

Great Lakes Restoration Initiative Invasive Species Focus Area

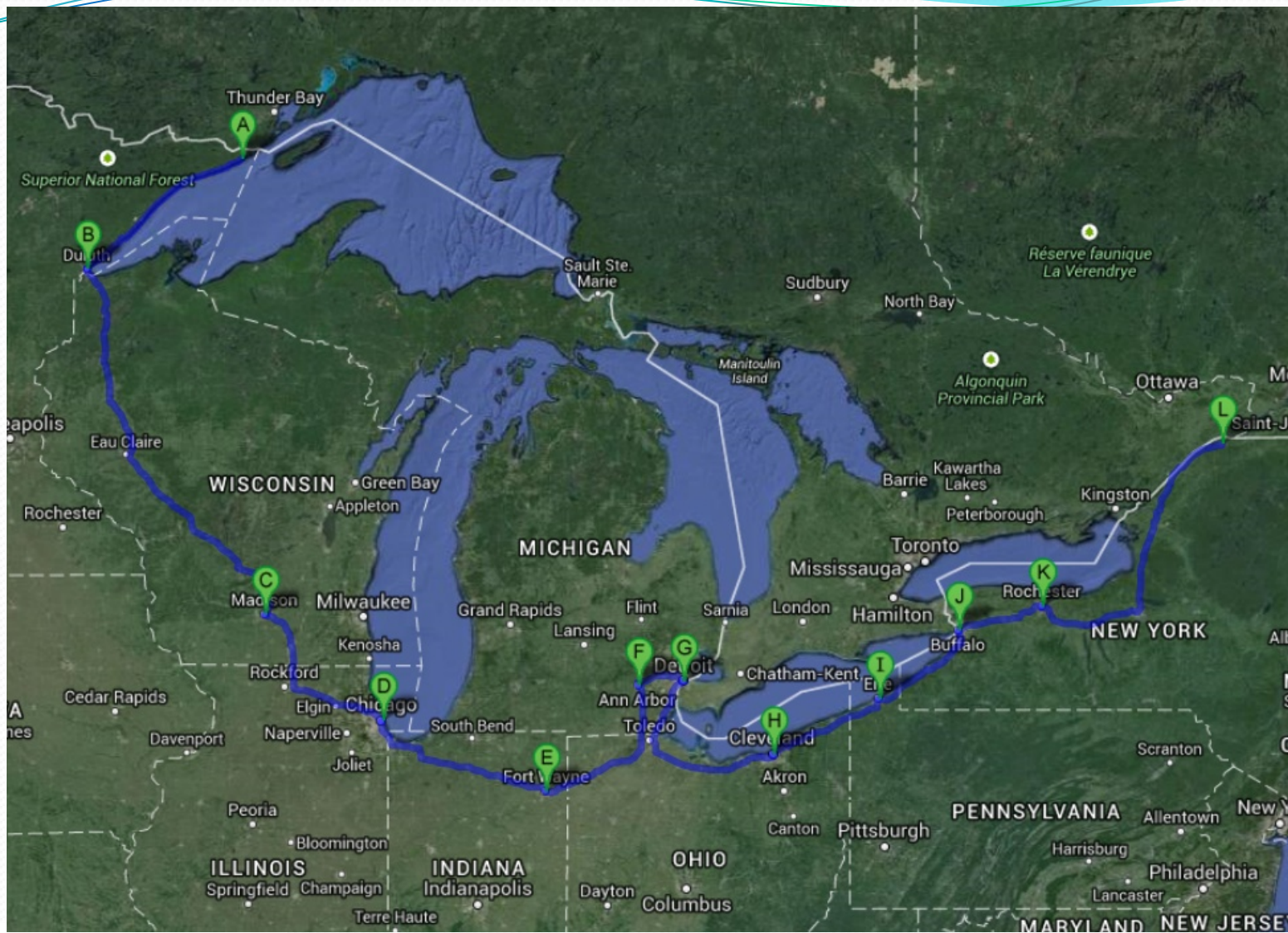
Five Years of Progress ...and a New Action Plan

