

# Rapid Response Plan and Procedures for Responding to Aquatic Invasive Species in Pennsylvania



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# Acknowledgements



- Sara Stahlman, Pennsylvania Sea Grant
- Leo Donovall, PISC Council Coordinator
- Jim Grazio, Pennsylvania Department of Environmental Protection
- Bob Morgan, Pennsylvania Fish and Boat Commission



# Purpose of the plan

- A tool to help agencies work together to respond to new AIS infestations
- Outlines steps to follow during the response



# Development of the plan...

2008

- Began development

2009

- Workshop for agency staff

2010

- Mock exercises and field testing
- Round goby in Fairview gravel pits

2013

- Mock exercises and field testing
- Didymo
- New Zealand Mudsnail

2014

- Plan approved by PISC

# The plan is in use!

- Asian carp discovery in Washington County
- Water chestnut in Chester County
- Round gobies in Erie County
- **This is a working document!**



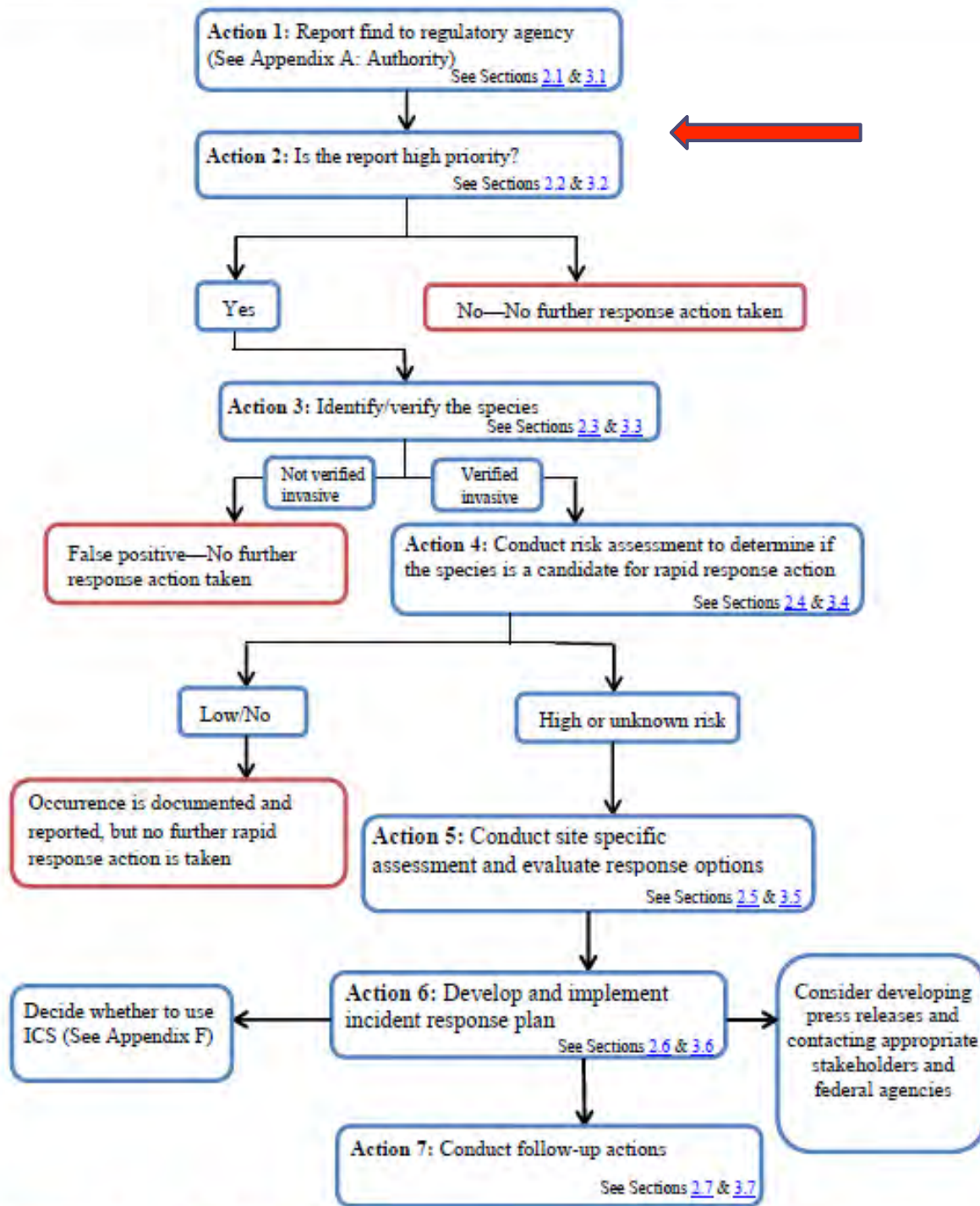




# Plan Layout - Three Sections

- Section 1 – Flow Chart
- Section 2 – Checklist of Action Steps
- Section 3 – Supplemental/detailed information needed to support the action steps

# Section 1: Flow Chart



## Section 2 - Checklist of Actions

Action 1:  
Report  
suspected AIS to  
AIS coordinator

completed

Action 2:  
Is the  
report  
high priority?

completed

Action 3:  
Identify/verify the  
species

completed

Seven action steps total



## Section 3 - Details of RR Plan

- Describes details about what should be included at each step
- Example: Detection
  - Contact information
  - GPS coordinates
  - Clear, high resolution digital pictures
