

Minnesota Statewide AIS Advisory Committee (SAISAC)

September 22, 2022 Meeting Minutes

Microsoft Teams Online Meeting

Members Present: Charlie Brandt, Chris DuBose, Beto Garcia, Kate Hagsten, Michaela Kofoed, Chris Magnotto, Mike Sorensen, Ryan Wersal

Members Absent: Will Bement, Shelly Binsfeld, Pat Brown, Holly Kalbus, KoriiRay Northrup, Maggie Stahley

Ex-officio Members Present: Meg Duhr

Ex-officio Members Absent: Nicole Lalum, Amy McGovern

DNR Staff Present: Tina Fitzgerald, Doug Jensen, Shane Kirlin, Jake Walsh, Katie Smith, Heidi Wolf

Vice Chair M. Kofoed called the meeting to order at 9:04AM.

Motion to approve agenda: First by M. Sorensen, second by R. Wersal.

Motion to approve Meeting Minutes from August 25, 2022: First by C. Brandt, second by M. Kofoed.

Meeting Summary:

- The Committee learned about the DNR's plans for the 2023 Control Grant Program.
- The Committee reviewed the DNR's list of research needs to be submitted to the Minnesota AIS Research Center's Research Needs Assessment.

Motions & Actionable Items:

- The Committee members present at the meeting approved of the DNR's list of research needs.

DNR Ecological and Water Resources Director Updates:

- **K. Smith:** Legislative proposal to go to Governor. For AIS there are two parts. One is restoring base funding. This will restore a \$375,000 reduction that occurred during the 2019 legislative session. The second addresses significant workload in Region 3 to increase staffing in Region 3 which has the most permits, many local governments, lake associations, lake vegetation management plans (LVMPs), and technical support to counties. Base funding will be a continuation of 2022 levels of watercraft inspection and invasive aquatic plant management grants. Request includes adjustment for inflation so asking for \$400,000. For Region 3, it will be \$430,000 in FY24 and \$720,000 FY25 from the general fund. Not in the "cone of silence" for DNR policymaking – encouraged to get feedback from stakeholders and groups. Governor Walz wants to get information out there beforehand; previous administration was more restrictive. **M. Duhr** asks, will this be for more capacity to do management, or more catching up and administrative? **K. Smith** says the same level of support. The base funding gets us back to what we need and an increase in Central Region. **H. Wolf** adds it is for staff time, 3 people in FY24 and 2 more in FY25 and beyond. These AIS Specialists are needed to respond to growing needs. Central Region permit load has is fivefold to what it is in any other region. It will

not be additional in-lake management directly, but it could increase management on the landscape because of increased capacity. Also, there are more Lake Vegetation Management Plans to review. Keegan Lund's position has been filled by April Londo. Next filling Kylie Cattoor's position. The request is beyond what is already in Region 3. **D. Jensen** asks, any action this committee can take? **K. Smith** says we are filling out all the forms now. Then, they go to the Governor for recommendation. Then, he will decide whether or not to include it in his proposals to the legislature. The forms include stakeholder engagement, could include talking with this Committee about that. Then, when it is time for the legislative session, will need House and Senate, hearing, testify in support, etc.

DNR's AIS Control Grant Program Plan for 2023

Jake Walsh, DNR AIS Research & Grants Coordinator (jake.walsh@state.mn.us)

