USFWS Fisheries Program Southeast Region 2010 Update on *Aquatic Invasive Species Program*

http://nas.er.usgs.gov/taxgroup/plants/images/hydrilla/H_verticillata3.jpg

Photo Credit: USGS, Colette Jacono

http://www.100thmeridian.org/photobank/US_Fish_and_Wildlife_Service/Zebras/JustMussels.jpg

Photo Credit: U.S. Fish & Wildlife Service

@ALEX KANG, WWW.REDANG.ORG

http://www.redang.org/gallery3k_06.htm

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Florida Fish and Wildlife Conservation Commission Archive, , Bugwood.org

Presented to GSARP
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Florida Fish and Wildlife Conservation Commission Archive, , Bugwood.org

USFWS Region 4, Southeast Region

http://www.fws.gov

OBJECTIVES

- Issue Background

- Communication, Cooperation, and Collaboration

- Opportunities and Partnerships (e.g., Lionfish)

Eric Engbretson, US Fish and Wildlife Service, Bugwood.org

http://upload.wikimedia.org/wikipedia/commons/thumb/2/2c/Monopterus_albus_2.jpg/300px-Monopterus_albus_2.jpg

Photo Credit: Leo G. Nico, USGS, Gainesville, FL

http://upload.wikimedia.org/wikipedia/commons/1/18/Giant_salvinia.jpg

http://upload.wikimedia.org/wikipedia/commons/0/08/Snakehead_-_Channa_argus.jpg

http://www.biolib.cz/IMG/GAL/76488.jpg

http://www.celsias.com/media/uploads/admin/mudsnail.jpeg

http://www.scubaboard.com/gallery/data/512/medium/sweeping_hydrilla_sb2.jpg

http://www.100thmeridian.org/photobank/US_Fish_and_Wildlife_Service/Zebras/JustMussels2.jpg

http://www.redang.org/gallery3k_06.htm

http://cichlid.umd.edu/cichlidlabs/kocherlab/images/Adult-tilapia.jpg

http://conservationreport.files.wordpress.com/2009/12/asian-carp.jpg

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Water hyacinth (dark) and water lettuce (light) covering Fisheating Creek
Photo by J. Schardt
2003 Florida D.E.P.

http://plants.ifas.ufl.edu/guide/infest8js.jpg

http://www.csmonitor.com/var/ezflow_site/storage/images/media/images/1229-carp-asian/7164505-1-eng-US/1229-carp-asian_full_600.jpg

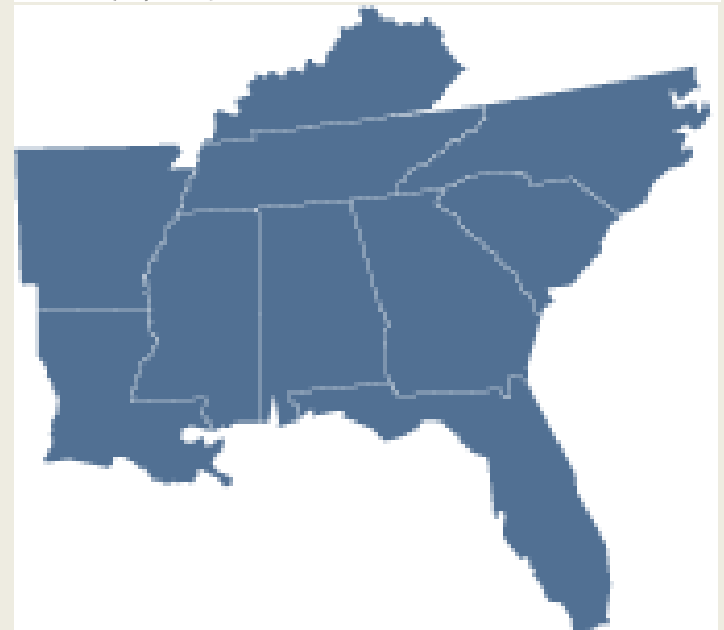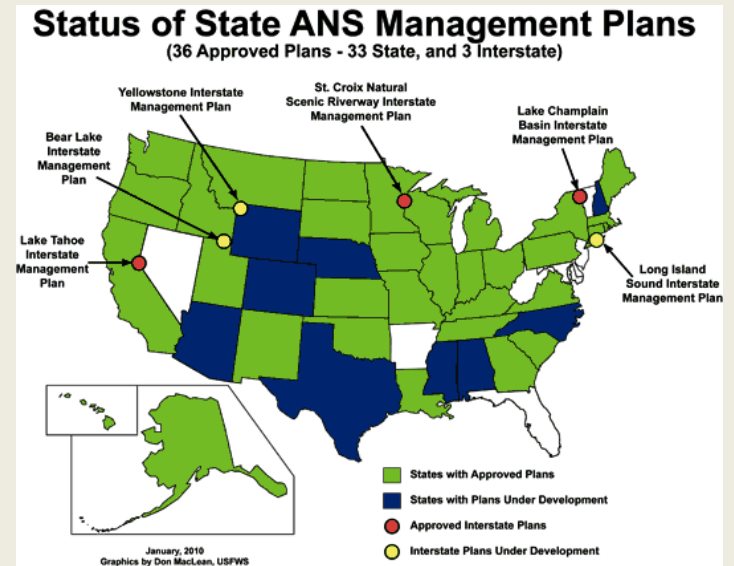http://www.agri.state.id.us/Categories/Environment/InvasiveSpeciesCouncil/Images/Quagga_Pipe_Small.JPG

