



Aquatic Invasive Species Rapid Response Initiative

Endorsed by GLRC Executive Committee on March 2, 2007

I. Introduction

Invasive species come from outside an ecosystem, degrade habitat, kill and/or displace native and naturalized species, and short-circuit food webs needed to maintain and rehabilitate biological resources. The Great Lakes region continues to face wave after wave of aquatic invasion. Even after decades of high-profile invasions like the sea lamprey and zebra mussel, the rate of new introductions has not slowed. The Great Lakes, which are the world's greatest freshwater lakes, are succumbing to an irreversible biological damage that may be more severe than chemical pollution, as aquatic invasive species (AIS) often make the Great Lakes home, they reproduce and spread, rendering eradication impossible. Existing measures to prevent the introduction of new species and to control species that are already established are inadequate. The Great Lakes cannot afford even one new invader, and as invasions are irreversible, prevention is paramount.

Preventing the introduction of AIS is the first line of defense against invasions. Several ongoing efforts, including the Great Lakes Fishery Commission's Sea Lamprey control program and the carp barrier on the Chicago Sanitary and Ship Canal, are working to prevent the introduction and spread of AIS. The State of Michigan has passed ballast water treatment legislation. States and cities have passed laws prohibiting the importation and sale of a number of live AIS, shutting down another vector for their introduction.

However, even the best prevention efforts may not stop all AIS introductions. The Great Lakes Regional Collaboration (GLRC) Strategy recognizes that early detection and rapid response efforts increase the likelihood that invasions will be addressed successfully while populations are still localized and can be contained and eradicated.

Federal, State, Tribal and Local governments, as well as non-governmental entities, have developed a variety of approaches and techniques to address AIS. Each of these governments has jurisdiction over response agencies that will need to be activated when a new AIS is detected. When a new potential invader is detected, being able to efficiently coordinate and pool expertise and resources could mean the difference between fully eradicating a species, merely controlling it, or being overrun by yet another invasive species.

The Strategy includes the following recommendation:

- Establish an interagency Great Lakes Federal Rapid Response Team that will conduct activities on federal lands, and in other locations with State, Tribal, and Local cooperation.

II. Proposed Activities

By developing points of contact, establishing communication protocols for coordination, and exploring a mock exercise, members of the GLRC could begin to implement key aspects of this important recommendation.

Identify Agency Points of Contact and technical experts that could be call upon to inform early identification and rapid response efforts.

The Great Lakes ANS Panel – established in 1991 and comprising representatives from government (State, Provincial, Federal, and Tribal), business and industry, universities, citizen environmental groups and others—met in December this December 13-14, 2006 in Ann Arbor, Michigan to specifically discuss rapid response. They have made the recommendation for Great Lakes agencies to establish an ad hoc committee to populate the national ANSTF Expert Database.

The ANSTF database was designed to direct users to invasive species experts. It has been set up as a 2-tier system with the first tier accessible to the public. The public portion of the database will guide you to an overall agency contact who acts as a filter for information and identifications. If the tier1 person cannot answer the question, these contacts have the ability to log in, identify, and refer the question to the second tier experts. At this point the database is set up for “overall points of contact” and “taxonomic experts”, which presents a good initial step for this effort. More functionality to the database can be added after we have demonstrated success in this initial step.

Concurrently, though the Near Term Federal Action Plan, Federal Agencies committed to “explore creating a Rapid Response Subcommittee under the [Federal] Regional Working Group to serve as a central point of contact for information and activities related to invasive species rapid response efforts.” A Federal AIS Rapid Response Subcommittee (FAISRR Subcommittee) has been formed to this end. Over the last few months, FAISRR has developed a list of overall points of contact for the Federal Agencies and made inroads to developing a list of technical experts. This effort could be expanded by adding State, Federal, and Local members and having these jurisdictions provide “overall points of contact” and “taxonomic experts”.

The Great Lakes Panel’s recommendations are advisory only. Agency managers need to commit their staff to identifying and inputting data in order for this database to become functional. The GLRC is in a position to act upon the Panel’s recommendations and demonstrate the Great Lakes region’s leadership in populating this national database. It is recommended that the GLRC accomplish this activity through the Great lakes ANS Panel’s soon-to-be-formed ad hoc committee.

Proposed Schedule

- Commitment to provide Agency Contacts and Taxonomic Experts (March 2007 timeframe)
- Population of Database (Mar-April 2006 timeframe)
- Report out of success at GLRC Spring 2006 meeting.

Develop a Great Lakes Communication Protocol for rapidly identifying new invaders and formulating response efforts.

As was demonstrated by the recent discovery of “northern snakehead” fish in Chicago, a rapid response effort will likely involve Federal, State, Local and other resources. The development of a formal Communication Protocol would help articulate how agencies will communicate each other for an effective ad hoc rapid response effort. This communication protocol will promote clear channels of communication and rapid mobilization of resources in the event that new aquatic invasive species are discovered in the Great Lakes. This protocol would incorporate the points of contact identified in the previous steps and outline the flow of communication between

agencies. It may include the following items (from the Great Lakes ANS Panels' Model Rapid Response Plan guidance):

- Early Notification of Jurisdictional Authority or Designee
- Species Confirmation by Taxonomic Experts
- Notification of Participating Agencies via "Invasive Species Response Coordinators"
- Identification of "Central Communication Officer"
- Identification of "Public Communication Officer"
- Formation of Ad Hoc "Scientific Assessment Committee" to inform decision making.
- Deliberation and Decision on Management Approach by Authority or Designee

Because there are different jurisdictions where invaders could be discovered, different species (fish, plant, insect/pest) that would involve different agencies with management authority, and different availability of control measures – the development of a comprehensive response protocol is likely beyond the resources of GLRC agencies at this time. For example, MDEQ's response plan for the invasive aquatic plant Hydrilla is a single-species, single state plan that took years to develop. The proposed Communication Protocol would apply to the early stages of all rapid response efforts and promote the quick development of a rapid response plan.

Proposed Schedule:

- To be developed over Spring and Summer of 2007.

Explore conducting a Mock Exercise to test the Communication Protocols.

There is no better way to test the responsiveness and effectiveness of the GLRC Communication Protocol than by conducting a mock AIS rapid response exercise. This mock exercise can include a press event/outreach piece to raise awareness. It will be important to have a protocol in place before attempting this exercise.

Proposed Schedule

- A small workgroup could explore the development of a Mock Exercise over the Summer of 2007.