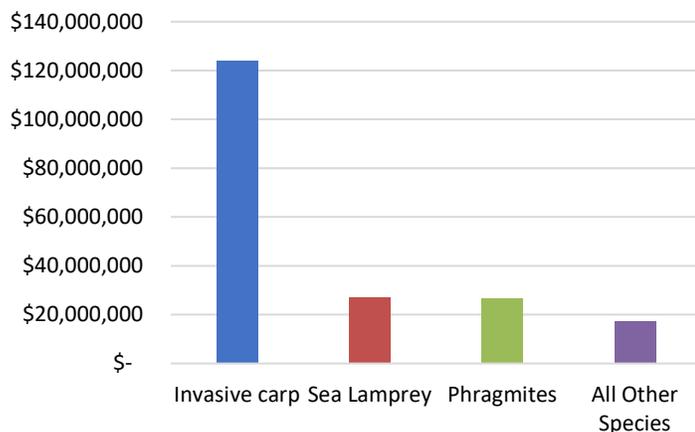


Great Lakes Restoration Initiative Funding for Aquatic Invasive Species: Species

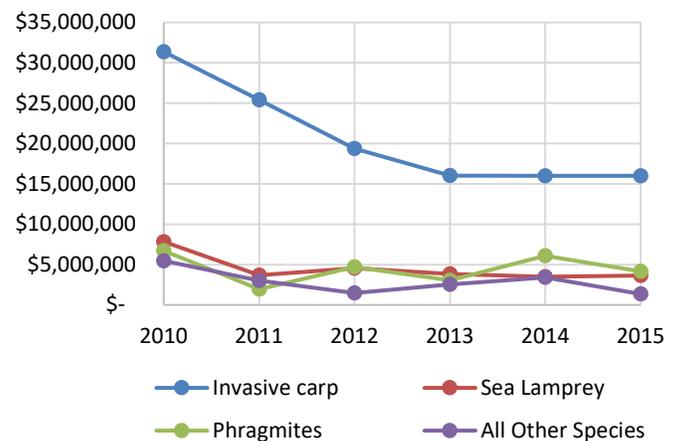
Management of established invasive species is imperative to restoring the health of Great Lakes ecosystems. In order to guide research towards the riskiest species, the Research Coordination Committee (RCC) of the Great Lakes Panel on Aquatic Nuisance Species developed a list of priority species recommended for research attention. This priority species list is intended to draw attention to those organisms with known and significant adverse impacts on the Great Lakes-St. Lawrence River ecosystem, its users, and uses. Likewise, the Great Lakes Restoration Initiative (GLRI) Action Plans target specific species for control projects. To determine trends in funding for species-specific projects, the RCC analyzed project information for federally-dispersed GLRI funds (i.e., FY2010-2015 funding dispersed directly to recipients for project implementation through a federal agency's GLRI request for proposals). Data was derived from U.S. Environmental Protection Agency's Environmental Accomplishments in the Great Lakes (EAGL) database, associated data metrics and project descriptions, and supplemented with information from the Asian Carp Action Plans (2010-2015).¹

OVERALL SPECIES FUNDING

Total GLRI Species Funding



GLRI Species Funding Per Year



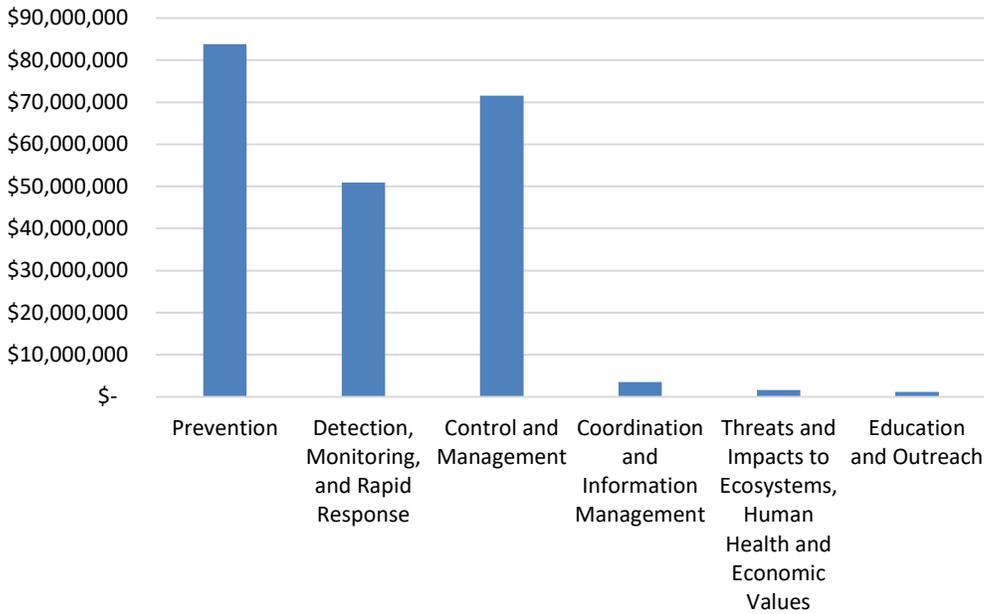
Note: Projects undertaken through or funded by state aquatic nuisance species management plans are not included in this analysis