http://kenai.fws.gov/overview/notebook/images/northern_pike_lobby_adfg.jpg

Communication, Cooperation, and Collaboration

State AIS Plans

- Kentucky
- Tennessee
- Louisiana
- South Carolina
- Georgia

- Florida

- Alabama, Mississippi

- North Carolina, Arkansas

Summary of Partnerships

- 4 state ANS plans received support

- 8 states in SE US received project support

- Universities, Federal Partners and States working on projects...

  - Specific species/ Risk Assessments/ Physiological Tolerances

  - Prevention and Detection

  - Economics

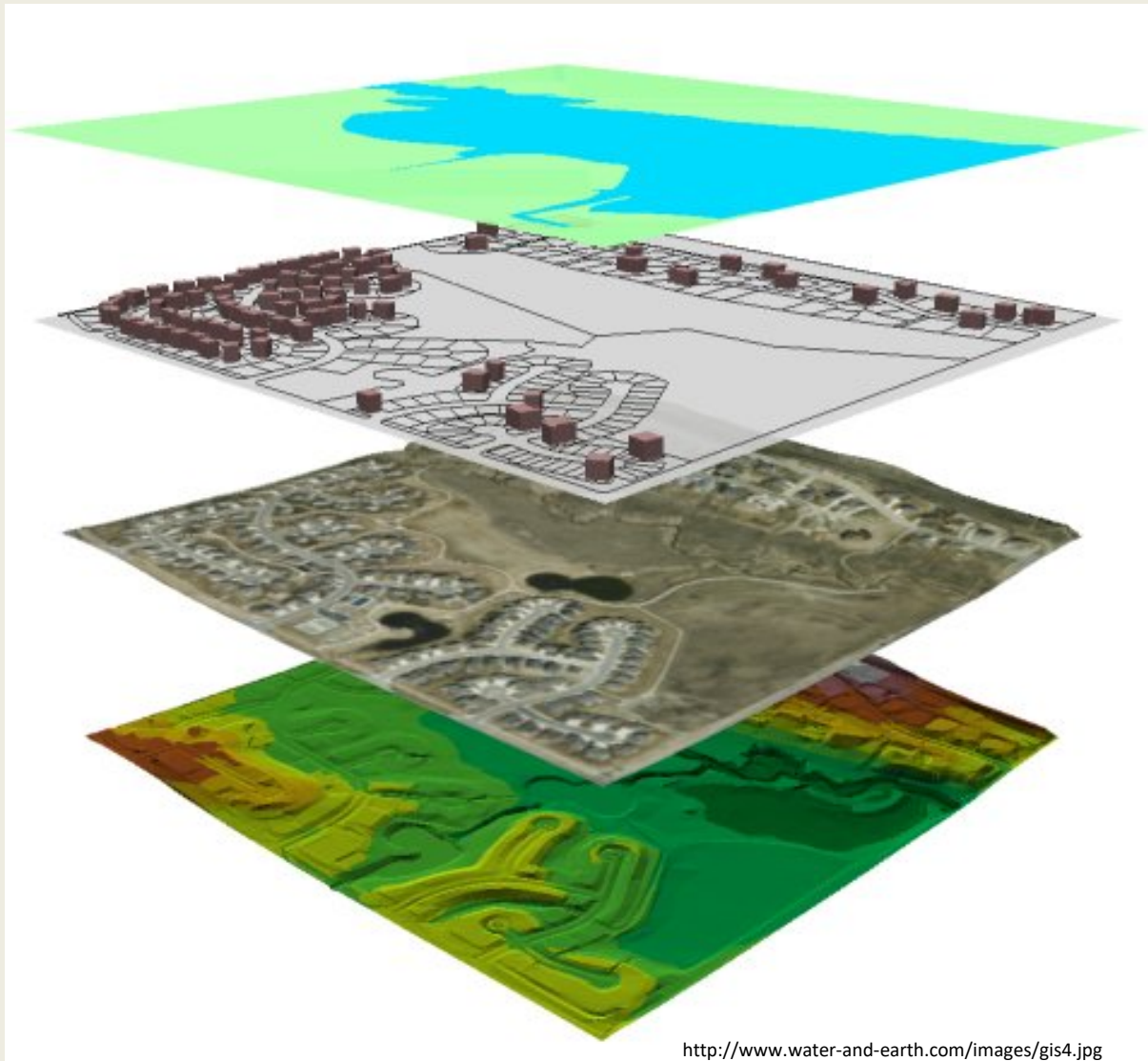 - Control strategies

  - Outreach/ Education

Opportunities and Partnerships

Think Regionally…

http://www.redang.org/gallery3k_06.htm

A Regional Biosecurity Framework

http://www.water-and-earth.com/images/gis4.jpg

Prevention

- Species Tolerances/ Risk Assessment

- Pathway/ Vector Risk Assessment

- Safeguard Priority Pathways through Risk Management (e.g., HACCP)

Risk Evaluation of Invasive Species Transport Across the U.S. – Canada Border in Washington State