  - Notes about location and habitat
- Resources/references



Jim Grazio, DEP: Round gobies found at Lake LeBoeuf

**Action 1:**  
Report  
suspected AIS  
to AIS  
coordinator

completed

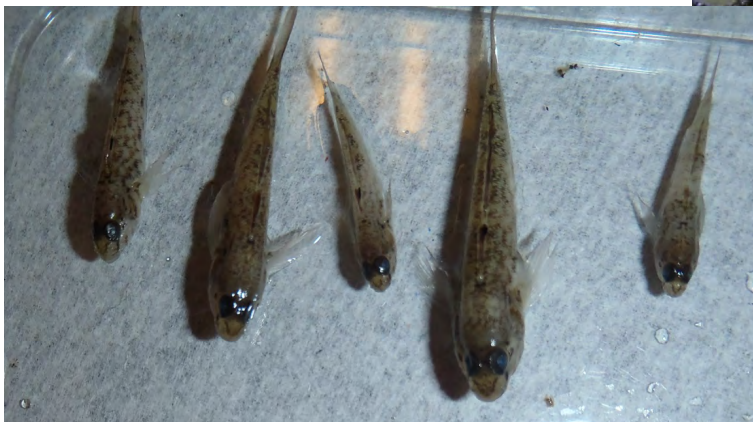


- Reports may come from a wide variety of sources
  - General public
  - Partner organizations
  - State agencies
- Report should go to the PISC coordinator
  - Call 717-772-5225
  - E-mail: [Idonovall@pa.gov](mailto:Idonovall@pa.gov)
  - AIS report form



# When Taking Pictures

- Left side photos
- Good contrast background
- Something for scale
- Distinguishing characteristics



Authority:  
Agency  
contact  
information  
based on taxa  
or location

TAXA	JURISDICTIONAL AGENCY	AGENCY CONTACT
State noxious aquatic weeds <sup>1</sup> and Federal noxious aquatic weeds	Pennsylvania Department of Agriculture (PDA)	<b>Leo Donovall</b> Invasive Species Council Coordinator
Other non-regulated obligate aquatic plants, amphibians, reptiles, mollusks, crustaceans, and fish	Pennsylvania Fish and Boat Commission (PFBC)	<b>Bob Morgan</b> Lead AIS Ecologist
Other invertebrates	PDA (terrestrial)	<b>Leo Donovall</b>
	PFBC (aquatic)	<b>Bob Morgan</b>
Mammals	Pennsylvania Game Commission (PGC)	<b>H. Eric Miller</b> Bureau of Wildlife Habitat Management
Pathogens <sup>3</sup>	PFBC	<b>Bob Morgan</b>
	PDA	<b>Leo Donovall</b>
	Pennsylvania Department of Health (PDH)	<b>Dr. James Rankin Jr.</b> Secretary of Health
AIS on State Park Lands	Department of Conservation and Natural Resources (DCNR)	<b>Fawn Kearns</b> PA Bureau of State Parks
Permitting	Pennsylvania Department of Environmental Protection (DEP)	<b>Jim Grazio</b> Great Lakes Biologist



