

Minnesota DNR AIS Advisory Committee (AISAC)

April 28, 2022 Final Meeting Minutes

WebEx Online Meeting

Members Present: Bruce Babcock, Shelly Binsfeld, Will Bement, Charlie Brandt, Beto Garcia, Kate Hagsten, Holly Kalbus, Michaela Kofoed, Maggie Stahley, Mike Sorensen

Members Absent: Pat Brown, Chris DuBose, Chris Magnotto, KoriiRay Northrup, Ryan Wersal

Ex-officio Members Present: Nicholas Phelps

Ex-officio Members Absent: Nicole Lalum, Amy McGovern

DNR Staff Present: Katie Smith, Jan Shaw Wolff, Heidi Wolf, Tina Fitzgerald, April Rust, Sean Sisler, Adam Doll, Jeannine Howland

Chair H. Kalbus called the meeting to order at 9:04AM.

Motion to approve agenda: First by C. Brandt, second by K. Hagsten.

Motion to approve Meeting Minutes from March 24, 2022: First by M. Sorensen, second by K. Hagsten.

Meeting Summary:

- Katie Smith, Director of EWR, joined and introduced herself and thanked members for their service on the Committee.
- The Committee learned about bait harvesting permitting and training requirements related to preventing the spread of AIS through these activities.
- The Committee learned about and discussed aspects of the DNR Watercraft Inspection Program, including recent data, partnerships, and training.

Member Updates:

- **B. Babcock:** Interested in learning more about AIS and helping out throughout the state. Will be fishing and guiding on Lake of the Woods in the season.
- **K. Hagsten:** CD3 stations set up at some accesses – interested to see what kind of data they will get from the stations. Looking forward to getting starry stonewort monitoring plots set up and using the DASH unit.
- **M. Stahley:** Works on controlling common carp populations and in winter works in ice fishing. Will be doing water quality monitoring and carp work with Riley Purgatory Bluff Creek Watershed District soon.
- **M. Kofoed:** Installing weed stick stations and selling them to county programs. Excited for fishing tournaments coming up.
- **M. Sorensen:** Just started new job as a water resources specialist with Robbinsdale. Will do mixture of stormwater and AIS work and running the flocculation treatment plant for the lake.
- **S. Binsfeld:** Enjoyed participating in the Earth Day celebration at Long Lake in Orono and interacting with the community.

- **W. Bement:** Fisheries water program at White Earth. Bait harvest in full swing. Been getting the word out on AIS with bait harvesters and working with tri-counties for co-management and co-sampling plans. Been working with BIA on veliger sampling. Education out to the public through community events and math and science program extensions – several weeks of programs including AIS talks among other natural resource programs.
- **H. Kalbus:** With Le Sueur County, administers the AIS program. Works with lake associations and runs the watercraft inspection program. Enjoys creating programs. Watercraft inspectors are getting up and running for the season and getting trained.
- **C. Brandt:** No AIS updates. Been seeing Phragmites all over after completing a training.
- **B. Garcia:** Building a boogie board based UAV to do aquatic vegetation mapping. Listened in on St. Anthony Falls legislative meeting. Emergency prevention to keep it from breaking apart. Trying to figure out ownership of the dam. Challenging problem to keep on your radar. St Anthony Falls reservoir provides water to Minneapolis and 7 major suburbs. So if dam fails there is no backup water supply – only have a 3 day supply. Meeting is on YouTube, happened last Thursday morning. **K. Smith** says the DNR has been involved in discussions with USACE, Xcel Energy, and legislators on the cutoff wall topic.
- **N. Phelps:** We are continuing to review proposals for projects that will start in 2023. Really excited for the research coming up! The field season is about to ramp up. If anyone has interest in connecting with research teams out in the field or coming to the lab on the St. Paul campus, let him know (phelp083@umn.edu) and we can try to set something up.

DNR Updates:

- **J. Shaw Wolff:** Appreciates the service of Committee members. Appreciates active and productive AIS grant season and all the AIS work and staff work.
- **H. Wolf:** Shared Modified Unified Method (MUM) photos for capturing and removing invasive carp in the Mississippi River (completed the third successful MUM). Moves carp from one area to another, harvest and remove the invasive carp.