- Background
 - \$6.2M in 1,300 grants from 2012-2017, 2020-2022.
 - Support invasive aquatic plant management (IAPM) for Eurasian watermilfoil, curly-leaf pondweed, and flowering rush.
 - Broad eligibility for a large number and wide range of local entities. Ex: lake associations, local units of government, tribes.
 - Funds are used for reimbursement of expenses directly related to a control project, including pretreatment delineation survey and treatment under an IAPM permit.
- Funding Support for Traditional Control Grants
 - ~\$400,000 in funds.
 - On-time and complete applications selected by a randomized order until funds are spent.
 - 2021-2022 award formula:
 - Under 10 acres: \$1,500
 - Over 10 acres: \$1,500 + \$150 per acre above 10 acres
 - Grant maximum of ~\$5-10K
 - Not a lot for some larger treatment projects, but do provide some funds. On average provide 30% of costs for a project.
- Invasive Aquatic Plant Management (IAPM) Permit
 - Projects conducted under an Invasive Aquatic Plant Management permit.
 - Selective treatments in offshore public waters that minimize negative impacts to aquatic habitat, native plants, including water quality.
 - Limits on proportion of total littoral area treated.
 - More information can be found online for [Invasive Aquatic Plant Management](#), [MPARS](#), and the [Value of Aquatic Plants](#).
- Pre-treatment delineation survey
 - Statute requires we make sure you are treating plants that are actually there.
 - Required for grant work plan, awards support survey expenses.
 - Must be conducted by qualified third party (i.e., not the treatment contractor) to avoid conflict of interest issues. [A list of contractors](#) is available online.

- Treatment – range of methods – herbicide, mechanical, or combination. Must be done under IAPM permit, which considers treatment selectivity and non-target impacts.
- 2023 Program Details
 - “Business-as-usual” with \$400K in grant funds. In 2021, there was a large amount of extra funds for lake associations, had one time funding around those programs, don’t have those this time.
 - Earlier application period – based on conversations with this committee, opens more time for planning. Will be communicating through our listservs.
 - Application period: November 10, 2022 – December 12, 2022.
 - Would put unofficial award notice to grantees in early January (vs. mid-Late March).
 - IAPM permit application will be a part of grant work plan (not grant application).
 - Likely “traditional” control grants.
 - Delineation + IAPM-permitted treatment.
 - May add starry stonewort to target species list.
 - 81 “two-year” projects from 2022.
 - Must complete project work before 7/1/23.
 - Those projects are not eligible for 2023 program.
- Potential ideas for 2023 – discuss!
 - Approach is to limit spread between lakes.
 - Prioritized new infestations to jumpstart management of newly infested lakes?
 - Prioritized starry stonewort control at public accesses?
 - Or, more generally, invasive aquatic plant control at public accesses?
 - Provide more funding for expensive hand-pulling or DASH?

Discussion

- **R. Wersal:** Ran into situations recently where there is confusion between AIS permit and nearshore permit. Theoretically, they are targeting the same species, e.g. curly-leaf pondweed. Is there a potential for all AIS management to be put under AIS management permits? **H. Wolf** says no, but there should be communication between IAPM (managed by Ecological and Water Resources Division) and Aquatic Plant Management (APM) (managed by Fish and Wildlife Division). Two different folks permitting that, but both follow Minnesota Rule to allow treatment. APM allows for plant removal for access, IAPM allows selective removal for invasive species, which sometimes allows for more control. Total treatment cannot exceed 15% of the littoral area. Reach out to **H. Wolf** if there is confusion. There should be communications between the two because of the littoral limits, but can be challenging. If there is friction, Shane McBride (Aquatic Plant Management Coordinator), Wendy Crowell (AIS Management Consultant) and **H. Wolf** want to address it. Also, we have meetings every fall and are going to have even more this year for more complicated topics like Lake Vegetation Management Plans.
- **K. Hagsten:** She heard from a county AIS person – they are definitely in support of jumpstarting management of newly infested lakes. For example, Bowen Lake, newly found with starry stonewort. Even just a permit around the access to prevent spread within and from lake. They also support doing research on new starry stonewort infestations that aren’t going to be treated, to grow our knowledge on this species.
- **C. Brandt:** Asks to describe measures taken to minimize impacts to other native plants. Also, what is the opinion on the budget size compared to the amount of work to be done? **J. Walsh** says we achieve

selectivity through: 1) highly selective mechanical and herbicides. 2) Selectivity through timing. For instance, curly-leaf pondweed, all treatments in early spring when water is 50-60°F before waters warm, the curly-leaf is starting to grow, but natives aren't. 3) Fall treatments are also options. The grants on average cover 30% of projects. Distribute 150-200 grants per year. Receive 300-400 permits per year for target species. It is a meaningful and helpful amount, but management projects are widespread and large.