Laura J. Sellens, April J. Markiewicz, and Wayne G. Landis
Institute of Environmental Toxicology
Western Washington University
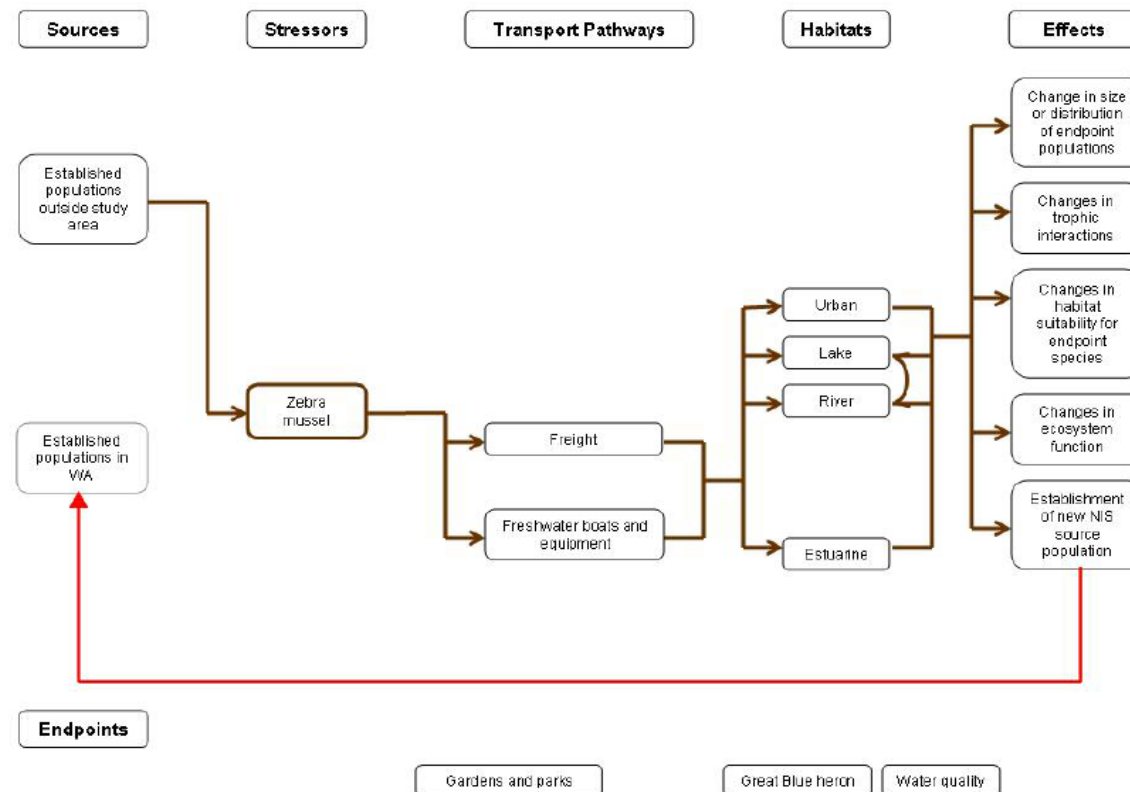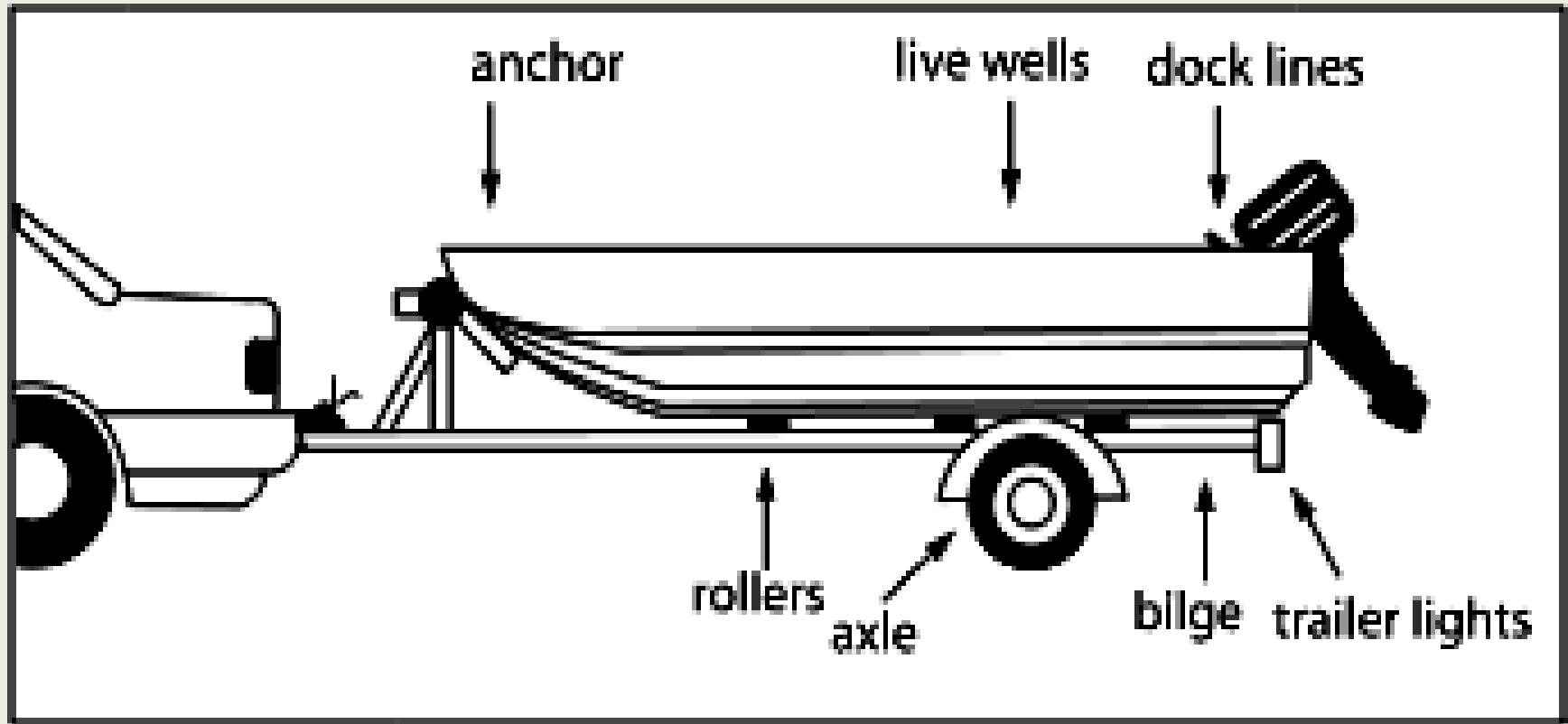ES 518, MS-9180

