

Committee Report: AIS Operating Team 10-25-18

Summary of 2018 Accomplishments

Hubbard County Environmental Services – AIS Program & Hubbard County Coalition of Lake Associations (HC COLA)

1. Public Awareness

- Continued Radio PSAs on KDKK, KXXX, KPRM Radio.
- Utilized Lead Inspector employee to engage resort owners/guests and other local businesses.
- In coordination with HC COLA, distributed Hubbard AIS Identification Cards (*shared production cost*) and Decon Cards to numerous local businesses/*establishments, lake associations, & at County Fair*
- *Co-sponsored MAISRC Update & Legislative Forum held at M-State with input from HC Envir Svcs too*
- *HC COLA Column in Park Rapids Enterprise*
- *HC COLA Meetings feature Educational Speakers and are open to the public; resources on website*
- *Downtown Business Association Membership – AIS Educational ad in Park Rapids Walking Map*
- *Lakes Area Chamber of Commerce (CofC) Discovery Guide Advertisement on AIS Prevention/on website*
- *ACTION Park Rapids Lakes Area participation increased collaboration opportunities:*
 - *Community Education – 2 Adult Classes - Protecting Our Lakes & Rivers*
 - *Comm Educ – Century Adventures – K-5th Grade rotated through 7 Water-related stations*
 - *Library – Lakes Game for Kids – How Your Decisions Can Protect Our Lakes & Rivers*
 - *Kinship Mentors –Resource Document created on Educating Children on Good Fishing Habits*
- *Plastic Flyer Container Mounted at Wolf Lake undeveloped access with flyers to help educate on SSW*
- *Billboard on East Hwy 34 near Brauhaus German Restaurant – family on pontoon – AIS prevention*
- *Hosted Viewing 2-day AIS Summit at Northwoods Bank Community Room*
- *30-second movie ad for summer – personal watercraft AIS prevention*
- *Some lake associations provided members Wildlife Forever articles to promote Clean-Drain-Dry*
- *Social Marketing Team including DNR AIS Specialist -identifying group (riparian owners) & message.*

2. Prevention (Watercraft Inspection and Decontamination)

- Conducted 14,752 hours of watercraft inspection. 8410 funded from State AIS Prevention Aid funds. 6342 hours of supplemental inspection time was funded by lake associations \$86,669.50 and Townships \$32,781 for a total of \$119,480.50 of supplemental funding
- Decontaminated 141 watercraft at Hubbard County FREE Watercraft Decontamination Station.
- Coordinated law enforcement support for several watercraft violations.
- *Kabekona Lake Association implemented an I-LID Launch site monitoring system to raise AIS awareness and better understand launch site traffic 24/hours per day.*
- *Kabekona aided lake service provider in Laporte, trained by DNR in hot water pressure washer*
- *Continued discussion for inspector scheduling to increase effective coverage while supporting a standardized schedule when possible*
- *Partnered to monitor fishing tournament activity to minimize the AIS risk.*
- *HC AIS Volunteer training for 15 HC organized w/ DNR; provided service at public accesses a few times.*
- *Supported Wright County Pilot in letter to Governor and DNR Commissioner - following progress.*

3. Early Detection

- *Developed new “Eyes on the Water” logo that will promote a broader message of protecting the health of our lakes, including water quality in addition to shielding our lakes from aquatic invasive species.*
- *Constructed & distributed PVC tubes to area lakes for sampling adult zebra mussels. Also taught Girl Scout Troup how to make ZM sampling tubes; theirs provided to local resorts through CofC member-to-member contact, HC COLA lake associations used at public accesses & AIS Identification Class Attendees*
- *Increased AIS Citizen Watch Volunteers participating in HC COLA’s “eyes on the water” campaign to 220 volunteers from 40 lakes including 3 Becker County lakes.*
- *In 2018, 24 volunteers were trained in AIS identification and lake monitoring; bringing the total number of trained early detectors to approximately 213 since 2006. Partner: UM Hubbard County Extension*
- *Coordinated 2018 Starry Trek searching for Starry Stonewort (SSW) & other AIS at 10 selected public access sites in northern Hubbard County. As a result of HC COLA’s participation in the state-wide Starry Trek, SSW was discovered in Wolf Lake in northern Hubbard County. Did 2nd Trek in HC. Grand total of 20 lakes checked. HC COLA member lakes were encouraged to check their own lake public accesses.*
- *19 lakes participated in zebra mussel veliger sampling (ZMVS) in 2018; veligers tested positive in one Garfield Lake water sample for the 2nd consecutive year demonstrating the importance of ZMVS.*
- *HC COLA recruited 16 early detectors/lake monitors in our outreach efforts at the Hubbard County Fair.*
- *14 lakes have suspended zebra mussel settlement samplers at their public access.*