Control Grants Discussion Continued

- **M. Duhr:** This is a good direction to go. Bowen Lake starry stonewort is new, small and does not have a lake association. Could just a homeowner that observed a problem apply? Does it have to be a lake association? What about rapid response for lakes without organized groups? **J. Walsh** says these grants aren't so large that we could get in there and treat everything. It could fund some, jumpstart treatment, get them connected with specialists and contractors. The bare minimum for receiving a grant is a federal tax id number, they don't have to be a lake association. Relatively quick turnaround on applying for a tax id. This is another reason we are thinking about providing more funding for more expensive, more selective mechanical controls.
- **B. Garcia:** Does this also cover delineation? That would be first step for small lakes that think they have a problem. **J. Walsh** says yes, up to \$1,000 for delineation, but then it gets trickier as they need to consider the size of the treatment and remaining funds for treatment. It is on grantees to think about their budget.
- **M. Sorensen:** Likes the idea of prioritizing starry stonewort and at public water accesses. What capacity do you have to sort through? It might be hard to define, e.g. a lake without public access gets a first survey vs. a lake that has been monitored and found something new. **J. Walsh** says last year, the one-time program, the new infestation definition was very coarse "infested since 2020." Ideally focuses on lakes with public interest, like public access. There is a lot of work that goes into developing criteria for evaluating proposals, as long as we can be binary about it, that helps. For starry stonewort at public water accesses, some component of the grant application would have to demonstrate it is there.
- **K. Hagsten** (via chat): Asks if a private homeowner could partner with the county (Dana). Similar to and cost share application that is offered through the SWCD? Not sure if there is conflict of funding sources that way or if the county would have to set up a process for that. **J. Walsh** says generally coordinating with those county grants has been pretty straightforward. We do ask grant applications if they are getting funding from other sources. Some counties have some limitations on what portion of a project can be funded, DNR does not have that.
- **C. Dubois** (via chat): Not sure what the County participation would look like. Are you talking about additional funding from the county? We work with the lake associations to match funds from our Lake Improvement District. He's worried about more remote lakes that have no funding sources. The cost for the individual homeowner would be very high. **J. Walsh** says that is a concern as well. Would like to continue those discussions for cases that don't fit the program right now, e.g. rapid response are big and expensive but very valuable.
- **K. Hagsten:** would it be a conflict for a lake consultant to apply for the grant, on behalf of the homeowner/stakeholder? **J. Walsh** clarifies, allow a consultant to manage the grant? **K. Hagsten** says more about what options do they have. She was more picturing the homeowner applying for the grant and then the county matching the funds. **C. DuBose** says (via chat) we work with the lake associations to match funds from our Lake Improvement District. He worries about more remote lakes that have no funding sources. The

cost for the individual homeowner would be very high. **K. Hagsten** agrees that is of concern. If this program became available, it would be crucial that it is available to the more remote areas. **B. Garcia** (via chat) expresses same concern. **K. Hagsten** (via chat) agrees that is a big headache. **J. Walsh** says we have awarded to lake associations, not contractors, as well as tribes and local governments. Contractors do help lake associations fill out the application. Thinking about removing that barrier for those groups. **B. Garcia** (via chat) says the conflict of interest issue is what he was wondering about. It's not a simple problem. **H. Wolf** adds you have to follow a process for tax ID. Concerns and experiences with contractors overselling something, like treating swimmers itch at the wrong time of year. Every part of the state has specialists as well as **J. Walsh** and Wendy Crowell can help. We wouldn't want to expand that ability for someone who doesn't live on the lake. **C. DuBose** says \$400k doesn't go very far, if we get more, maybe set aside for lakes that aren't organized. Infested lakes affect all of us. Some counties could host a grant through their environmental services department. Set aside funds for those that don't have outside funding. **J. Walsh** says these are good ideas, lots of people here to help.