## Action 2:

Is the report  
high priority?

completed



# Why would a report be “low priority”?

- Species is already known in the area
- Species won't survive PA climate
- Other reports of higher priority at same location



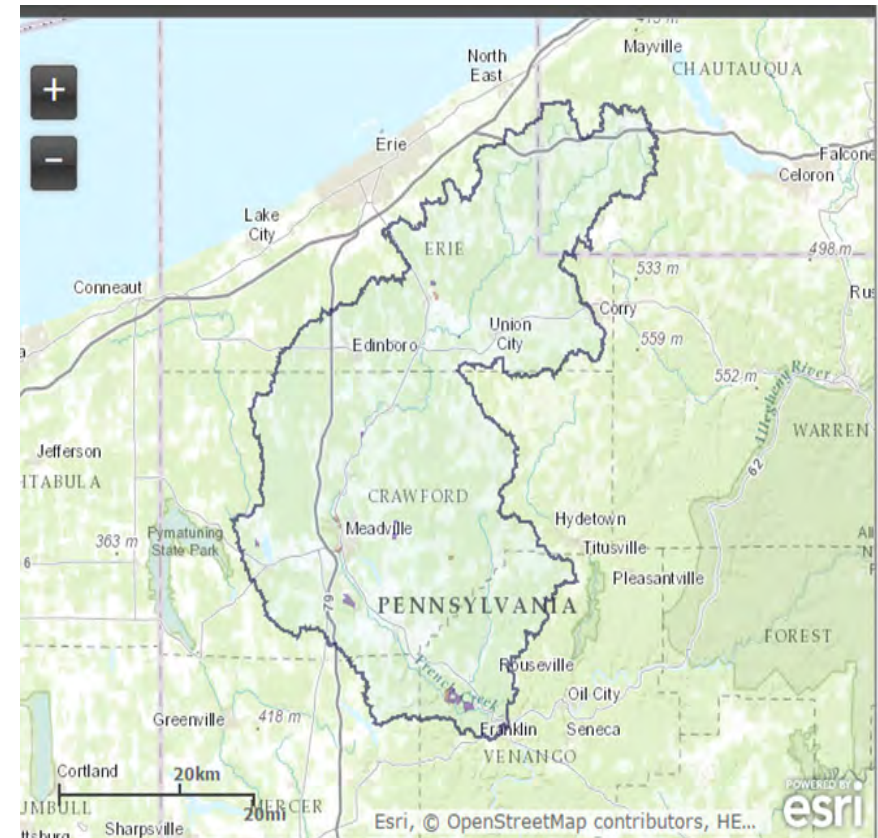


# Round gobies in French Creek: **HIGH PRIORITY**

- LeBoeuf Creek is connected to biologically diverse French Creek
- Flows SW from Chautauqua County, NY to Allegheny River in Franklin
- 27 of 65 species of freshwater mussels
  - 13 are PA state threatened 4 are federally endangered
- More than 80 fish species
  - 19 state listed as threatened, endangered, or candidate status



“One of America’s Last Great Places” - The Nature Conservancy



### Action 3:

Identify/verify  
the species

completed



UGA1354058

# Collecting a specimen

- May need to consult outside sources and collect a specimen...
  - Gather and document information accurately
  - Keep the specimen secure to avoid spreading
  - Note that it is **ILLEGAL** to possess or transport certain live AIS
  - Appendix C