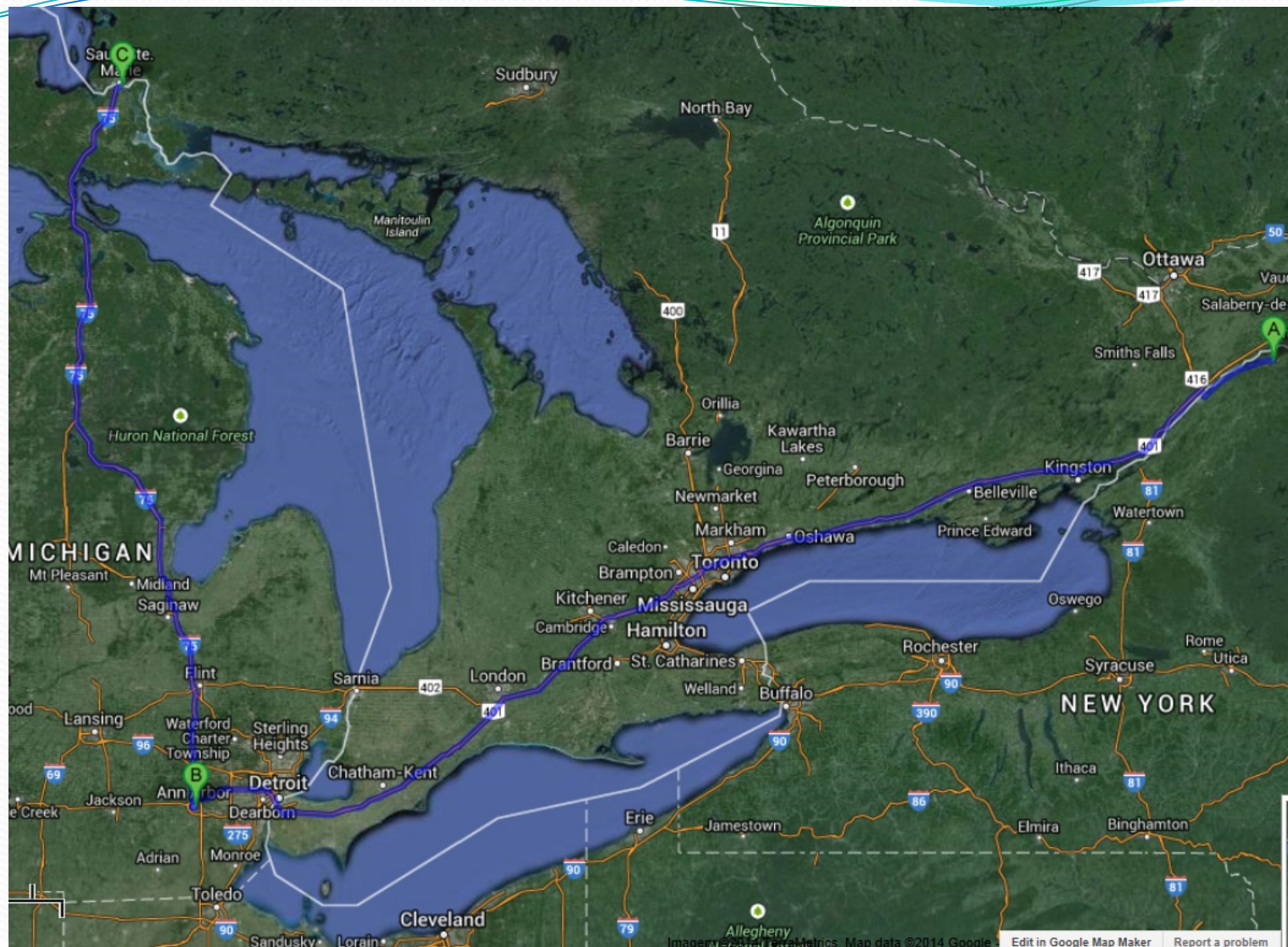
Great Lakes Aquatic Nuisance Species Panel

Ann Arbor, USA

November 19, 2014









Find a GLRI Project

Use the map below to find GLRI project information. Or, see a [list of all GLRI projects](#).

(Note: the points on the map show the actual location of the project and/or the location of the entity managing the project.)

Enter a location (such as area of concern or watershed) or a project name in the search box. Select a year and click Search to query.