- The majority (89%) of species funding is directed to invasive carp, sea lamprey, and Phragmites projects. All contribute to large-scale regional initiatives with established management programs or collaboratives.
- Invasive carp projects represent 57% of funding for species-specific projects, and 28% of all funding for AIS work through the GLRI. These projects predominantly fall under the umbrella of the Asian Carp Action Plan that aims to protect the Great Lakes from bighead, silver, black, and grass carp.
- Fourteen of the 28 species on the RCC's priority species list received GLRI funding:

- | | | |
|-----------------|--------------------------|--------------------------------|
| • Invasive carp | • Round goby | • European frogbit |
| • Black carp | • Sea lamprey | • Hydrilla |
| • Bighead carp | • Rusty crayfish | • Phragmites |
| • Grass carp | • Dreissenid mussels | • Water chestnut |
| • Silver carp | • Eurasian water milfoil | • Viral hemorrhagic septicemia |

TYPE OF WORK FUNDED

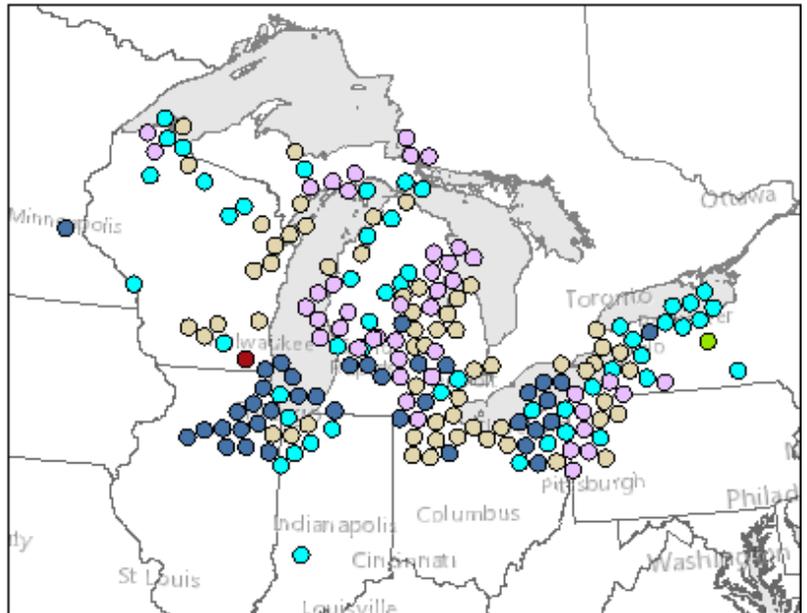
Focus of Species Funding



- The GLRI Action Plans' objectives for invasive species centers on prevention, EDRR, and control. Most species-specific funding is directed to these focus areas.
- GLRI Action Plan I and II also emphasized "shovel ready" projects and appear to have prioritized projects focused on species for which management techniques already exist.
- The funding amount for Education and Outreach is likely underestimated here, as all GLRI projects must contain some aspect of education/outreach.

LOCATION OF SPECIES-SPECIFIC PROJECTS

- Funding for invasive carp follows the invasion front; bighead and silver carp projects are focused in Illinois and Indiana near the Chicago Area Waterway System, and grass carp projects take place in Michigan and Ohio along Lake Erie and its tributaries.
- Phragmites projects occur throughout every Great Lakes state, consistent with the integrated regional approach to management facilitated by the Great Lakes Phragmites Collaborative.
- Funding for response actions to new invaders (e.g. red swamp crayfish, water chestnut) is focused around the point of introduction.



Taxa targeted by funding

- Invasive Carp
- Sea Lamprey
- Phragmites
- Water Chestnut
- Red Swamp Crayfish
- All Other Species

¹ The information used in this analysis is derived from the EAGL database and was provided to the Great Lakes Commission by the U.S. Environmental Protection Agency. This dataset is supplemented with funding and project information from the Asian Carp Action Plans for fiscal years 2010-2015. Data regarding funding agency, funding year, recipient, project coordinates, and project award amount was entered directly from the EAGL dataset metrics, while information about species and/or pathways covered by the project, project work focus areas, and recipient categorization was determined based on information included in project descriptions in the EAGL database. For a full list of granting agencies and grant recipients, please visit www.glri.us