

## MN DNR Aquatic Invasive Species Advisory Committee

Minnesota Aquatic Invasive Species Research Center  
Skok Hall 135  
2003 Upper Buford Circle  
St Paul, MN 55108

October 14, 2014

Dear MAISRC Advisory Board Members:

Our committee is pleased to respond to your request for input into your research needs assessment process. Last month we forwarded a list of priority species. Now we are providing a list of priority research topics for your consideration. Our committee members have considerable insight into what citizens and lake managers want and need to know to tackle existing and future AIS threats. We feel your center can make a difference by targeted research in four areas:

- prevention,
- integrated control and management,
- ecology and impacts of priority species,
- economic and social impacts in our state.

After considering a comprehensive list of twenty five research topics, the list attached represents the Committee's top two most important research questions in each area, listed in order of importance. We feel that research should be done in the context of a changing climate and encourage the use of cutting edge technology in all areas including research and communications. Using techniques such as molecular DNA will help biologists quickly identify, track and uncover their progress and range. It will also provide insight for lake managers to develop effective AIS programs. Reporting and communications tools that are effective and engaging to all ages will be critical to minimizing spread and rapid reporting of new threats.

We understand from your communications that this call for research priorities is part of an ongoing process that will be revisited annually. On behalf of the Statewide AIS Advisory Committee, I look forward to continued collaboration and sharing of information to find solutions to a pervasive problem that impacts our state's economy and way of life.

Regards,

Robert E. Olsen  
MN DNR Aquatic Invasive Species Advisory Committee Chairman  
[Roslen@co.lincoln.mn.us](mailto:Roslen@co.lincoln.mn.us) 507-694-1344

**MN DNR Statewide Aquatic Invasive Species Advisory Committee**  
**List of Priority Research Topics for Submission to the**  
**Minnesota Aquatic Invasive Research Center**

October 16, 2014

**Research Sub Area: Prevention**

Preventing the arrival of new, potentially more dangerous species and limiting the spread of current invasive species.

Priority 1: Identify strategies to address the movement patterns of current and future invaders. In particular, identify how different water user groups move invasive species through the movement of equipment (such as personal watercraft, recreational and small boat commercial fishers, guides, docks, lifts etc.) and how different equipment designs may pose more threat than others.

Priority 2: Identify patterns of user movement from contaminated lakes to allow more strategic positioning of education, decontamination and enforcement efforts.

**Research Sub Area: Integrated Control and Management**

Managers need to know which tools to use and when to use them in their water body. An effective control and management action plan that is locally appropriate is needed for each invader.

Priority 1: For priority species: What are the best current tools and plans (toolbox and workbook) for managers for integrated management options for each species, for particular situations and regions? Can others be developed? What modifications are needed for local adaptations of these plans? Although much is known, easy access to this information is also needed.

Priority 2: Early detection and rapid response- what are the best ways to detect and control new invaders?

**Research Sub Area: Invasive Species Ecology and Impacts**

Each invasive species is unique and its impact in a region is affected by characteristics of the invader as well as the characteristics of the region.

Priority 1: What are long-term ecological impacts to date on water bodies and projected future ecological impacts?

Priority 2: Using the best tools available, determine how priority species are moving within the state.

**Research Sub Area: Economic and Social Impacts**

Given the budget limitations of every managing agency, it is essential we put the impact of invasive species into economic terms. What are the current and future costs of the different invaders?

Priority 1: For each priority species, research the economic risks of continued spread: property tax, business and tourism and economic impacts of invasion.

Priority 2: For each priority species, research the social costs of the invasion to Minnesota's quality of life, traditions and heritage.