outdoor resources is changing in the state, we need funding that is holistic and adaptable to growing needs. The DNR is spearheading a transformational initiative to co-create a future funding for recreation and conservation with Minnesotans. Find more information here: www.mndnr.gov/futurefunding
- **A. Pierce** shared charts of revenues, expenses and balances. Despite a small bump up in outdoor activities during the pandemic, projections for future fiscal years are in a downward trend. Revenues are not keeping pace with the expenditures and they often can’t keep pace with inflation (e.g., Game and Fish Fund, State Park Account). Game and Fish fund, State Park Account are user-based funds, and the user base is changing.
- DNR has a diverse network of funding mechanisms, but a lot of these funding sources have very specific uses, which doesn’t always accommodate new funding needs as they emerge.
 - AIS funds come from the Natural Resources Funds (surcharge) and Game and Fish (out-of-state fishing licenses)—both are dependent on traditional users.
- We’re getting many more users who use natural resources in non-traditional ways (e.g. for mental health) that aren’t producing funds through licenses or surcharges. Therefore there’s a need to expand funding mechanisms to meet all needs.
- What can we do to create a sustainable funding mechanisms to help maintain healthy waters and lands in Minnesota? Currently trying to ramp up Public Engagement, more information can be found on the DNR’s [Funding Future for Natural Resources and Outdoor Recreation website](#). The DNR is also going to host open houses around the state. Members can sign up to an email list to stay updated.
- **V. Perry** is the Planning Director at OSD (Operation Services Division), project manager, listed online as a contact for questions about the initiative.

Discussion

- **B. Garcia**: AIS have an infrastructure impact. Is there any funding available or liaison with MNDOT? MNDOT infrastructure (bridges, water treatment, water supply) are impacted by AIS. **A. Pierce** says no, MNDOT doesn’t provide any of the AIS funding that comes to DNR. They do have programs where they plant natives and things like that. They have maintenance programs to prevent the spread of invasive species. There is a large funding source to counties (\$10M). It goes directly to counties. We do get some funding through General Fund for Enforcement Officers. MNDOT has to follow pertinent laws and engages with DNR for construction projects. **V. Perry** adds conservation and recreation (including AIS) as infrastructure is a good point, if it’s competing with infrastructure it may lose, but these things are indeed critical for health, education, and other infrastructure, which is the big picture/holistic thinking here.

- Discussion in chat: **D. Jensen** adds that MNDOT is a member of [MISAC](#) and MNDOT has [invasive species related programs](#). MNDOT's representative to MISAC is Christina Basch.

Future funding discussion continued

- **J. Johnson:** We've been trying to push for an additional contribution (e.g., for the loon contribution). For example, the MAISRC willingness to pay study found a bimodal distribution of people being unwilling to pay or people being willing to pay a lot. Rather than an average, it could be a voluntary contribution. He has heard concerns with a "shell game" and past failures with the walleye stamp. The fact that this group is AIS focused, how do we fund AIS without it being taken over by somebody else? If it won't be taken over, is it possible that we could do a voluntary contribution and make it earmarked and untouchable?
 - **A. Pierce:** If we look at the natural environment and its services more holistically (e.g., MNDOT) and how functioning ecosystems are valuable and support everything we do, not placing them in siloes, then that's where some of this work with future funding/thinking differently about natural resources comes into play. The reason we're worried about AIS is because we want healthy waters, which is holistic in nature. If we come up with something that's innovative, then we can look at implementing it through this process. As far as a voluntary mechanisms for donating, we can have further conversation about that (e.g., with non-game check box that goes into a specific state-based fund, that's also matched by another set of money). We can't bank on seeing increases to the general fund.
 - **V. Perry** adds we have heard that people will give money if it's easier to do that, the internal consideration with how to parse that into specific funds gets into issues with heavy administrative loads.
 - **J. Johnson** says he likes this being an "impulsive" sort of thing that gets tacked on to processes users are already engaged in. There are some missed opportunities here. Catering toward specific markets (e.g., Malcolm Gladwell tomato sauces and mustards) could increase funding overall rather than having a general contribution—target highly passionate small groups, even if the administrative burden is high. Members comment that the only way you'll know its effective is if you do it. It seems to make a lot of sense.
 - **J. Johnson** asks **N. Phelps**, MAISRC has a thing on their website for voluntary contributions, have you gotten much funding from that? **N. Phelps** says on the research side it's pretty different, mostly there's been some foundations, corporations, lake associations. It's not totally similar to what we're describing for the DNR, but the voluntary giving is a good idea. What's the break-even point for a voluntary stamp or giving? There was a threshold with the walleye stamp.
- **V. Perry** refocuses the conversation, adding that DNR's budget is complex and we're not trying to solve for the status quo, we want to solve for an emerging and evolving natural resource landscape in Minnesota. **A. Pierce** adds there is a good understanding of different types of mechanisms for creating "interspaced" donations and setting that process up. **D. Jensen** says he serves on other boards involved in fund-raising, generally support from the public will be greater around a project than an operational fund (research-based). **V. Perry** says a lot of our needs are in operations. What is that system piece? **D. Jensen** says it is key to differentiate what the ask is now from what the public is already contributing to. It could be wrapped around a project but also available for using generally.