Bait Harvesting and AIS Prevention

Sean Sisler, DNR Commercial Aquatic Programs and Fish Health Consultant

- Gave summary of bait harvest AIS issues. The DNR contracted to do an assessment and report on bait importation and risks. After 10 years of intensive testing, Minnesota doesn't have any VHS in inland waters. Minnesota has new VHS testing zones (major watersheds) that can be declared VHS free.
- Working on project to raise golden shiners in the state – have preliminary data showing how they can be raised successfully in Minnesota.
- Reviewing permit conditions for harvesting in infested waters. Dealers can harvest in any water they have legal access to, but an exception to that is water bodies with zebra mussels. Initiated outreach project just prior to COVID-19. Just finished it this winter. One outcome was that they were interested in being able to use traps in zebra mussel waters. The DNR issued permits in 7 pilot lakes that have good spottail shiner runs.
- **W. Bement** asked about the pilot project and scope of harvesting in any waters and about tagging equipment procedures. What are neighboring states doing in regards to VHS?

- Need a permit to harvest in infested waters. The DNR issues those. Permit conditions are related to the AIS present, the species they're harvesting, and requirements for equipment.
- People can't bring live minnows into the state. Any dead minnows brought in need to be tested for VHS.
- **S. Sisler** works with April Rust to offer AIS training and training certificate for all harvesters. Minnow dealers need to bring water with them to transport minnows. In Minnesota you can't move water with some specific exemptions. Bait harvesters use well water to haul minnows and use tempering buckets to transition minnows from lake water to municipal water. Anglers need to bring clean water with you if you want to save them. If not going to use them, encourage anglers to give unused bait to another angler or throw it in the trash.
- **S. Sisler** shared image of bait harvesting equipment tags and shared permit requirements for pilot project.

Watercraft Inspection Program and Training Updates

Background and Overview of the DNR's Watercraft Inspection Program

Adam Doll, DNR Watercraft Inspection Program Coordinator

See power point for additional information.

Program History

- The program we have today started with legislative changes in 2011. Given authority to legally require inspections and legal authority to deny launch. Everything was voluntary before that. Education is first and foremost. Requirements are helpful, as are a second set of eyes. **A. Doll** knows what to do, but human error is a thing, so even ones you see every day, the more people looking, the more we can catch the human error aspect.
- Currently the number of inspectors fluctuates between 800 to 1000 on an annual basis. 2021 was the first time total inspections decreased. Likely approaching capacity. Most have a long program and some are gained and lost each year.
- Statewide inspection coverage expanded in 2014 due to the AIS Prevention Aid funds.

DNR Inspection Program

- Annual goal to hire 46 Level 1 and 46 Level 2 staff, a total of 92.
- Level 2's always works with a Level 1, for safety using heavy equipment. Also helps when one is busy doing a decontamination, the other can do inspections.
- Level 1's are interns and have to be students seeking a degree. Others interested can be forwarded to local governments.
- **A. Doll** coordinates the program statewide – helps shape and create general policy, works with 4 regions to be on the same page, and works with LGUs. 4 staff supervise 92 staff. Regional questions can be directed to supervisors, they are responsible for the on the ground direction for their area.

Where DNR Places Inspectors

- The challenge: There are more waterbodies and accesses than we can put inspectors at.
- The Tier List helps prioritize locations and allows for flexibility due to staffing changes, ability to inspect at places we may not have covered in the past, accounts for the need of two staff to run a decontamination unit, and ability to go to places where a decontamination unit wouldn't fit or isn't needed much.

- Tier 0 = high use zebra mussel waters with a decontamination unit, which is proven to kill zebra mussels.
- Tier 1, 2, 3 = Solo inspectors, for waters that are infested with starry stonewort, zebra mussels and/or spiny waterflea.
- Tier 3 are exploratory hours which means the DNR has not been to or has been requested to be there. Since we don't know what the inspection/hours are if we have not been there, we need to collect that data.
- For local government (LGU) coverage, some use the AIS Explorer Tool. The DNR supervisors uses the Tier List to determine coverage for their area, then they coordinate with LGUs to cover as many accesses without duplicating efforts.

