

# USFWS Region 4 AIS Program: *addressing aquatic invasive species*

Presented to  
**SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL**

**Ecosystem-Based Management Committee**  
December 5, 2011



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# Who is speaking...

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- **2010- current, USFWS R4 Fisheries AIS Coordinator/ SARP ANS Coordinator (Atlanta, GA)**
- **DoN NavFac Pacific:** Micronesia Biosecurity Plan, Regional Invasive Species Specialist (Hawaiian Islands – Japan- Diego Garcia)
- **USFWS R1 ES Invasive Species Specialist (Honolulu, HI)**
- **USFWS R8 Fisheries AIS/ NIS Coordinator, Sup Fish Biologist (Stockton, CA)**
- 13 years Federal, 10 years invasive species

# Objectives

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- The Issue
- Coordination and Partnerships
- Raise awareness on types of project



# Invasive Species

- As reported in the USGS 2001, *Summary Report of Nonindigenous Aquatic Species in U.S. Fish and Wildlife Service Region 4*, the Southeast Region has documented non-native fishes (231), crustaceans (33), mammals (1), mollusks (22), and freshwater vascular plants (60).
- Cost an estimated \$120 billion annually in economic loss due to invasive species (Pimental et al. 2005).
- Florida spends about \$14.5 million each year on hydrilla control (Center et al., 1997). Despite this large expenditure, hydrilla infestations in just 2 Florida lakes have prevented their recreational use, causing \$10 million annually in losses (Center et al., 1997; rev. in Pimental et al., 2005).
- Impact nearly half of the species currently listed as Threatened or Endangered under the U.S. Federal Endangered Species Act. (Wilcove et al. 1998).



# Legislation

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- Nonindigenous Aquatic **Nuisance** Prevention and Control Act of 1990;
- National **Invasive** Species Act of 1996;
- Executive Order 13112, 1999;
- Brown Tree Snake Control and Eradication Act of 2004;
- Many Bureau and Agency directives



[http://upload.wikimedia.org/wikipedia/commons/thumb/2/2c/Monopterus\\_albus\\_2.jpg/300px-Monopterus\\_albus\\_2.jpg](http://upload.wikimedia.org/wikipedia/commons/thumb/2/2c/Monopterus_albus_2.jpg/300px-Monopterus_albus_2.jpg)

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[http://upload.wikimedia.org/wikipedia/commons/0/08/Snakehead\\_-\\_Channa\\_argus.jpg](http://upload.wikimedia.org/wikipedia/commons/0/08/Snakehead_-_Channa_argus.jpg)

Photo Credit: Lee G. Neo, USGS, Gainesville, FL

# Coordination, and Partnerships in FY 2011

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

[http://www.redang.org/gallery3k\\_06.htm](http://www.redang.org/gallery3k_06.htm)

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

[http://www.scubaboard.com/gallery/data/512/medium/sweeping\\_hydrilla\\_sb2.jpg](http://www.scubaboard.com/gallery/data/512/medium/sweeping_hydrilla_sb2.jpg)

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

<http://conservationreport.wordpress.com/2009/12/asian->

# USFWS Region 4, Southeast Region



<http://www.fws.gov>



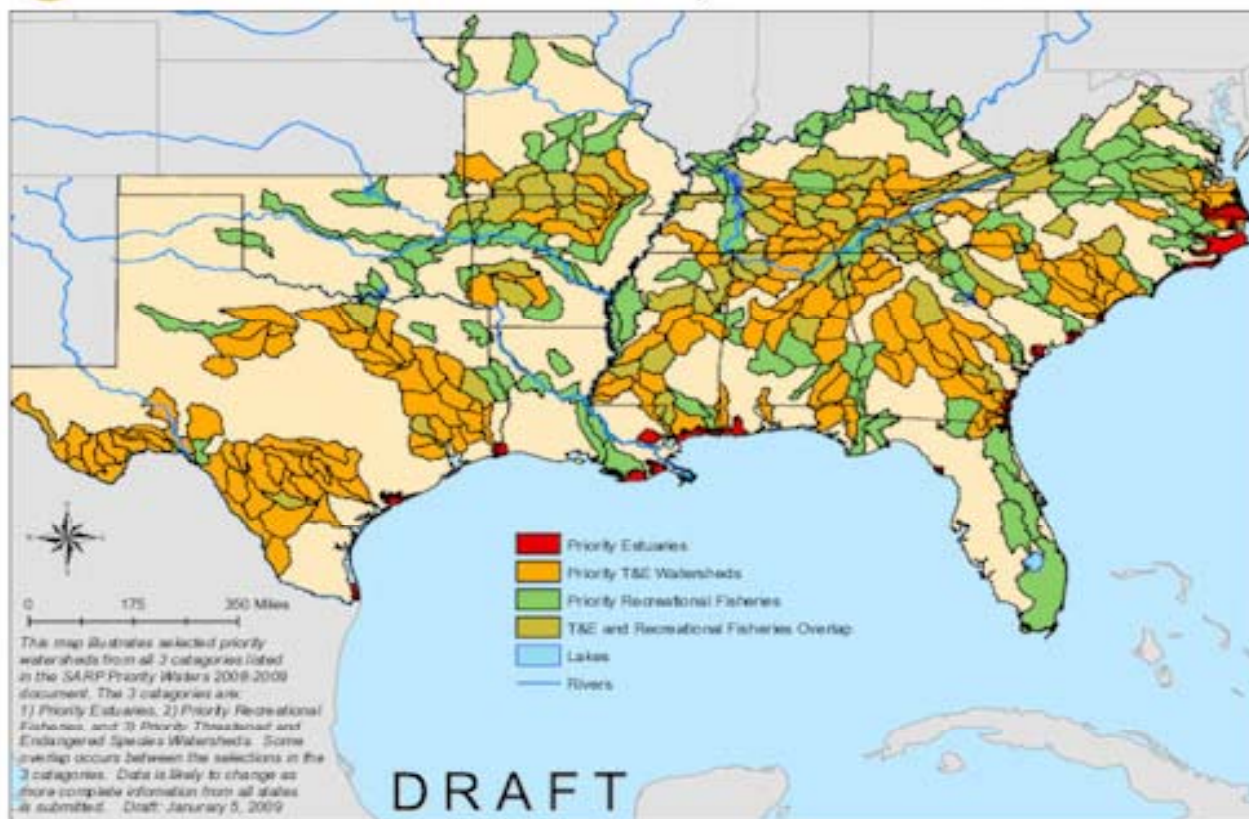
# SOUTHEAST AQUATIC RESOURCES PARTNERSHIP



