MINNESOTA AQUATIC INVASIVE SPECIES RESEARCH CENTER
UNIVERSITY OF MINNESOTA
Driven to Discover℠

Request for Research Proposals

For continuation of MAISRC subprojects ending June 30, 2019

The Minnesota Aquatic Invasive Species Research Center (MAISRC) at the University of Minnesota is seeking proposals for research studies to advance control and management, prevention of establishment and spread, risk assessment, and early detection of aquatic invasive species (AIS) in Minnesota.

Through this competitive proposal process, MAISRC will administer up to $1,250,000 to fund high-priority research needs focused on new lines of research and continuation of existing projects. Projects that are scheduled to end on June 30, 2019 are eligible for continuation funding. The goal of continued project support will be to build on ongoing success and advance research toward a solution. Not all projects will warrant continuation (e.g. continued funding secured from other sources, solution has been achieved, progress has not yielded promising results) and investigators are highly encouraged to discuss their plans with the MAISRC Director before pre-proposal submission. Please note that the continuation project RFP is a competitive process and funding is not guaranteed.

Proposals are invited from principal investigators or collaborators of currently funded MAISRC projects at any Minnesota-based academic or governmental research institution for work that proposes to build capacity in and benefit Minnesota. As appropriate, new research collaborations are encouraged for continuation projects. Research teams may include expertise outside of Minnesota if needed; however, please note that some restrictions apply for use of grant funds out of state.

Projects are expected to use state-of the-art techniques and approaches and must produce both peer-reviewed publications in high-quality journals as well as technical publications. Resources within the newly renovated MAISRC Containment Laboratory may be available for use in association with funded projects. Anticipated funding availability is July 2019 through June 30, 2021.

Pre-proposal instructions and selection process

The funds to support research solicited in this announcement primarily originate from the Environment and Natural Resource Trust Fund (ENRTF), administered by the Legislative-Citizen Commission on Minnesota Resources (LCCMR). Therefore, the pre-proposal application is similar to and eligible expenses are the same as LCCMR's.

Pre-proposals will be reviewed by a committee consisting of MAISRC's Director, two members of MAISRC's Advisory Board, and two technical reviewers. Evaluation will be based on ongoing research progress, likelihood the research project will result in important new information useful for solving AIS problems in Minnesota, demonstrated capacity of the collaboration to perform the proposed research, and contributions of the project team to MAISRC during the previous project period. Demonstrated support from end users of the research and ability to leverage additional funding will also be considered.

Investigators invited to submit full proposals will provide detailed research plans that will undergo scientific peer-review. Funding is available upon final approval of an ENRTF workplan and budget by MAISRC & LCCMR.

Pre-Proposal Components:

1. Project proposal – *submit in one PDF*
    - Cover Sheet – *1 page limit; template available online*
    - Research Progress Report – *1 page limit; template available online*
    - Pre-proposal Narrative – *3 page limit; template available online*
    - Researcher Qualifications – *provide a CV for all primary investigators; 2 page limit each*
    - Project Manager's Organization Description – *1 page limit*
    - Citations
2. Project Budget – *submit in MS Excel; template available online*
3. Optional Attachments – *letters of support, etc.*

The deadline for pre-proposals is December 21, 2019 at 5:00 PM. Submit all documents to maisrc@umn.edu. Please contact MAISRC Director, Dr. Nicholas Phelps, with questions about research priorities or the proposal process – phelp083@umn.edu or 612-624-7450.

Research Priorities

Proposals for continuation of the following research projects will be considered for funding. Like AIS problems in general, these problems are complex. To be effectively advance the science, these projects will benefit from continued innovative research approaches, research scope spanning fundamental and applied, and/or multidisciplinary expertise. The projects are not listed in priority order. If not specifically addressed below, the species studied must be included on the MAISRC 2018 species priority list. Research not focused on continuing one of the following projects will not be considered for funding. For information on the proposal submission process for *new* lines of research, see separate RFP.

Ongoing MAISRC subprojects scheduled to end June 30, 2019

2.2	Sadowsky	Phase II: Development of potential microbiological control agents for aquatic invasive species
3	Sorensen	Attracting carp so their presence can be accurately assessed
4.2	Bajer	Phase II: Common carp management using biocontrol and toxins
7.2	Phelps	Phase II: Virus discovery and evaluation for use as potential biocontrol agents
8	Larkin	Risk assessment, control, and restoration research on aquatic invasive plant species
9.2	McCartney	Population genomics of zebra mussel spread pathways, genome sequencing and analysis to select target genes and strategies for genetic biocontrol
10	Larkin	Citizen science and professional training programs to support AIS response
12	Branstrator	Characterizing spiny water flea impacts using sediment records
14	Fieberg	Cost-effective monitoring of lakes newly infested with zebra mussels
15	Brady	Determining highest risk vectors of spiny water flea Spread

16	Hansen	Sustaining walleye populations: assessing impacts of AIS
17	Larkin / Galatowitsch	Building scientific and management capacity to respond to invasive Phragmites (common reed) in Minnesota
18	Newman / Thune	Eurasian and hybrid watermilfoil genotype distribution in Minnesota
19	Phelps	Decision-making tool for optimal management of AIS
21	Kozarek	Early detection of zebra mussels using multibeam sonar
26	Gilmanov	Updating an invasive and native fish passage model for locks and dams

Funding for the 2018 MAISRC RFP is provided by the Environmental and Natural Resources Trust Fund, as recommended by the Legislative-Citizen Commission on Minnesota Resources (LCCMR).