	Tier 0	Tier 1	Tier 2	Tier 3
Infestation Status	Designated infested water with zebra mussels. Decon accessible. More information found on decon tier list.	Designated infested water with starry stonewort	Designated infested water with zebra mussels (not accessible with decon) and spiny waterflea.	Designated infested with Eurasian watermilfoil, or exploratory accesses with no recent inspection data. Exploratory accesses assigned as supervisor discretion
Lake Use	Lakes are high use	Lakes are high use	Lakes are high use	Lake usage is unknown
Access Use	Accesses are high use (>0.9 IPH)	Accesses are high use (>.9 inspections per hour)	Accesses are high use (>.9 inspections per hour)	Access usage is unknown
LGU Coverage	Accesses with high LGU coverage receive 0 hours, medium coverage receive 50%, and low coverage receives 100%. Supervisor discretion.	Accesses with high LGU coverage receive 0 hours, medium coverage receive 50%, and low coverage receives 100%. Supervisor discretion.	Accesses with high LGU coverage receive 0 hours, medium coverage receive 50%, and low coverage receives 100%. Supervisor discretion.	Accesses with high LGU coverage receive 0 hours, medium coverage receive 50%, and low coverage receives 100%. Supervisor discretion.
Percent of Days	45%	20%	20%	15%

Background and Overview Continued

Partnerships

- **A. Doll** is a committee member for decon think tank in conjunction with the Western Regional Panel. They are developing standardized procedures and protocols for inspection and decon. In these discussions, he emphasizes that Minnesota gets so many inspections because of our partnerships. We hire the most people and conduct the most inspections in the country; typically it is either us or Colorado. That dip in inspections in 2021 was seen across the country.
- The Delegation Agreement allows DNR to give authority in exchange for doing the same inspection procedures as the DNR.
- Currently there are 66 LGUs. The largest hire is 100+ by Three River Park District; some hire 60 to 80; smallest LGU is a Lake Improvement District, we have 4 or 5 of those. 800 partner inspectors trained annually.

Partner Inspection Numbers

- Pie charts of staff size, inspection hours, and accesses.
- Partner numbers help show how we can be so successful in Minnesota with the number of inspectors and inspections.
- Many small programs (staff, hours, accesses) add up to big results.

2021 Inspection Data

- Data is collected through a mobile application, harvester data, using them since 2012. A limitation is that there is no memory (e.g. have to record the access again and again). Advantages are GPS (e.g. managers can use it to find people trying to game the system) and photos (e.g. for enforcement – have photos and survey data). Data is available in raw format through FTP site. Working to improve ways our partners interact with the data; same website where they post decon locations/times; they can now review and edit their data more easily.
- Data
 - 4 types of inspections: entering, exiting, courtesy (not launching there), and lift (because these are different/complex).
 - June and July are always the busiest and it tapers off on either end. Most interns leave before Labor Day.
 - 538,595 total inspections were completed in 2021 and 606,726 inspections in 2020.
 - LGUs are doing the bulk of inspections: 471,615 inspections were completed in 2021 by 811 inspectors; 549,870 inspections in 2020 by 756 inspectors.
 - DNR: 66,573 inspections were completed by 61 inspectors; 56,813 inspections in 2020 by 64 inspectors.
- Items Found
 - State law requires all plants to be removed. Most violations are plants.
 - Inspectors recorded “something found” during 6,516 entering inspections (1.9%); 7,640 occurrences in 2020 (2.1%).
 - 3% drain plug violation rate. Inspectors record whether or not drain plug was in and whether or not the boater put it in when they arrived.
 - 95% of entering inspections followed all MN AIS laws.
- Decontaminations
 - 4,478 decontaminations in 2021; 3,034 decontaminations in 2020.
 - 2,299 partial decontaminations in 2021; 1,424 partial decontaminations in 2020.
 - 1,443 courtesy decontaminations in 2021; 837 courtesy decontaminations in 2020.
 - Always trying to increase and working with staff to “sell” decontamination and help them be more confident in doing and promoting them.
 - Most of the time we don’t use high pressure, only to remove attached things. If we are not finding something, but still doing a preventative decon, we are not going to use the high pressure. Trained to not use pressure on boat carpet, decals, flexible tubing, etc. In other words, not just absent minded spraying, they are targeting residual water areas typically with low-flow hot water.
 - Also trying to get more buy-in to do ballast water decontaminations. These boats are expensive and challenging, but they have the most residual water and greatest likelihood of veligers to be found. **A. Doll** would love to see this improved. The type of equipment we have to do the decontaminations can sometimes limit this too, but some companies are starting to develop new equipment.
 - A courtesy decontamination means the boater is taking time out their day to seek us out. The takeaway is to encourage boaters that are leaving and going to another lake in 48 hours to get a