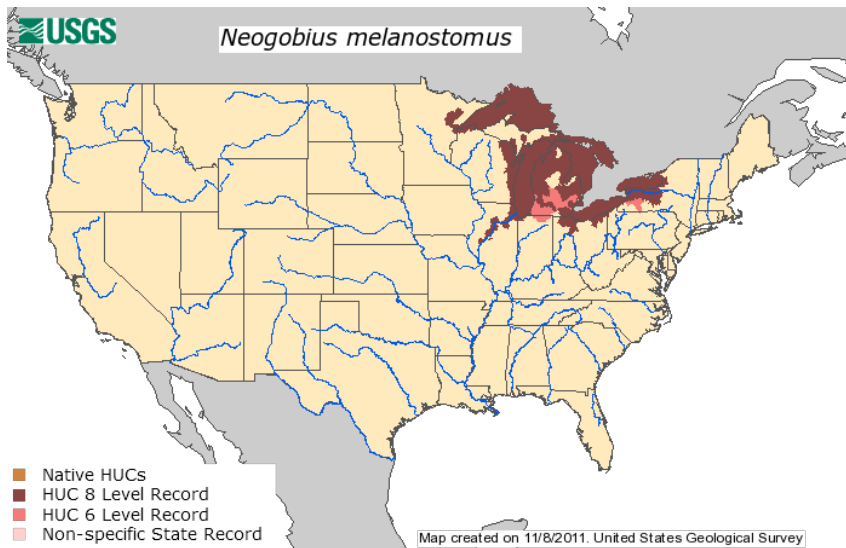


# Shipping Specimens

- Vascular plants:
  - Place in a Ziploc bag with water and newspaper packing
- Invertebrates:
  - Package securely in a small box with plenty of packing material to ensure jars or bags are not broken.
- Vertebrates
  - Work with USPS and recipient due to restrictions on shipping formalin and dry ice







- Once verified, agency will report the occurrence internally and with:
  - Partner organizations
  - Federal contacts
  - State parks
  - Mapping initiatives:
    - iMAP invasive
    - USGS NAS
    - EDDmaps

#### Action 4:

Conduct risk assessment to determine if the species is a candidate for rapid response action

completed

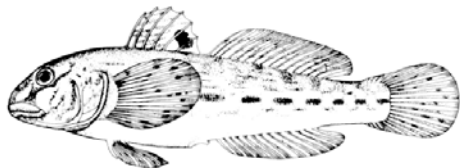
- Step 1: Is this a new invasion?
  - Yes: Go to Step 3
  - No: Go to Step 2
- Step 2: If a population already exists, is it increasing?
  - Yes: Go to Step 3
  - No: Low Risk
- Step 3: Is the species known to cause significant impacts?
  - Yes/Unknown: **HIGH RISK**
  - No: Low risk