- **N. Phelps** says the new willingness-to-pay results are out now—there’s definitely interest in supporting AIS management. We’re happy to provide final reports in the next month and a half or so. **V. Perry** says it seems like one of the reasons willingness to pay is so high is because it’s easy for people to connect to things they love (or are afraid of losing), and we’re trying to connect to those things holistically and generally.
- **B. Garcia** in the chat: It seems going forward, a more stable and larger funding pool would need to be come through legislative initiatives. Different administrations and administrative leadership will have different priorities, and that is always a problem.
- **J. Dauphinais** says funding general operations and overhead is a tough pill to swallow, maybe if it’s something like in retail where you have relevant companies (e.g. outdoor recreation) offer customers the opportunity to round up to the nearest dollar to donate to “clean water” (fine print: DNR). **V. Perry** says that’s a great way to capture those who aren’t really contributing now.
- **V. Perry** says she appreciates everyone working on this, and feel free to reach out.
- **T. Fitzgerald** will send notes from past Committee meetings where they have discussed alternative funding sources.

Presentation: 2022 AIS Control Grant Funding Overview & Potential Directions

Jake Walsh, DNR Research and Grants Coordinator

- Background: Grants for invasive aquatic plant management (IAPM) is reimbursement-based funding for control of Eurasian water milfoil, flowering rush and curly-leaf pondweed; includes funds for delineation and treatment. About \$400,000 is typically offered.
- For 2022: There is \$850,000 in one-time funds for lake associations. Some portion of the typically \$400,000 will be available for local governments and tribes. Timeline: website drafted in December, open the grants in mid to late January, close in mid to late February, review applications in March and start projects in April.
 - The \$850,000 in one-time funds must be dispersed by 6/30/2022 and work can occur from spring 2022 to 6/30/2023. This allows for two year projects, mostly for curly-leaf pondweed, but also others. It could support projects to treat starry stonewort.
- Clarification in progress:
 - Still working to clarify lake association vs. local government.
 - Additional work plan ideas include adaptive management via pre and post treatments and genetic testing of hybrid watermilfoils. Still finalizing ideas. Many types of projects are likely feasible, especially those that contribute directly to improving control.
 - How the typical \$400,000 will be used.
- Ideas for future years
 - What places do IAPM goals like innovation and adaptive management have in the AIS Control Grant Program? Considerations include: Grantees have diverse management goals; grants support the basics of IAPM; and other groups have communicated support.
- What does equity look like in the AIS Control Grant community? Which groups have been underserved or altogether missed with traditional approaches to AIS Control Grants? To IAPM? How could the AIS Control Grant Program better serve Minnesota through supporting IAPM?