May 31, 2007

Figure 8. Conceptual Model for zebra mussel.

Prevention Capacity: Watercraft Inspection Training

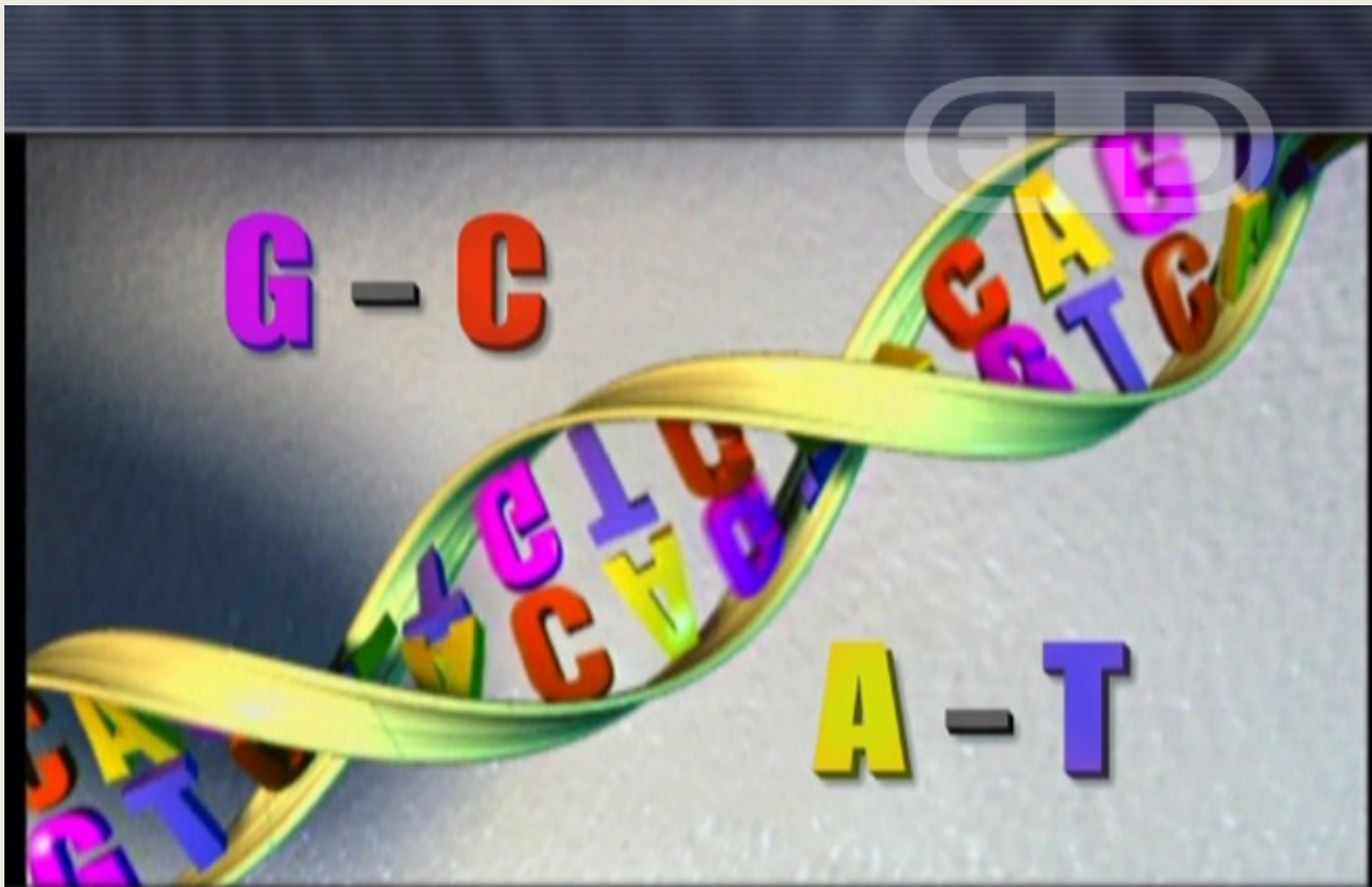http://www.dnr.sc.gov/regs/images/boattrailer.gif