## Action 5:

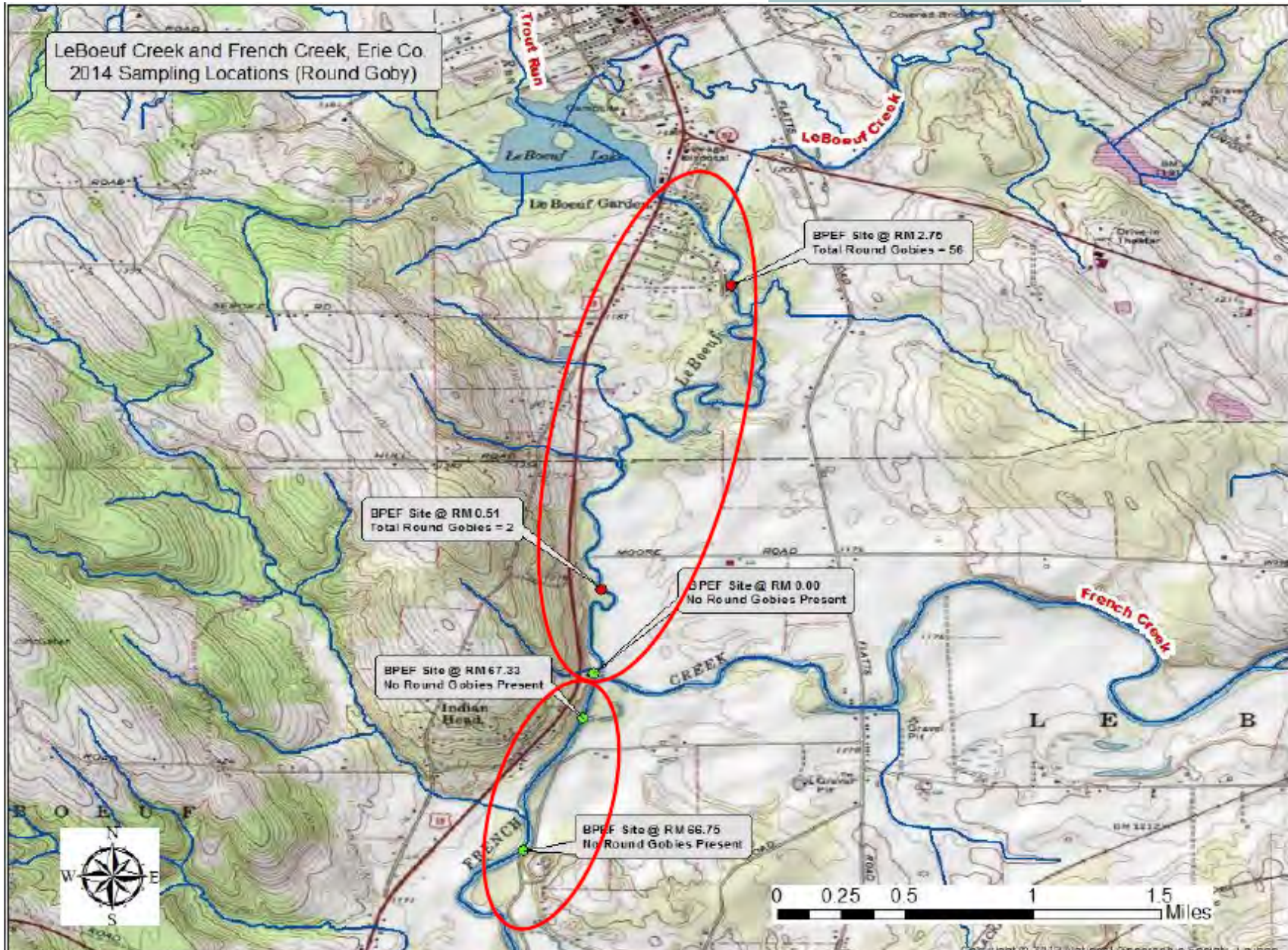
Conduct site  
specific  
assessment and  
evaluate  
response  
options

**completed**



- Gather as much information as possible
  - Round goby conference calls
  - Round goby monitoring
- Identify response objectives
  - Ex: Contain, manage, or eliminate round gobies from Lake LeBoeuf
- Use response options tool to compare response options