Control Grants Discussion

- **N. Phelps** asks, how many grants and how much money does each get? **J. Walsh** says typically 150 grants with an average of \$2,000 to \$3,000 with a cap of \$5,000. **N. Phelps** asks, what proportion of the total cost of a control project is that grant funding? **J. Walsh** says it is typically 1/3, but varies hugely. **N. Phelps** asks, are they repeat applicants doing the same thing? Are you solving the problem? **J. Walsh** says that is a question we'd love to get a better idea on. We do have people coming back every year, e.g. mechanical harvesting. Some don't apply one year because of success. Discussions with Mike Verhoeven and Dan Larkin too (MAISRC researchers). The DNR is data hungry because we want to improve IAPM as a whole. Pre and one-year-after treatment monitoring. Get a sense of what is happening long term.
- **J. Johnson** says an assessment of what is changing is critical. For lake associations, they focus on the densest areas. Free money, just need to get it, and then end up being over-aggressive. Some sort of assessment of what has changed should be tied to the money somehow. **J. Dauphinais** agrees. And not just acreage, but also chemicals used. **J. Johnson** asks, what is an end point? It is not zero. Lake associations have a backsliding fear that if they skip a year, it will get worse. Monitoring to assess sufficiency of treatment is needed. **J. Walsh** says DNR can use this grant to advertise the expertise available. We general know what works and what doesn't. But administrative load is high and depends on permitting. If it is good enough for a permit, it is good enough for a grant. It depends on the specialists and is already a process we do. **J. Walsh** is hearing these perspectives, and values these discussions.
- **N. Phelps** asks, can you do both? Two pipelines – small grants for nuisance control, larger projects for groups that have lake management plan or multi-year goal. Incentivize people to get to adaptive management. Not a fan of state money to mowing lakes. Goal should not just be to give out more money to more people, it should be having a bigger impact. **J. Walsh** likes the ideas of two pots with one focused on adaptive management. This year seems like a good year to bring it in and try it out.
- **D. Jensen** supports treatment of other species. Supports early detection and rapid response at local level. For instance, species on the periphery of their range such as yellow iris. Now is the time to treat it, but no funding mechanism to do that. **J. Walsh** says it is on our radar.
- **D. Jensen** says in a recent Diversity Equity Inclusion and Justice training, there is pushback on the word "underserved." Agrees there is a need to get those communities funding. **J. Walsh** asks, where are those opportunities?
- **J. Johnson** asks, so it opens in January and they will have a month to plan before the application is due? **J. Walsh** says yes, the plan is to have things posted online at the end of December, then open mid-January. Give people plenty of time to understand the changes. The DNR has a lot of communication to do and it will be his focus after information is posted. **J. Johnson** says a he has a couple lakes that have innovative projects and they want to get going now. If he gets that many projects and in a short amount of time, proposals won't be that great. Could we meet with the DNR now, so when the application is due we know what is doable? Kind of like a pre-approval thing? Maybe work with specialists? **J. Walsh** says we can't share ahead of time, can't do pre-approval. But you can work with the specialists now, have the expertise for evaluation. But cannot link that to a guarantee with grants. **J. Johnson** says another example is a small lake that says they are only going to do this if they get a grant. Can't do too much planning pro-bono before they get the grant.
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Control grants discussion continued

- **J. Walsh** says time is tight, but we know how much funding is available. Because of one-time funding, it was challenging to get things cleared up. Larger projects would likely not go by lottery, it would be a competitive projects. Lottery would be for smaller projects.
- **B. Garcia** asks, can these grants go to education and outreach? **J. Walsh** say no, these are limited to management. **B. Garcia** also wonders how the Mississippi River system and Lake Superior are addressed in this grant money, and how that overlaps with the other states. **J. Walsh** says funds are not used for Lake Superior or river systems at this time. It is mostly IAPM in lakes. **H. Wolf** adds that they could apply, but it is hard to treat in flowing water system. Harvesting is more feasible. Lake Superior has lots of funds through the Great Lakes Restoration Initiative. These grants has gone to lake associations and local governments for IAPM on lakes. Funds for these grants are not typically legislatively named, but this new pot is. Challenging to know what equity looks like. Maybe identify new groups that aren't as organized, and give them a hand up. It is complicated to know what the underserved communities are. **B. Garcia** asks, does grant allocation focus on lakes that are more likely a vector? **J. Walsh** says historically it has been first come, first serve. Last year it switched to a lottery. Haven't had evaluation criteria, but when thinking about larger grants, asking questions like that is important. Managing the spread is in the spirit of these grants. **H. Wolf** says it is challenging to identify criteria for "more likely to be moved." But when we gave out grants for watercraft inspection, we did focus on those. Another example like starry stonewort found near a public water access site, the DNR does something; but not traditionally part of these grants.
- **D. Jensen** adds that there are many multi-jurisdictional groups like the Western Lake Superior AIS workgroup, Mississippi Basin Panel, and Great Lakes Panel made up of federal, state, tribal representatives that collaborate and could be leveraged.
- **J. Dauphinais** understands DNR can't build a whole new competitive thing in a month. Could be an option for an applicant to get "sponsored" by a local government to do pre and post treatment evaluation and if they do you could offer doubling their grant. More expertise and staff, but funds still go to lake associations. It might work in metro, but out-state may not have as much capacity. **J. Walsh** says grantees provide evidence of partnerships. He is also curious of out-state capacity. **H. Kalbus** says it depends on who is in the position. AIS is sometimes on the backburner, but it is worth a shot and worth reaching out to see. Some have a lot of lake associations that are really active. Capacity to help is an important question. **J. Dauphinais** says **J. Johnson's** word means a lot working with lake associations and the DNR. Would that be a barrier? **J. Johnson** says he usually connects them with local governments, but is not heavily involved in the relationship. Lake associations do get recommendations from local governments and they bring it to him. Getting a stamp of approval from local government, would that be easy? It would be prepping a bunch ahead of time. He is doing that without funding. If they could work with the local government, that would be helpful. He typically talks with the DNR, who then says "I'd permit that." **H. Wolf** one challenge would be how we decide what a "legitimate" partnership is. **J. Johnson** is the gold standard, but there are consultants on the other side of the spectrum. **H. Wolf** likes the idea of getting a partner to help smaller, newer groups. The idea is good, but how to define is challenging. **J. Johnson** says, if a project is on the edge, start a conversation with the DNR right away. The DNR has to be the thumbs up, thumbs down on this. Lake associations aren't as careful if it is not their money. The DNR having time to go over projects and getting