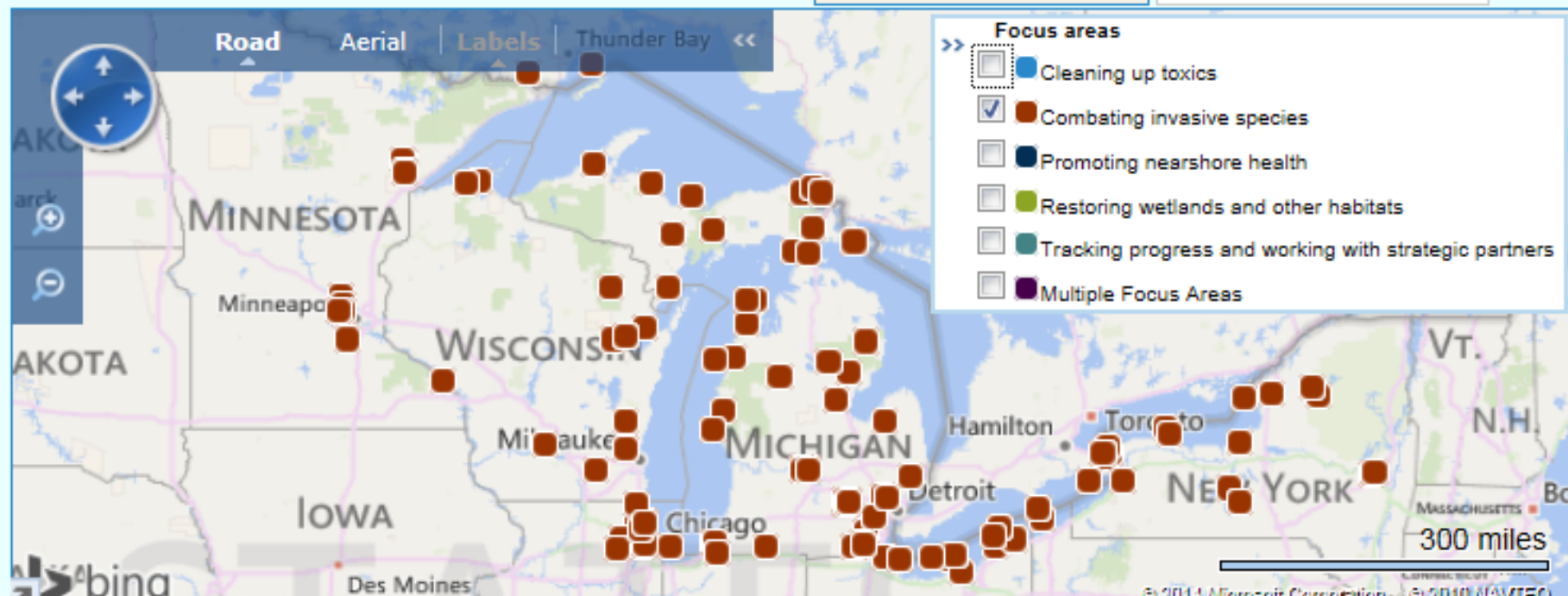
Year: **All**

Search Results for: : All Grants

Results found: [2215](#) | Current view: 239 | [Clear Results](#)

[Search results on map](#)

[Search results as a list](#)