4. Rapid Response and Containment

- *Continued budgeting of \$30,000 to Rapid Response Fund (RRF) for 2018.*
- *Provided additional 160 inspection hours to Garfield Lake for increased inspection hours, funded via RRF.*
- *Using the Hubbard County Rapid Response plan as a framework, supported Rapid Response activities on Garfield, Bad Axe and Wolf Lakes.*
- *Continued Veliger testing on Garfield Lake to better understand ZM infestation*
- *Installed a counter at Garfield launch site to determine usage dates and times as future staffing input*

5. Mitigation and Management

- *Individual lakes continued to manage and fund existing infestations, with no State AIS Prevention Aid funds.*
- *Initiated along with newly formed Garfield Lake Association members conduct through the MN DNR Fisheries an ongoing study for zooplankton / phytoplankton analysis in open water season due to ZM*

6. Administration

- *AIS Operating Team worked closely with Hubbard County Environmental Services AIS Program to support a healthy and effective Countywide AIS program.*

Summary of Plan for 2019

Hubbard County Environmental Services – AIS Program & Hubbard County Coalition of Lake Associations

Notes:

- 1) *Continue the efforts in 2018 that were effective.***
- 2) *List below is not all inclusive as of 10-25-18. Also much to explore yet with Hubbard County Environmental Services Groups as cost share potential partner.***

1. Public Awareness

- Continue Radio PSAs on KDKK, KXXX, KPRM Radio.
- Continue to Utilize Lead Inspector employee to engage resort owners/guests and other local businesses.
- Partnering with HC COLA for advertisement at Park Theatre
- Continue to distribute Hubbard AIS Identification Cards and Decon Cards to local businesses/establishments.
- *HC COLA to host one Park Rapids Lakes Area Chamber of Commerce (CofC) Morning Buzz; casual fast-paced business networking w/ continental breakfast, short presentation, & business announcements.*
- *Continue the memberships and activities promoting educational opportunities and publications*

2. Prevention (Watercraft Inspection and Decontamination)

- Conduct similar amount of inspection hours as 2018, dependent on budget approval and supplemental funding amounts from Lake Associations and Townships; supplemental \$\$ due 1/31/19 for all.
- Continue operation of the Hubbard County FREE Watercraft Decontamination Station.
- Continue to coordinate with law enforcement support on watercraft violations.
- *Partner to Improve signage and awareness of Hubbard County Decontamination station location and increase usage through public awareness campaign*
- Partner in sharing locations of decon sites in surrounding counties & analyze potential opportunities
- *Revisit inspector scheduling to increase effective coverage while supporting a standardized schedule when possible*
- *Monitor fishing tournament activity to minimize the AIS risk. Consider special WC inspection plans when justified.*
- *Schedule AIS Volunteer Training, communicate process and opportunities for using skillset*
- *Pilot Social Marketing Group / Message identified by team.*

3. Early Detection

- *Explore ability to conduct zebra mussel veliger sampling on approximately 30 Hubbard County lakes* potentially funded with sample analysis costs from other funds separate from HC COLA dues and/or lake associations. Costs for 30 lakes at \$160 per lake = \$4800 less funds from Mantrap Township for 3 lakes. One-time cost is \$200 per plankton net per lake. Would be dependent on volunteers for lake.*
- *Expand the number of lakes monitoring for adult zebra mussels with settlement samplers/ PVC tubes that circle each lake (N-S, E-W).*