Control Grants Discussion Continued

- **R. Wersal:** To prioritize new infestations, could this be a springboard to create an EDRR (early detection and rapid response) program for the state? **J. Walsh** says those (control grants and EDRR) are definitely two different things. **H. Wolf** adds, there is no money. If we do that, it would come from somewhere else. When the legislature gave us \$800,000 we did 2 year innovative grants, new lake associations, etc. Strive to help us gain knowledge and have long term impacts. What is the outcome of a rapid response? Is eradication possible? If not, what are we gaining? We get more exciting when more funds are available. There is a huge expectation these traditional IAPM grants will be available. **B. Garcia** (via chat) stressed the need to balance with expertise. Is there no way to create an approved contractor/consultant list? **H. Wolf** says we can't promote one business over another, but we can offer training and testing, like aquatic plant identification. They are required to have pesticide applicator license, what else would we regulate? **B. Garcia** says like what was mentioned earlier, people overselling swimmers itch treatments, there has to be an equitable way to show they are following the guidelines.
- **J. Walsh** says contact him if you have thoughts. Your diverse perspectives are essential.
- **M. Kofoed** asks, how expensive is the hand pulling compared to chemical? **J. Walsh** says 2x to 10x more expensive. **M. Kofoed** says as a fisher, the herbicides end up taking out whole lakes. Fisheries that were good disappear because habitat disappears. If she sees a treatment buoy, she doesn't fish there anymore because there are no plants. Very much supports hand-pulling. **J. Walsh** says this a bigger discussion we always have at these meetings and DNR meetings, there are so many other things going on in the lake. **R. Wersal** says he appreciates the sentiment behind it to increase funding for things like DASH (diver assisted suction harvest) or hand removal, but something to consider is that if we provide more funding, there is less opportunity to address more infestations around the state with a smaller pool of money. DASH is great for starry stonewort, especially smaller populations. In a state where we have vast water resources and increasing invasive aquatic plant populations, it is a tough line. **J. Walsh** asks, what about just for starry stonewort? **R. Wersal** says for small populations yes, not large scale like Koronis. There is room to work there. Integrated and non-chemical options are good, but looking at the whole program, it might limit the control of species overall. **J. Walsh** says starry stonewort is in its early stage, any work we can do to prevent it from becoming like curly-leaf, the better. **R. Wersal** says management timing is the big issue for starry

stonewort; don't want it to turn into a curly-leaf pondweed issue. Next 5-10 years will be critical for prevention. **J. Walsh** adds he would like to talk to **R. Wersal** and other researchers about starry stonewort.

Member Updates

- **B. Garcia:** No updates.
- **C. Brandt:** No updates.
- **C. DuBose:** Reorganizing water resources and lake improvement district people, Jerry Spetzman retired, have new people in new roles including Suzanna Wilson-Witkowski. Phragmites spraying happening now.
- **K. Hagsten:** Starry stonewort removal via DASH – they have removed 8,500lbs from Oak Haven and 1,500lbs from Steamboat Bay Anderson. They have 6 CD3 units out, so far 468 tool uses.
- **M. Kofoed:** No updates.
- **M. Sorensen:** Working with Phragmites, treating 5 spots, working with Julia Bohnen, UMN. MAISRC Showcase yesterday, highly encourage to check it out. They bring it down to a great level. Misses the in-person option.
- **R. Wersal:** Academic mode.
- **M. Duhr:** Sticking with an online showcase from now on, but planning to do 2 regional in-person meetings with more specific topics to the region. Fall conference and speaking season is ramping up. Volunteers doing spiny waterflea surveillance, nets are getting out there, and so far none found. Thanks for your attention and feedback on the research needs assessment!