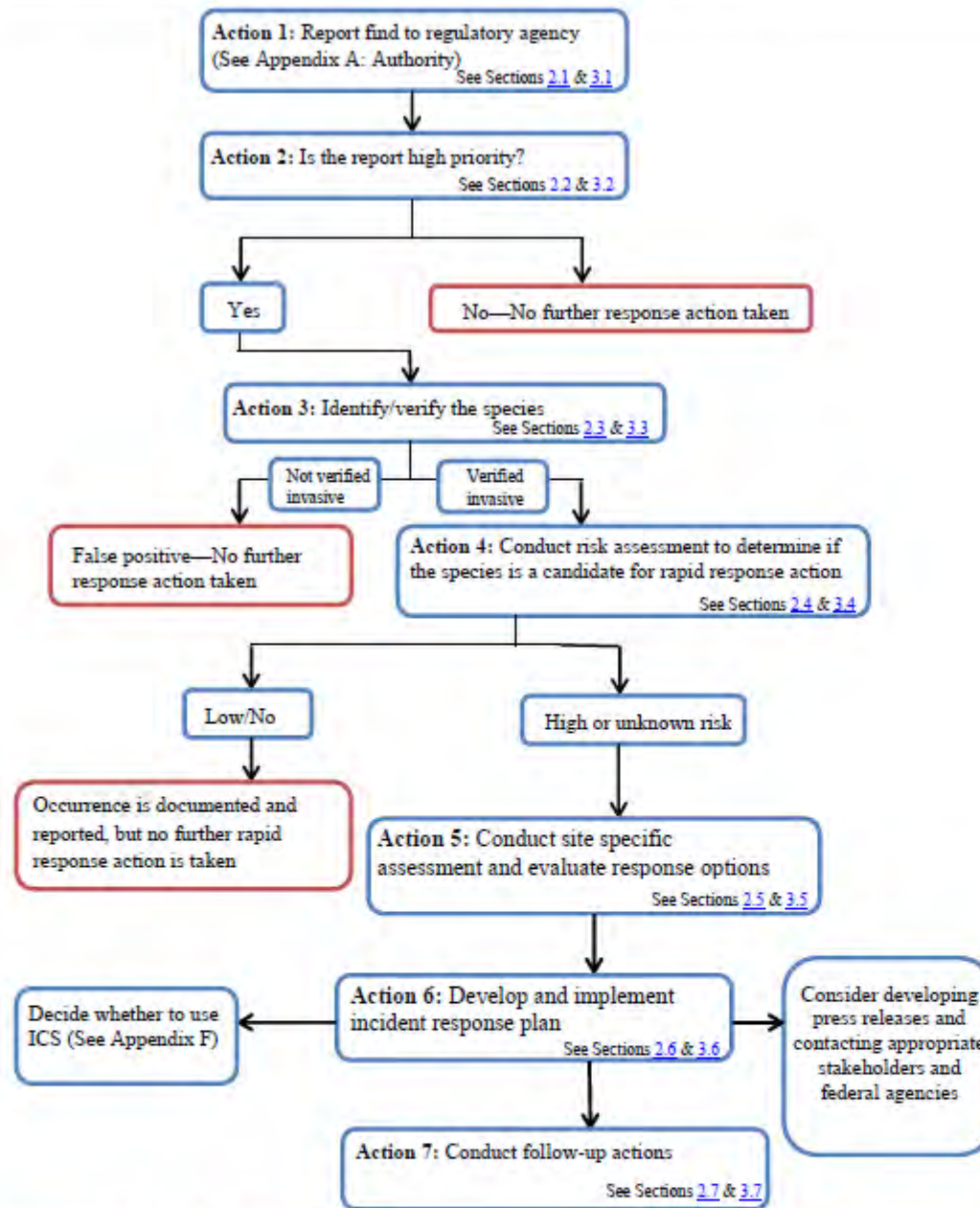
LeBoeuf Creek and French Creek, Erie Co  
2014 Sampling Locations (Round Goby)





	Response Option 1	Response Option 2	Response Option 3	Response Option 4
What resources would be needed to implement this control strategy? (if appropriate, insert the quantities of each)	<input type="checkbox"/> Personnel <input type="checkbox"/> Equipment: <input type="checkbox"/> Power Boats <input type="checkbox"/> Kayaks/Canoes <input type="checkbox"/> Nets <input type="checkbox"/> Fishing poles <input type="checkbox"/> Electrofishing gear <input type="checkbox"/> Waders <input type="checkbox"/> Pesticides and applicators <input type="checkbox"/> Transportation	<input type="checkbox"/> Personnel <input type="checkbox"/> Equipment: <input type="checkbox"/> Power Boats <input type="checkbox"/> Kayaks/Canoes <input type="checkbox"/> Nets <input type="checkbox"/> Fishing poles <input type="checkbox"/> Electrofishing gear <input type="checkbox"/> Waders <input type="checkbox"/> Pesticides and applicators <input type="checkbox"/> Transportation	<input type="checkbox"/> Personnel <input type="checkbox"/> Equipment: <input type="checkbox"/> Power Boats <input type="checkbox"/> Kayaks/Canoes <input type="checkbox"/> Nets <input type="checkbox"/> Fishing poles <input type="checkbox"/> Electrofishing gear <input type="checkbox"/> Waders <input type="checkbox"/> Pesticides and applicators <input type="checkbox"/> Transportation	<input type="checkbox"/> Personnel <input type="checkbox"/> Equipment: <input type="checkbox"/> Power Boats <input type="checkbox"/> Kayaks/Canoes <input type="checkbox"/> Nets <input type="checkbox"/> Fishing poles <input type="checkbox"/> Electrofishing gear <input type="checkbox"/> Waders <input type="checkbox"/> Pesticides and applicators <input type="checkbox"/> Transportation
List any other resources that may be needed to address this infestation				
Of the needed resources, which are readily available?				
What is the cost estimate for this response option?				
Do any regulations or permitting restrictions apply to this action?				
How feasible is it to meet your response objectives using this response option?				