- *HC COLA fund PVC tubes for area lakes to conduct adult zebra mussel monitoring. Cost @ 220 tubes X \$4 = \$880.*
- *Conduct monitoring for adult zebra mussels at public/county access sites in Hubbard County.*
- *Increase AIS Citizen Watch Volunteers participating in HC COLA's "Eyes on the Water" online survey.*
- *Provide AIS identification and lake monitoring training opportunities for riparian owners and lake users in conjunction with Hubbard County Extension.*
- *Establish aquatic vegetation sampling and mapping on selected lakes in conjunction with Park Rapids Area Fisheries.*
- *Foster community partnerships to further expand our "eyes on the water"; i.e. partnering with Envir Svcs along with Paster Chip, Riverside Methodist Church and potentially others for an AIS-related Event*
- *Promote HC COLA's participation in Starry Trek, a statewide 1-day search for Starry Stonewort & AIS*
- *Utilize HC COLA's new "eyes on the water" logo to promote clean water and healthy lakes*

4. Rapid Response and Containment

- *Budgeting \$30,000 to Rapid Response Fund (RRF) for 2019.*
- *Over winter will determine response effort for starry stonewort infestation in Big Wolf Lake.*
- *In collaboration with the DNR and Hubbard County, support Rapid Response efforts on infested lakes in Hubbard County*

5. Mitigation and Management

- *Individual lakes will continue to manage and fund existing infestations, with no State AIS Prevention Aid funds.*

6. Administration

- *AIS Operating Team continues with Hubbard County Environmental Services AIS Groups to support a healthy and effective Countywide AIS program*

HC COLA proposes the expansion of the veliger monitoring program to include the following Hubbard County lakes in 2019 – for discussion purposes:

Approximately 30+ targeted lakes sampled by lake association volunteers. These lakes potentially include:

- Mantrap Chain – Big Mantrap, Upper & Lower Bottle (composite of 4 sites), Big Sand, Little Sand, & Belle Taine. (5 lakes)*
- Fish Hook Chain – Eagle, Island, Potato and Fish Hook. (4 lakes)*
- Crow Wing Chain – 3, 6, 8 & 11 (4 lakes)*
- Other targeted lakes – Long, Boulder, Kabekona, Duck, Blue, Plantagenet, Portage, Garfield, Lake George and Lake Benedict. (10 lakes)*
- 3 Mantrap Township lakes sampled by SWCD and paid by the township – Spider, East Crooked and Middle Crooked (3 lakes)*
- Other optional lakes – 5th Crow Wing, West Crooked, Ojibway, Big Stony. (4 lakes)*

HC COLA TALKING POINTS FOR STRONGER ACTIONS FOR AIS EARLY DETECTION by Dan Kittilson

The following talking points demonstrate the need for stronger lake monitoring actions that provide opportunities to **“detect and respond”** to an early discovery of AIS.