decontamination, because that is how long live veligers will potentially be in. Another recommendation would be to dry dock it before moving it.

Discussion

- **M. Sorensen** says LGUs are supplemented by lake associations and other groups, any anecdotal evidence over the last 10 years if those are still happening? Increasing or decreasing due to infestations? **A. Doll** says the DNR does not track contributions or how they are funding inspections. Christmas Lake inspections were funded by Shorewood before and after zebra mussel infestations. Not aware of groups stopping inspections because of infestation occurs. Most small groups are doing this because they are funded by a lake association. Another example is the Crow Wing County model. They send out a report of where they are going to be, they offer funds to the lake association, then the lake association has to funnel through a township. T. Fitzgerald adds that Hubbard County gets \$100,000 mostly from lake associations, they received that before the aid and still get it today.
- **B. Garcia** asks, are a majority of funds for salaries? Counties have minimum wage rules. Don't know what you are paying. **A. Doll** says yes, salaries are big portion. DNR funds also goes to training related purchases (manuals, survey). Level 1 inspectors are paid \$15/hour because DNR mandated a minimum wage for interns. Level 2 inspectors are seasonal, with larger operating costs of fringe and insurance. They work April through October and start around \$17/hour. We collected salary information from local governments during off season meetings. The meetings are opportunities to network with one another, e.g. **M. Sorensen** presented about how he engaged staff and trained staff throughout the season. No matter how good of a job Jeannine does, they are minimally trained. DNR supervisors continually train our interns throughout the season and encourage other groups to do that too. The Delegation Agreement gives authority to LGU, which can move to a contractor if they hire one. There are contracting companies that do this. There is an increase in cost from staffing company - \$25/hour. Meetings help LGUs know about it and coordinate. **B. Garcia** adds that Ramsey County increased wages, but the budget was the same. **A. Doll** says it was the same impact for us, DNR had to reduce the number of people hired and reduced hours. The number of people trained hasn't changed much.
- **B. Garcia** says they also saw the number of inspectors stay the same, but the number inspection go up. **A. Doll** says they could be more efficient, could be staff turnover, there is a general struggle to hire people at \$15/hr. **M. Sorensen** says Minneapolis was impacted by minimum wage – a tiered increase over 5 years. A gradual increase, we could prep our funders. **H. Wolf** adds it is \$17.31 starting now.

Inspector Training by DNR

Jeannine Howland, DNR AIS Training Specialist

The following information is a combination of power point content and presentation comments.

Background

- Pre-pandemic all training was held in-person.
- Level 1 Training: 6 hours of in-person classroom style training. About 30 minutes was held outdoors. Exam –80% passing score and graded in class.
- Level 2 Training: 5 hours of in-person combination classroom style and outdoor hands on. About 2 hours was classroom training. 3-4 hours was hands on training with decontamination units. Exam –80% passing score and graded in class.

Issues with Training

- Lots of information all at once.
- Same information given each year.
- Videos were not made in-house (e.g. Colorado and Lake Mead), which required clarification after to be specific to Minnesota laws and procedures.
- Returning inspectors had to take the same training every year.
- Large classroom size – some would have 40+ inspectors.
- Two trainers to cover whole state. Relied heavily on Regional staff to help at or provide trainings separate from trainers.