GLRI I - Principal Actions

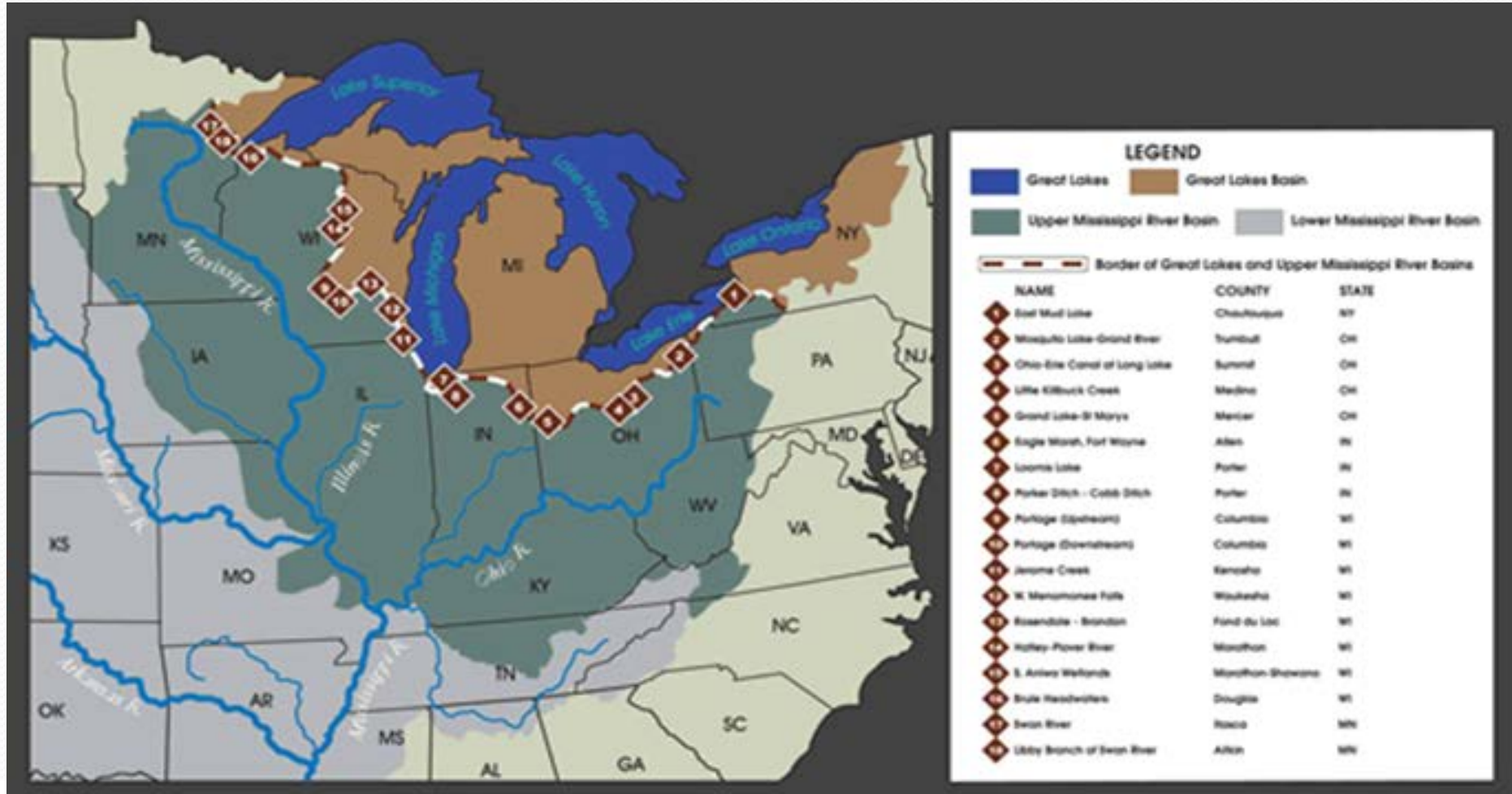
- 2.4.1 – Ballast Technology for Freshwater
- 2.4.2 – Understanding and Addressing Vectors
including Recreational Boats, canals/waterway, etc.
- 2.4.3 – Education and Outreach to user groups
- 2.4.4 – Develop Control Technology
- 2.4.5 – Support States Role in Prevention and Control
- 2.4.6 – Understanding and Managing Impacts
- 2.4.7 – Early Detection and Rapid Response

Ballast Water



- National ballast water standards and management programs.
- Great Ship's Initiative as a worldwide leader in freshwater ballast water testing.
- University grants to explore new technology and on-board monitoring approaches.

Vectors of Transport



Leadership on Organisms in Trade

- Massive through-put on risk assessments.
 - Historically: 1 every 4 years.
 - Conducted over two thousand risk assessments in past 5 years, including scenarios that account for climate change.
- Ongoing enforcement against illegal trade of Asian carp.
- Multiple investigations of aquarium trade, bait trade, and sale through internet commerce.

Leadership beyond GLRI:

- Great Lakes States Governors and Premiers list of “least wanted” species.

Outreach



Cutting-edge Technology

- eDNA Detection Technology
- Genomic approaches for both native species assessments and detection of novel (non-native) genomes.
- Zequinox – approval for open water uses of Zebra Mussel microparticle biocide delivery system.
- New lamprey barriers, developing use of pheromones
- EPA: Funding R&D of molecular/genetic techniques for detection of invasive species at low population levels.

State & Tribal Capacity

- ANS Plans in legislation (Section 1204 of the Aquatic Nuisance Species Prevention and Control Act).
- States have revised management plans to include rapid response capabilities.
- Prevention, rapid response, control programs have been enhanced.
- Essential funding mechanism for Asian Carp Framework funding allocations to States, especially in Illinois and Indiana.

Managing Impacts

- Continuing to implement natural resource management programs with due regard to invasive species impacts.
- Over 50,000 new acres of control work via State ANS management plans, Cooperative Weed Management Areas, community grants, direct federal implementation.

Early Detection Network

- Asian Carp
- Non-Carp initiatives in St. Louis Harbor, Isle Royale, Maumee River and Harbor, and others...