DNR Updates:

- **H. Wolf:** UMISC end of October, many DNR staff will be there. The Modified Unified Method in Mississippi Pools 5-8 to remove invasive carp is happening next week. We are doing tagging with this too, that's new. USFWS is really interested in tagging to track movement. Water appropriation and mine pits – they are infested with zebra mussels and they want to dewater, we are working on that. Also working on requests to import invasive carp for dog food. Control grant planning. Lessard-Sams Outdoor Heritage Council, DNR will be talking about invasive carp. Successful presence at the State Fair.
- **T. Fitzgerald:** The State Fair booth covered aquatic and terrestrial invasive species. A lot of questions about buckthorn and purple loosestrife this year. Best part is the temporary tattoos – if you want some, she can mail them to you! Take the Pledge program has 400 signed up online, only 5 visitors signed up during the fair; needs to be more aggressively promoted in different ways.
- **S. Kirilin:** Filling opportunities for wetland resource officers in northeast Minnesota and metro area. Graduated 18 officers from academy to be stationed later this fall. Liaison for the group will transition to Major Robert Gorecki.
- **D. Jensen:** Co-chairing UMISC, heavily involved with planning. Great Lakes Panel OIT ad-hoc committee met, issue gaining more traction. Mississippi River Basin Panel, attended parts of meeting and gave presentation on branding. Report on Lake Superior Lakewide Management Plan is available.

Review of DNR's Draft Research Suggestions for the MAISRC Research Needs Assessment

- **T. Fitzgerald** describes how the Research Needs Assessment process has changed. In 2018, DNR and this Committee submitted separate lists. In 2020, this Committee reviewed the DNR's list of research needs and

submitted a jointly approved list to MAISRC. DNR staff have identified management needs for 2022 and is looking to this Committee for review, feedback and additions. During the last meeting, **C. Mattke** described the process and how it works.

- The Committee reviewed the four priority topics (below) keeping in mind scale, scope and research questions. **T. Fitzgerald** reminded members to consider projects underway or will be funded in the future (see references from MAISRC).
- Feedback gathered ahead of the meeting from individual members and a summary of the discussions below were included directly in the DNR's 2022 research needs list as comments and were provided to the DNR for review and changes.
- DNR staff reviewed the Committee's feedback, incorporated changes into the list, provided responses questions posed, and provided justifications for changes made/not made. This track-changed document was provided to the Committee approximately a week after the meeting.

Aquatic Plants

- **K. Hagsten:** There were lots of good research ideas for invasive aquatic plants. She expresses concern for European frogbit; could be added to cross-cutting in the water garden theme. **R. Wersal** agrees.
- **C. Brandt:** Would like to see aquatic plant management to include water quality impacts. What are the impacts of herbicides and pesticides on fish? Based on a quick list of 40-50 lakes he's recently fished, if he could go back 10 years, lakes today have dramatically changed; shocked to reflect upon vegetation composition or lack thereof. This is completely anecdotal, but needs scientific basis to quantify reasons for impacts. Research findings could be used as springboard to improve management. **M. Kofoed** says she can see where herbicides have been applied; if she sees a marker she will leave because there are no weeds and no fish. When controlling for Eurasian watermilfoil, herbicide treatment will take out all the weeds like in Lake George, where no weeds are left, big change in ecosystem. Realizes that the target is not whole lake treatment, but this can be the result. **C. Brandt** says wind drift of herbicides is an issue especially when applied on windy days. Pellet treatment is more focused, has questions about that compared to efficacy of surface application.
- **T. Fitzgerald** stresses that this idea needs to be developed into a research question for MAISRC.
- **R. Wersal** responds that not all herbicides should be treated equally; impacts on vegetation depends on what chemical used and water quality characteristics such as dissolved oxygen, pH, turbidity, etc.
- **B. Garcia** (via chat): asks if there is a way to correlate herbicide application with water quality data?
- **M. Kofoed** says that bullets #1 and #2 address her concerns. **B. Garcia** emphasizes the need for before and after treatment data.