their support or feedback is a really good filter. For a big project have them meet with the DNR, county, lake association, consultant, applicator, etc. **H. Wolf** says yes, getting people in the same room is necessary.

- **B. Garcia** understands this is a difficult problem. There are small groups that don't have resources to put together a good plan; but also not fair to get people like **J. Johnson** to put together a plan that may or may not be funded. But also not good for the state to just hand out funding. What if it was something like the lake service provider, some sort of minimum level of competence? **J. Johnson** adds, not requiring having a full plan, but a "permit-plus" kind of thing. **H. Wolf** adds, it wouldn't require work with local government or consultant.
- **C. Magnotto** says buy-in is important as well as cost benefit. Supports expanding on the lake associations investment, but not excessive. More involvement is better. **J. Johnson** adds a filter is needed and if the DNR is willing to meet is good time spent. Maybe an email to Specialists asking them to meet with groups that are interested in bigger projects. Cautions that "innovative" is not necessarily something you want (e.g. untested, experimental things like magnets and ultrasonic – not tested, not proved, not innovative). Spend money on things that we know works. We know risks. If it is new, require third party research that support their project. Screening process is a good idea, like a pre-proposal process. **D. Jensen** provides an example for Minnesota Sea Grant, they ask for a two page letter and the grantor provides improvement feedback. Alleviates pro-bono work and reviewing huge proposals upfront.

Elect 2022 Chair and Vice Chair

- **T. Fitzgerald** reviews chair and vice chair responsibilities, nomination and voting process, and charter language. Ex-officios abstain, new members invited to abstain if they so choose.
- Vote for Chair: **T. Fitzgerald** asks for nominations for Chair three times. One question during nominations, is **J. Dauphinais** interested in serving as Chair again? No her term will be up this year and she did not sign on for more service. Nomination: H. Kalbus (accepted nomination). Votes: JD, PB, CD, BG, KH, MA, JJ (7). **H. Kalbus is elected Chair.**
- Vice Chair: **T. Fitzgerald** asks for nominations for Vice Chair. Members ask if new members **C. Magnotto** or **B. Garcia** would be interested. They both decline, being new to the group. Do we have any absent members who would be eligible? **K. Taylor**, **B. Gross** and **E. Johnson** terms are ending. **W. Bement** and **K. Northrup** are not here and are new, just started last month. Nomination: Michaela Anderson (Interested, but pending a final decision until January). KH, JD, HK, PB, JJ, CD vote to **table Vice Chair vote until January meeting when there are more new members present.**

Celebrate Members with Terms Ending

- Thank you for your service – stay in touch!