Improvements to Training

- 6 different training videos were scripted out
 - Conflict (difficult boater)
 - Decontamination
 - Entering Inspection
 - Exiting Inspection
 - Violations
 - Poor Inspection
- Fall of 2019 –MN DNR Training videos were recorded!

2020 Training

- Training was moved 100% online.
- PowerPoint was broken into different training videos.
- Level 1 –11 videos; 7 were PPT Voiceover and 3 DNR Training videos.
- Level 2 –9 videos; 8 were PPT voiceover and 1 DNR Training video.
- Training Staff and Regional Watercraft Inspection Staff worked on voiceovers.
- Training was produced very quickly – about 2 weeks.
- YouTube videos made available by links on a hidden DNR webpage.
- Exam -80% online survey form. Level 1 had one exam and Level 2 had two – based on training materials and on scenarios they could encounter.

Difficulties with 2020 training

- Inspectors would not watch videos –Honor System.
- No way for us to track training was being completed fully.
- Exam: Had to be downloaded and graded by training staff. If someone failed they would have to retake it, and that process took a while to communicate.
- Level 2 training issues:
 - No new Level 2s were authorized, had to be authorized in 2019 season.
 - Could not hold a hands-on component due to pandemic restrictions.
 - Equipment could damage watercraft/equipment if not trained properly.

2021 Training

- Training stayed the same.
- Added an in-person component for Level 2 training.

- How do we track training is being fully completed?
 - Contract with AccordLMS for 1500 active learners.
 - Had to complete each training module before moving to the next.
- New training website was launched in Late June
 - About 120 level 1 inspectors took training on new platform
 - 41 Level 2 inspectors took training on new platform

Issues with 2021 Training

- Switched training platforms mid-season – Data management was difficult.
- Videos were the same as previous year – Many errors in voiceovers.
- Technical issues – Tech support relied on training staff. Internet connection reliability.
- 2nd year of no in-person training, except for new Level 2 operators.

What to do next year?

- Lots of options, lots of pros and cons for all in-person, hybrid or all online.
- Many people liked the all online, with the flexibility of when to take the training. The LGUs preferred online, because it is easier than getting all their staff to one location.
- Starting lose touch with Level 1s – more complaints about training and conflicts out in the field.

Hybrid Training

- Level 1
 - Online and in-person to be completed by 1st and 2nd year inspectors.
 - Online training to be completed by 3rd and 4th year returning inspectors.
 - Followed by 5th year hands-on refresher.
 - This is consecutive authorization years starting in 2020.
- Level 2
 - Online and in-person training for inspectors not authorized in the previous year.
 - Online only if authorized in previous year.

2022 Training – Hybrid

- Online training via AccrodLMS: Level 1 Online Training is about 3 hours. Level 2 Online Training is about 1.5 hours. PowerPoint training videos were redone. Articulate software was purchased to create new video format.
 - Training tracking works better – can leave and re-enter at same point; tracks everything a lot better. Issues are now more related to internet connectivity – it is not refreshing that they completed the part for 10 minutes delay. Faster connection faster tracking.
- In-person component for Level 1 and new Level 2 Inspectors (3 hours).
 - Level 1: Find the invasives, AIS introductions with samples, watercraft terminology, survey work with scenarios and violations, conflict resolution and evaluation form.
 - Level 2: Safety procedures, set-up and how to operate the decontamination unit, demonstration by trainer, and hands-on experience for each inspector.
- Keeping total amount of time in training about the same as in 2019 and earlier.
- A few LGUs partnering with marina, to practice on different types of boats.

What's next?

- Evaluate current online training.
- Evaluate in-person training.
- Update manuals to match online training.
- Update and create new online training content.

Discussion

- **B. Garcia** asks, is there a centralized spot where these positions are posted? **A. Doll** says no, not for all. DNR positions are posted on the state jobs posting website. Interns are posted in January. We will run one posting now. Diminishing returns at this time, since most college students already have internships. Level 2 is posted as law compliance representative.