Invasive Fish

- **C. Brandt:** asks about snakehead viability in Minnesota. **D. Jensen** says that viability is a national concern and there is a national plan to address the problem. While there are no reproducing populations in Minnesota, a snakehead was discovered in the Wisconsin River a few years ago.
- **T. Fitzgerald:** points out that goldfish releases are a growing concern and knowing impacts will help with outreach prevention messaging. If there is any more feedback, it is needed by the end of the week so it can get to MAISRC by the end of the month.

Invertebrates

- **B. Garcia** asks about which invasive crayfish are of concern. **H. Wolf** replies rusty crayfish and red swamp crayfish. **T. Fitzgerald/D. Jensen** add that red swamp crayfish case study from Germantown, WI, where nearly a \$1M and several years of intense control has eradicated them from three ponds. **H. Wolf** comments that DNR regulations allow importation of red swamp crayfish for use in crayfish boils with a permit.
- **B. Garcia**: brings up issue of crayfish nematodes. **D. Jensen** says he's co-author on a draft paper concerning nematodes in crayfish. His co-authors are waiting for positive identification of nematodes sent to a researcher in LA, but have not heard back in months. There are at least 4 parasitic nematodes of concern, but until we know the identification, we can't predict potential impacts.
- **K. Hagsten**: asks about impacts of invasive crayfish and starry stonewort.
- **M. Kofoed**: wonders if starry stonewort (as a food source?) could facilitate greater abundance?
- **B. Garcia** mentions invasive parasites, but not sure which section they would fit in. **T. Fitzgerald** says the microbes section covers parasites.

Microbes

- **D. Jensen**: reminds members that all species identified are fish parasites and diseases, except didymo, which is a diatom.
- **M. Sorenson**: likes the list, since there is a need to address them before they become a big problem. **D. Jensen** points out that the first species identified is the cause for bacterial kidney disease. Discussion ensued about the need for baitfish sampling for microbes.
- **R. Wersal** mentions the need for research into avian vacuolar myelinopathy.
- **R. Wersal** mentions studies by Dr. Susan Wild has identified a cyanobacteria on invasive hydrilla that bioaccumulates in the food chain, kills birds that eat it and in turn kills eagles that eat the dead birds. This phenomenon has been documented particularly in the southeast. **D. Jensen** points out that the closest infestation of hydrilla to Minnesota was in Indiana (Manitou Lake), but has been eradicated. **M. Sorenson** (via chat) shares [an article from Science](#).

Cross-Cutting

- Emphasis on pathways such as docks/lifts and non-target impacts as discussed earlier.
- Members felt that emphasis on non-target impacts is important and understanding impacts on trophic scales like the use of copper-based control methods is also important. Study does not include potential impacts of copper-based boat paints.
- **D. Jensen**: reminds that for this and future suggestions, they should consider both the capacity and emphasize need; research ideas are welcome from anyone.
- **B. Garcia**: asks if there are other research priorities by different organizations. **D. Jensen** replies that both the regional Great Lakes and Mississippi River Basin Panels have research priorities and may have funding or are seeking funding for projects to address regional needs.
- **M. Sorenson**: more information about how commercial minnow and leech trappers are being addressed from an indigenous equity point of view. **H. Wolf** says that pathway is regulated. Commercial trappers are trained by the DNR, require permits, and include use of tagged gear only on infested waters.

Consensus to approve list with additions/comments included: Motion: B. Garcia, Second: R. Wersal.

Discussion Time for Committee and Wrap Up:

- Add to future agenda discussion by Wendy Crowell and Shane McBride to discuss permitting and control of invasive and aquatic plants.
- Members like the hybrid approach to meetings for more flexibility.

Adjournment at 11:49 Central

Next Meeting to be held at Sauk Rapids DNR Office, 9 AM – 3 PM, November 3, 2022. On the agenda for the next meeting are Wendy Crowell and Shane McBride to discuss permitting and control of invasive and aquatic plants.