Presentation: Invasive Organisms in Trade

Chelsey Blanke, MN DNR AIS Pathways and Plans Analyst

- Invasive Species in Trade in Minnesota: What have we learned and where should we go from here?
- Background: Invasive Species in Trade
 - Includes horticulture, pet, food, bait, and biological supply pathways.

- 2/3 of prohibited invasive species have been documented in these trades, ¾ regulated invasive species, 15 additional risky species.
- Release of these species is not uncommon.
- There are outreach campaigns (e.g., Habitattitude) but are not universally recognized.
- Species are often not labeled or mislabeled.
- Supply chains are poorly understood.
- Many invasive species can be purchased online.
- Enforcement is limited.

Invasive organisms in trade continued

- DNR-led projects
 - Aquarium and water garden industry workshop to understand their practices.
 - Survey of businesses selling live organisms.
 - Contracted visits of pet store and seafood market invasive species assessment.
 - Aquarium and water garden hobbyist survey.
- DNR-assisted Projects
 - Outreach to online sellers.
 - Symposium on enforcement of invasive species in trade.
 - Local bait outreach projects.
 - Development of online and print resources.
 - Crayfish boil outreach and permitting.
- Seller Survey
 - Survey of businesses involving live organisms, more than 3,500 businesses contacted overall.
 - Helped to educate businesses as a first touch about invasive species regulations, letting them know about new website content and inviting them to an email list.
 - Survey respondents: Was a good starting point for Minnesota in all the different trades (horticultural, bait, pet, MDA-licensed food). Respondents were diverse within each trade.
 - Surveys were responding to DNR, which may introduce bias.
 - Most respondents are concerned about and take responsibility regarding invasive species, a small but important fraction did disagree with the question. Some recommended to increase inspections and enforcement. Retail staff had positive attitudes overall and were very knowledgeable, representing good potential partners.
 - Majority of sellers are not providing educational materials to customers but would be willing to, which is encouraging. Many reported that they do remind customers not to release.
 - Identified a list of resources or initiatives that would help: Identification and best practices guidebook for employees, materials for customers, online training for employees. Also evaluated categories based on past workshops and the CBSM projects (recognition program, enforcement, and customer commitment).
 - Seller concerns: overregulation and banned sale of invasive species, transparency in decision-making, lack of agency understanding, customer and recreationist apathy, and ongoing funding. From industry workshop (aquarium and water garden): lack of non-invasive alternative plants, online sellers pose additional risks, and Minnesota's regulatory system can be confusing.

- Generally, sellers were aware that some species are illegal to possess/sell and do not offer invasive species for sale (self-reported to the DNR).

Invasive organisms in trade continued

- Retail invasive species assessment (Fortin Consulting examination of aquarium and live seafood markets).
 - Risks: Prohibited invasive crayfish were detected in pet stores, identification of crayfish is extremely challenging (study used an expert crayfish taxonomist, who is working on a crayfish identification guide for retailers), evidence of other prohibited invasive species (weather loach, Louisiana crayfish), regulated invasive species are prevalent at pet stores, several hitchhikers were observed in pet stores, stores report they often receive hitchhikers (they freeze, dispose or even give away hitchhikers), many species are sold, and scientific names often are not used (many species have multiple common names).
 - There was a language barrier at some seafood markets, will need attention for future outreach and education.
 - Assessment represents a single snapshot in time.
- Recommendations for working with businesses
 - Keep working with industry to understand how we can help in AIS prevention efforts.
 - Provide periodic education to stores, which was requested in the seller survey.
 - Support industry in providing educational materials to customers.
 - Improve existing educational materials, including providing nice photos online.
 - Improve communications about best practices for disposal, providing options for disposal or rehoming.
 - Educate and collaborate with other invasive species professionals.
 - Create a reward for sellers who do the right thing.
 - Conduct periodic inspections, to address high species turnover.
 - Simplify state AIS regulations and work with other states to consolidate lists of AIS regulations.
- Quick Q&A
 - **D. Jensen** asks, from the smaller business standpoint, did they provide any feedback about the lack of capacity and expertise for resources for creating their own materials? **C. Blanke** says when we distributed the hobbyist survey, we talked with independent retailers, and it did sound like this was a challenge. If we can provide materials, they can help get the word out.
 - **D. Jensen** helped start the Habitattitude initiative, which developed materials for pet stores. We're stilling lacking materials at the point of sale for customers. Something universal for all store types would be valuable. The moss ball incident taught us that most retailers in the northeast were not familiar with the moss ball problem and zebra mussel risk. There's definitely a need there. **C. Blanke** says it would be great to get those materials out and distributed more broadly. **D. Jensen** adds Petco produced a fish compatibility sheet that was helpful.
 - **H. Kalbus** asks, do you know if the retailers have required training before a permit or license is issued? Is there an opportunity there to add training? **C. Blanke** says there's different levels of licensing and regulation for each of these trades. Pet retailers are not licensed and there's no required training. Bait sellers go through an online invasive species training. Horticulture businesses are often inspected by MDA and are primarily focused on noxious weeds. Food businesses have so