1. Hubbard County has had Early Detection/Lake Monitoring as an element of its AIS Strategy since 2006.
2. MN DNR AIS Strategy Document (2009) has Early Detection/Lake Monitoring as one of its key strategy elements. A document entitled “Monitoring for Zebra Mussels” developed by the MNDNR & Minnesota Aquatic Invasive Species Center (MAISC) identify monitoring protocols including both veliger sampling and zebra mussel settlement samplers to assist in early detection monitoring in a lake where zebra mussels have not yet been found.
3. Wisconsin DNR website/Wisc Volunteer program identify Veliger testing as one of several acceptable techniques for early detection.
4. Research suggests that frequent, ongoing monitoring will truly reveal an early introduction of AIS. No one technique is fully inclusive and sufficient to cover all aspects of early detection. Many eyes, frequent visual checking, multiple locations in a lake are needed.
5. Clearly early detection of veligers will not prevent (mitigation) of an infestation of zebra mussels in the infested lake, but early detection can trigger actions to prevent spread to other lakes.
 - a. More inspections on lake
 - b. Communications to citizens
 - c. Education
6. Lake monitoring strategies such as veliger sampling and zebra mussel settlement samplers can help raise AIS awareness among lake shore owners, and promote education and communication about protecting our lakes from aquatic invasive species.
7. Other Counties use veliger sampling as an AIS early detection activity. It is an accepted technique.
 - a. RMB Laboratories reports that Counties that sample for veligers and the County pays the bill include Aitkin, Morrison, Crow Wing and the Sauk River Watershed District (funding from Stearns or Todd Co.)
8. Research reports that once a local lake is infested with zebra mussels, they spread rapidly in lake rich regions to form clustered invasions in Minnesota lake regions (Michael McCartney, MAISC research on zebra mussels).
 - a. This premise is further supported by reviewing the DNR’s infested species list. Findings support this fact with the following Counties infested with zebra mussels:
 - i. Crow Wing County – 58 lakes
 - ii. Douglas County – 40 lakes
 - iii. Otter Tail – 40 lakes
 - iv. Cass County – 11 lakes (includes large destination lakes like Cass, Leech and Gull).
 - b. Hubbard County – 3 lakes (Garfield and Benedict / Steamboat connected to Leech)
9. Research demonstrates that plankton net sampling was effective in the discovery of zebra mussels in both Lake Winnie and Leech Lake.
 - a. Lake Winnie veligers were discovered in 2012 but adult zebra mussels were not found until 2016 in Winnie.
 - b. Leech Lake veligers discovered in 2016 but adults have not yet been found in Leech.
 - c. The discovery of veligers in both Winnie and Leech allowed the DNR the opportunity to **“detect and respond”** to the discovery of zebra mussels in these large destination lakes and help contain the spread of zebra mussels to other area lakes.

10. Review of literature (newspapers and other media outlets) reveals that most zebra mussel populations are discovered casually by lake users or people enjoying the lake. By then it's too late to protect our lakes from a rapid spread of zebra mussels in lake rich areas. The earliest possible detection of a zebra mussel infestation provides the best opportunity for rapid response and containment. (Hubbard COLA's AIS Lake Monitoring Early Detection Program Guide; 5/24/2016)
11. The early discovery of zebra mussel veligers in Garfield Lake via COLA's veliger sampling program supports the expansion of veliger sampling in Hubbard County lakes.
 - a. Veligers were found in both our 2017 and 2018 veliger sampling of Garfield Lake but adults are yet to be discovered.
 - b. The delay in finding adults zebra mussels in Garfield demonstrates the importance that veliger monitoring can play in early detection of AIS.
 - c. The discovery of veligers have allowed Hubbard County & HC COLA the opportunity to **"detect and respond"** to the discovery of zebra mussels in Garfield.
 - d. This early detection of veligers has helped us to implement a containment plan to prevent the spread of zebra mussels into other Hubbard County lakes.
12. Early research suggests the following impacts to our fisheries.
 - a. Zebra mussels feed on plankton and threaten the food chain and impacts game fish.
 - b. Decrease in walleye size
 - c. Increase in Smallmouth Bass populations
 - d. Change fishing patterns
 - i. Clearer water means more night fishing and/or deeper fishing.
 - e. Zebra mussels attach to and kill native mussels.

Expanding our zebra mussel veliger monitoring program offers the following benefits:

1. Help prevent the further spread of AIS and protect our lakes for present and future generations.
2. Protect our lakes from the ecological, economic and social impacts of aquatic invasive species.
3. Protect our lake shore property values and the loss of tax revenue from our high quality lakes.
 - a. Hubbard County tax study reveals that 37% of Hubbard County tax parcels are water influenced and represents 60% of the property tax value and 53% of tax revenue in Hubbard County.
4. Other?

What are the challenges for an expanded zebra mussel veliger monitoring program:

1. Funding for veliger water sample analysis and plankton nets.
2. Work load to organize volunteers and finding volunteers for some lakes.
3. Lack of support and funding from the County.
4. Liability?
5. Other?