Detection

- Monitoring Priority Waterbodies (e.g., risky)
- Informed Surveillance
- Communicate Detections (e.g., ANS Hotline)

Early Detection: eDNA

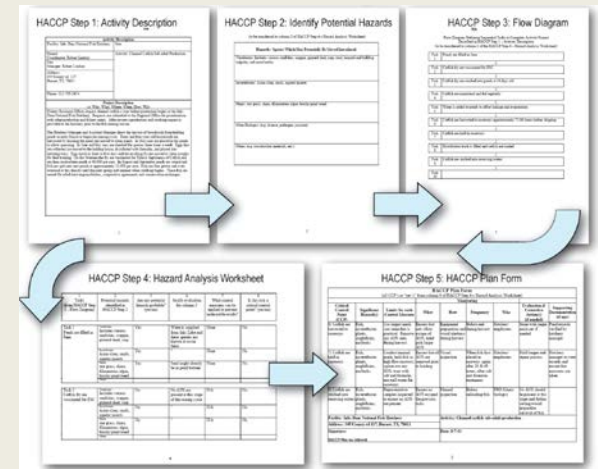© www.ehd.org

Aquatic Invasive Species Baselines: ROVs

Response

- Integrated Pest Management
- Safeguard High Priority Species or Habitats
- Managing a Response (e.g., Incident Command System)

Value of HACCP

- HACCP is a tool that can help reduce the risk of moving invasive species unintentionally

- HACCP is pathway focus

- HACCP process can be useful for many activities (e.g., field sampling, site visits, road and trail maintenance)

- Future opportunities for implementing HACCP within Natural Resource Agency programs

National Hotline
877 STOPANS

Topic: Lionfish Reports ANS Hotline

- Lobster mini-season Florida
- 877 STOP-ANS
- N=22 Lionfish calls (total time was 29 July-20 Aug)
- Information passed along within 24 hrs.
- Many thanks to REEF (esp. Lad) for face-2-face discussions with callers and lionfish pick up
- Resulted in Lionfish collection for studies
- Distributional data provided to FL FWCC and USGS
- What if others promoted hotline during strategic media events?

Lessons Learned

- What level of support

- Follow up on reports

- Specimen deposition/ verification

Conclusion

- Invasive Species, and specifically Aquatic Invasive Species, continue to impact economies, ecology, and human health
- The Region has partnerships to deal with aspects of invasive species
- There is a need for continued support of these strategies:
  - State ANS Coordinators and Invasive Species Plans/ Strategies
  - Prevention of AIS introductions Regionally through RA/RM focused on pathways
  - Providing resources and education to develop capacity in the Region for prevention, detection, and control
  - Test all Biosecurity elements on a suite of species (e.g., Lionfish)