Beyond-GLRI Leadership:

- Binational commitment to early detection initiative by 2015 (via Annex 6 of the Great Lakes Water Quality Agreement).
- Governors and Premiers “mutual aid” agreement

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Great Lakes RESTORATION



Great Lakes Restoration Initiative Action Plan II

New Focus Area Structure

Objectives

Prevent new introductions of invasive species

Control established invasive species

Develop invasive species control technologies and refine management techniques

Commitments

- Block pathways through which aquatic invasive species can be introduced to the Great Lakes ecosystem
- Conduct early detection monitoring activities
- Work with Great Lakes states to conduct rapid response actions or exercises

- Implement control projects for GLRI-targeted invasive species

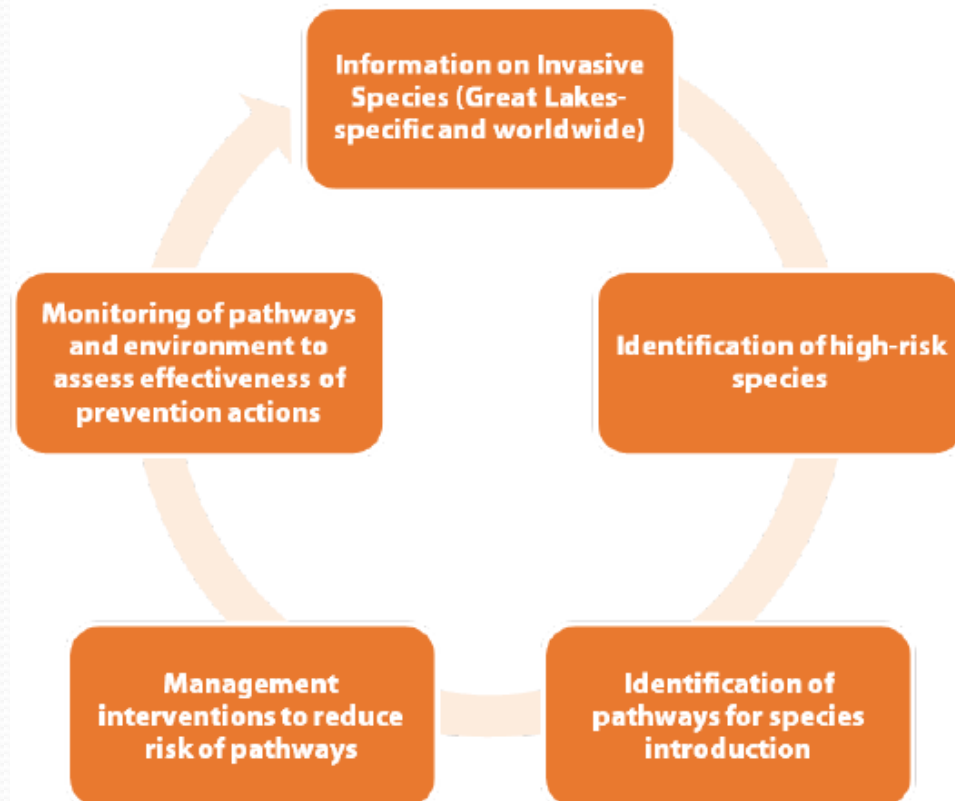
- Develop/enhance technologies and methods to prevent the introduction and to control the spread of invasive species
- Develop/enhance invasive species specific collaboratives to support rapid responses and communicate the latest control and management techniques

Prevention

Programs include:

- Asian Carp
- State ANS Management Plans
 - Annual Rapid Response exercises or actions
- Ballast Water program enhancements
- Early Detection
- Risk Assessments

Assessing the Risk of Invasive Species



Control

Programs include:

- Aspects of State ANS Plan implementation
- Cooperative Weed Management Areas
- Community grants.

Sustainable Invasive Species Control through Community Projects

1. Community rallies around a ecologically and/or economically important project site.
2. Community develops short-term control plan and long-term maintenance plan.
- *** 3. Federal (or GLRI-partner) funding for building community capabilities and initial control work.
4. Community stewardship maintains significantly improved site.

“Tech”

Technology and Management Techniques:

- Sea Lamprey and other control technology.
- Collaborations to share best management practices:
 - Phragmites,
 - monocious Hydrilla,
 - others?



>Your Collaboration Here?<

Firedrills

- Of course... will need to assess and respond to actual FY15-19 issues.