many other food safety issues that they likely aren't getting invasive species education. It's hard to identify target food businesses since we're only interested in live sales. We need different approaches for each since they're variable.

Invasive organisms in trade continued

- Aquarium and water garden hobbyist survey
 - 479 respondents to the survey which was distributed through DNR invasive species listservs, website, social media, and hobbyist groups. It does introduce some bias as these groups may disproportionately aware and concerned. Retailers also helped distribute the survey.
 - Most hobbyists know about invasive species and that there are laws and risks associated with their hobby (especially definitions, hitchhikers, and illegal release). More than 90% agreed that they're concerned about invasive species.
 - Highlight positive attitudes as social norms since there's strong support for awareness and prevention efforts.
 - Only 1/3 of respondents knew which species are illegal to possess and sell in Minnesota, many feel like they need more information. Suggests we have a lot of work to do for education.
 - Many sources of live organisms and they are different for aquariums vs. water gardens. Locally owned independent pet stores are top sources for both. Important to note the proportion of respondents who buy species online (15%).
 - Some potentially risky species are fairly common, though many species like crayfish may be naturally occurring natives in ponds.
 - Preferred plant disposal methods included disposal in the trash, composting or sharing/trading.
 - More than half check for hitchhikers and half quarantine new plants and animals, suggesting hitchhikers are common.
 - 21% have ponds near other waterbodies, but very few reported flooding.
 - Majority of respondents would be more likely to euthanize than release their aquarium or pond animals (may be biased since it's a DNR invasive species survey), would go to great lengths to avoid either.
 - Hobbyists are willing to commit to preventing the spread of invasive species. Could work with sellers on this.
 - Hobbyists are willing to buy similar, low-risk alternatives like the British Columbia's "grow me instead" program.
 - Many hobbyists would be more likely to purchase from sellers who've participated in an invasive species prevention program.

Invasive organisms in trade continued

- Recommendations for working with hobbyists:
 - Continue outreach to hobbyists.
 - Gather commitments.
 - Provide information on rehoming and euthanasia, using trusted messengers like well-known hobbyists.
 - Use marketing to increase demand for low-risk alternatives to AIS.

- Equip watercraft inspectors with info on ponds and aquariums, where many people get AIS info.
- Improve existing educational materials, promoting social norms.
- Provide rehoming options.
- Establish a training and recognition program with branded materials.
- Previous three were also recommendations for working with businesses.
- Online sales
 - Many regulated and prohibited species can be found online.
 - Social media and other online sales: Facebook Marketplace, Nextdoor. Education or enforcement can follow up with these if they know the identity of the seller, but it can be hard to identify the seller for the purposes of enforcement. We could contact and educate the seller with a DNR account.
 - GLDIATR: Great Lakes Detector of Invasive Aquatics Trade. Used an automated web crawler software to search the internet for high priority invasive species, then representatives would contact sellers IDd by the web crawler.
 - DNR helped with Phase II, identified 385 sellers (only 1 in Minnesota).
 - 36% of sellers responded to outreach, many were still selling the target species or other target species months after the outreach.
 - Results suggest that we need increased authority or capacity, or partnerships with online sellers such as Amazon or Facebook.
- Suppliers and other out-of-state issues
 - U.S. Customs and Border Protection, USFWS, USDA APHIS each have programs for this.
 - Labeling is a challenge. Requirements do not provide enough information for tracking trade of risky species. Capacity is a problem (inspect 0.5% of what's coming through, 5 inspectors at Chicago's international mail facility).
 - Moss ball incident was an example of partnerships across agencies working well, even though moss balls were inspected under USDA-APHIS and zebra mussels are regulated under USFWS. Sellers removed moss balls from ads and stores. Successful collaborative response. This was federally injurious, may not be so smooth for something locally prohibited but not federally prohibited.
- Symposium on enforcement of invasive species in trade
 - Great Lakes Panel on Aquatic Nuisance Species Organisms In Trade Ad Hoc committee
 - Presentations and case studies on enforcement. A synthesis document is in progress.