- Compare:
  - Resource needed
  - Resources available
  - Cost
  - Regulations
  - Permits needed
  - Is this a feasible option to achieve objectives?



# Action 6: Develop and Implement Incident Response Plan:

## Action Plan Template:

- What are the planned actions?
- Who will be in charge of those actions?
- What regulations exist?
- What permits are needed and who will secure them?
- Funding
- Education and outreach

Name: \_\_\_\_\_ Date: \_\_\_\_\_  
Agency: \_\_\_\_\_ Phone Number: \_\_\_\_\_

**1.) Current Situation Assessment**

**A. Infestation Location**

City/ Town: \_\_\_\_\_  
County: \_\_\_\_\_  
Nearest Street Address: \_\_\_\_\_  
GPS Coordinates: \_\_\_\_\_

**B. Extent of Infestation**

Was there more than one age class identified at the infestation site?  Yes  No  
If yes, does the population appear to be established?  Yes  No

What is the approximate size of the impacted area?  
\_\_\_\_\_

Is the body of water connected to any other body of water by in/out flows, canals, tributaries, etc.?  Yes  No

Is the body of water used for recreational activities?  Yes  No  
If yes, list the activities (fishing, power boating, swimming, jet skiing, etc.):  
\_\_\_\_\_

Is this body of water privately or publicly owned? Are there any impediments to accessing the site?  
\_\_\_\_\_

# Next Steps for Lake LeBoeuf Round Gobies:

- Identify and evaluate control/mitigation possibilities
- Conducted a mitigation feasibility study
  - Found it was not feasible to conduct a major mitigation effort on the creek this past fall because flows were high and stream was up
  - Wait until 2015 to focus on possible effort
  - Focus on lowering the population
- Continue to focus on outreach and education to boaters, anglers, and recreational water users to **PREVENT** the spread of invasive species





## Action 7: Conduct Follow-up Actions

- Continued education and outreach
- Long term survey and monitoring plan
- Evaluation
- Restoration plan



**STOP AQUATIC  
HITCHHIKERS!**

Prevent the transport of nuisance species.  
Clean all recreational equipment.

[www.ProtectYourWaters.net](http://www.ProtectYourWaters.net)

# STOP AQUATIC HITCHHIKERS!



Protect Pennsylvania's Waters

Aquatic invasive species harm recreation, our environment, and our economy.



You can help prevent their spread.

# STOP AQUATIC HITCHHIKERS!



Protect Pennsylvania's Waters



# STOP AQUATIC HITCHHIKERS!



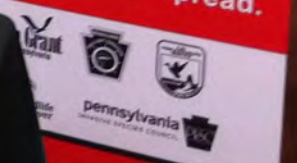
Protect Pennsylvania's Waters

- ✓ **Inspect** boats and equipment
- ✓ **Remove** plants, animals, & mud
- ✓ **Drain** water away from landing



You can help prevent their spread.

STOP AQUATIC HITCHHIKERS!



# Appendices

- A: Authority
- B: Legislation
- C: Protocols for reporting and collecting specimens
- D: AIS sighting report form
- E: Pathogens
- F: ICS



Questions?

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