



Addressing Aquatic Invasive Species in the Great Lakes: *Pennsylvania's Approach through GLRI*



pennsylvania
DEPARTMENT OF CONSERVATION
AND NATURAL RESOURCES



pennsylvania
DEPARTMENT OF ENVIRONMENTAL
PROTECTION





Pennsylvania's GLRI proposal

Overview:

- Seven major jobs
- Addresses all five goals within Focus Area 2 of the GLRI Action Plan
- Encompasses all principal actions except Ballast Water Treatment



Invasive Species-Principal EPA Actions

- Prevention
 - Risk Assessment
- Early Detection and Control
 - Coordinated monitoring
- Working with User Groups
 - Education and Outreach
 - Emergency response exercises



Pennsylvania's GLRI proposal

Overview:

- Next—Brief review of:
 - **Jobs & Tasks**
 - Relationship of Tasks: Goals: Measures



Job 1. Statewide and Interstate Coordination

**Job Summary: Communication, meetings,
coordination with other agencies & states-\$21,300**

Tasks:

- Assist with PA's AIS Management Plan
- Coordinate statewide and regional AIS planning efforts
- Coordinate Pennsylvania Invasive Species Council (PISC) AIS subcommittee and interagency activities
- Participate in the Mid-Atlantic Panel on AIS Social Marketing Committee



Job 1. Continued

Tasks:

- Rapid Response Plans/Exercise (*number developed or conducted*)
- Harmonize bait regulations among Great Lakes and Mid-Atlantic states.
- Implement an Aquatic Invasive Species Awareness Week in Pennsylvania (*number of people*)



Job 2. Biosecurity Protocol Implementation by State Agencies

**Job Summary: Materials, supplies for field staff
to minimize introductions; reporting-\$113,414**

Tasks:

- Provide watershed-dedicated equipment, materials, and supplies to appropriate personnel
- Provide field personnel the necessary materials and equipment for use in AIS disinfection procedure
- Reporting, project oversight and administration



Job 3. Early Detection and Monitoring

**Job Summary: Program development,
monitoring critical sites, report findings-
\$167,982**

Tasks:

- Develop an early detection, monitoring, and inventory program
- Conduct Monitoring for aquatic invasive plants, fish, and invertebrates at key sites in the PA Lake Erie watershed & boundary areas
- Report new AIS discoveries (*number of new detections*)



Job 4: Coordinated Reporting and Inventory System

Job Summary: Data gathering, database development, quality control, training-\$114,419

Tasks:

- Inventory existing datasets and transfer/input data into a centralized database
- Coordinate capture of all new data on location and distribution of AIS
- Institute data standards and quality control procedures
- Provide training and support on use of database and web tool.



Job 5. Rapid Response, Control, and Management

**Job Summary: Wetland plant control & tracking-
\$67,870**

Tasks:

- Remove aquatic invasive plants (e.g., *Phragmites* and hybrid cattails) in wetlands (*acres treated*)
- Track control efforts (primarily in the Presque Isle Area)
- Support herbicide treatments to invasive plant species. (*acres treated*)
- Job oversight



Job 6. Research and Risk Assessment

Job Summary: Risk assessment, strategy inputs, pilot new technologies-\$129,043

Tasks:

- Develop a process to identify and rank AIS of highest risk to Pennsylvania's Great Lakes Watershed
- Assess vulnerability of PA aquatic ecosystems to invasion
- Develop AIS control and management strategies
- Pilot innovative AIS control methods, develop eDNA sampling and analysis capabilities for high-risk AIS



Job 7. Education and Outreach

**Job Summary: Develop and provide materials, presentations, to users and train professionals-
\$177,972**

Tasks:

- Develop and deliver outreach to boaters, anglers, natural resource staff, and recreational water users-especially associated with the Great Lakes (*estimated number of people informed*)
- Improve AIS identification skills of professionals (*number of people trained*)



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		GLRI Goal				
		Eliminate AIS Introductions	Minimize Risks	Reduce Spread of AIS	Detection and Tracking	Integrated Pest Management for AIS
Job #	Job Description	1	2	3	4	5
1	Statewide and Interstate Coordination	X	X	X		
		X	X	X		
				X		
2	Biosecurity Protocol Implementation by State Agencies	X	X	X		
3	Early Detection and Monitoring		X	X	X	
4	Coordinated Reporting and Inventory System				X	
5	Rapid Response, Control, and Management			X	X	X
				X	X	X
6	Research and Risk Assessment		X	X	X	X
7	Education and Outreach			X		

Measure 1. Rate of New Non-native Detections

Measure 2. Acres Managed for AIS

Measure 3. Plans and rapid response

Measure 4. User contacts



Wrap-up

- Questions, comments?



EPA Activities Addressed by Jobs

- Information for evaluating potential rapid response actions (Job 1, Job 6)
- Program for detection and tracking newly identified invasive species (Job 3, Job 4)
- Contact aquatic resource users (Job 1, Job 7)



EPA Activities Addressed by Jobs

- Develop target species and target levels of control (Job 6)
- Report on number of acres where control was accomplished (Job 5)
- Conduct rapid response training (Job 1)
- Provide best practices that prevent the introduction and spread (Job 2, Job 7)