Invasive organisms in trade take-aways

- Need improved coordination.
- Funding and training needed.
- Lack of permitting authority. Some states have multidisciplinary coordination groups, ability to conduct enforcement of out-of-state suppliers, authority to require state registration of pet retailers (would be helpful to identify risky sellers), dedicated law enforcement units for invasive species in trade pathways, and do not release signage at accesses (Pennsylvania).
- We have a lot to learn about the risks associated with these pathways.
- Interested in SAISAC thoughts on next steps.

- Funded through GLRI and State Plan Implementation funding from US FWS, none was supported through state funds. This position expires in June.

Invasive organisms in trade discussion

- **D. Jensen** received funding through NOAA Sea Grant for the Great Lakes Symposium. Another take-home from the symposium would be the need for pathway specific identification materials for retailers and enforcement.
- **C. Blanke** asks, does this committee consider trade pathways to be a priority? How do you think these pathways rank with other pathways on your priority list?
 - **H. Kalbus** thinks it's important. It ties into the CBSM program itself, this stuff isn't necessarily new but there's a need to get the education and awareness out. Inspections have been successful, but this is the next step for identifying risky behaviors and next steps. There's a lot of momentum and a major need.
 - **R. Wersal** teaches ecology and invasion ecology in each ecology class, and I teach it (organisms in trade) as one of the most important pathways. You can go into a pet store and get whatever you want. More effort and focus needs to be put in here to keep things out of Minnesota and beyond.
 - **K. Hagsten** says it is absolutely a priority.
 - **D. Jensen** says there are 14 million households in the US with aquariums.
 - **J. Johnson** gets the sense that lake groups assume the DNR already covers this and they would be alarmed to learn about how much actually comes in through this pathway. I would hope to see this boiled down and presented to lake groups, it's a major blind spot for people.
 - **D. Jensen** says over a three year period, consumers had released animals and plants in the environment 50 times, extrapolating from there, there's thousands of these releases happening. It's a huge pathway.
 - **J. Johnson** talked with people at garden stores about their big horse trough water gardens that are selling invasive species and discuss with them about providing signage. Lake association people who are working on Eurasian watermilfoil may not even see how destructive water garden plants can be. There's a major disconnect—people believe if they are able to buy it, its okay, someone must have vetted it.
 - **D. Jensen** says 93% of all plant shipments were contaminated or mislabeled. The high level contamination is very alarming. There needs to be best management practices developed for hitchhikers. For example potassium permanganate for detaching snails and leeches from plants (Water Garden Society).
- **H. Kalbus** asks, in what ways can this committee provide help for furthering this research? What do you see as beneficial? **C. Blanke** says we're getting to the end of our funding for this position, so funding and capacity are going to be an issue. Any ideas for funding and collaboration would be valuable. Also, a list of essential items and recommendations would be valuable. Our plan is to do a lot of outreach on this and think about next steps. Would also be happy to come back after the group has had a chance to digest some of this information. **H. Wolf** says the challenge remains for finding funding. Could get funding through GLRI for a three-year maximum temporary position. It is work that's woven into what we do, but don't have funds to have a position for this specific work. Can we help people at the source to understand regulation? Can we get more focus with enforcement to improve the process for enforcement? We need awareness,

support and ideas for more stable funding. **H. Kalbus** would hate to lose momentum, it would be great to keep moving forward.

Discussion Time for Committee

- **T. Fitzgerald** suggested moving the time for the 2022 meetings to 9am-12pm. The typical 10am start time was to allow for travel for in-person meetings. We typically spend about three hours of time together anyways and this way our afternoons are a bit freer. And we can always extend into the afternoon if we have a lot of things to cover. Members present agree to move the time.

Adjournment at 2:30PM.

Next Meeting to be held at 9am-12pm on January 27, 2022.