[http://images.gofishn.com/media\\_files/66593/SARPLogoColor\\_no\\_quote\\_300dpi.jpg](http://images.gofishn.com/media_files/66593/SARPLogoColor_no_quote_300dpi.jpg)



## SARP - All Selected Priority Waters - DRAFT



[http://www.fws.gov/southeast/gis/media/SARP\\_all\\_priority\\_waters\\_map.jpg](http://www.fws.gov/southeast/gis/media/SARP_all_priority_waters_map.jpg)







Dedicated to the prevention and control of aquatic nuisance species

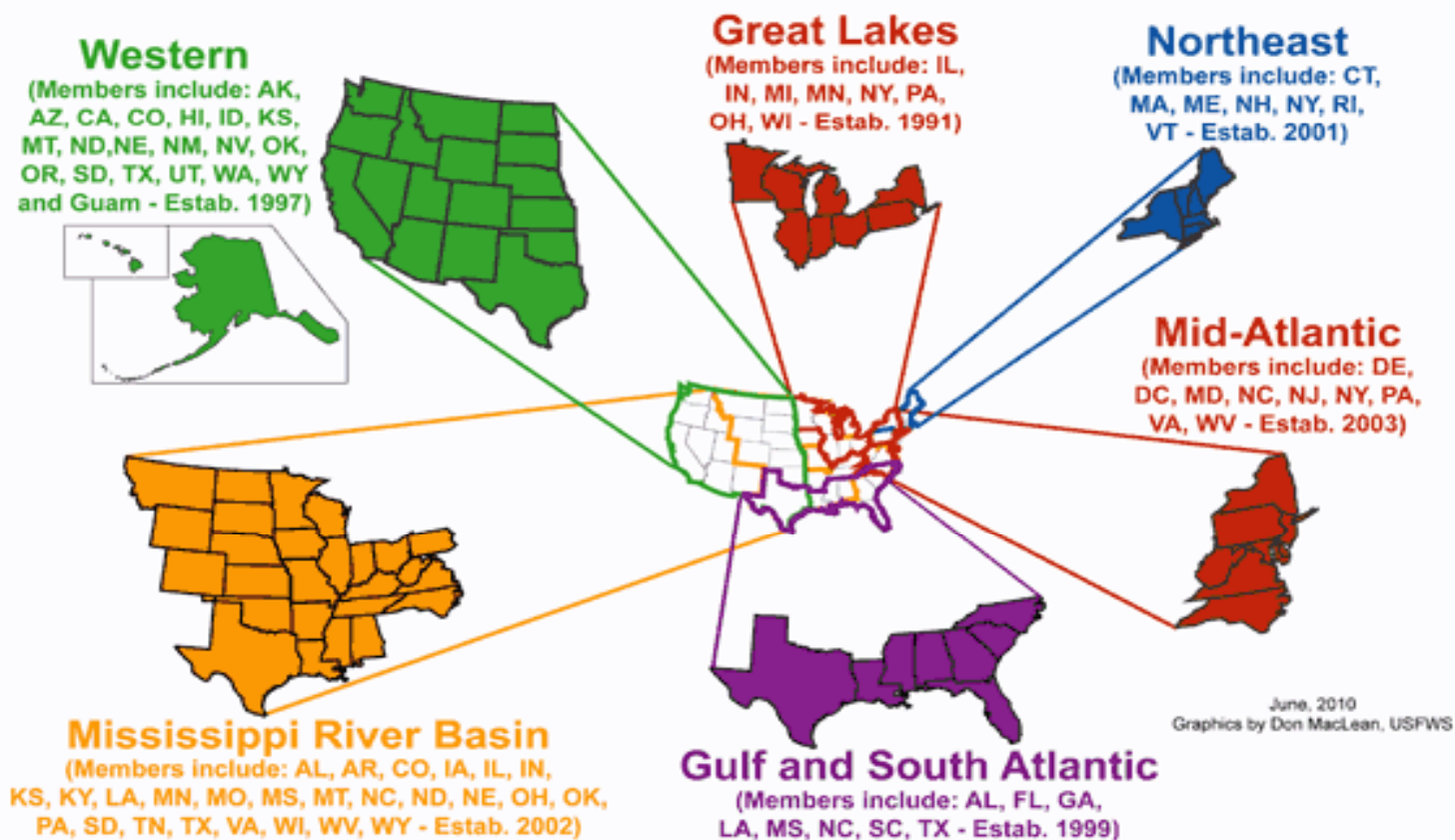


<http://www.anstaskforce.gov/default.php>

- Co-chairs USFWS and NOAA
- Approves State ANS Plans
- Implements Ad-hoc Committees for and approves species Control Plans
- Regional Panels provide recommendations to ANSTF

# ANSTF Regional Panels

## The Regional Panels of the Aquatic Nuisance Species Task Force





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Photo Credit: Lee G. Neo, USGS, Gainesville, FL

# Collaboration and Cooperation in FY 2011

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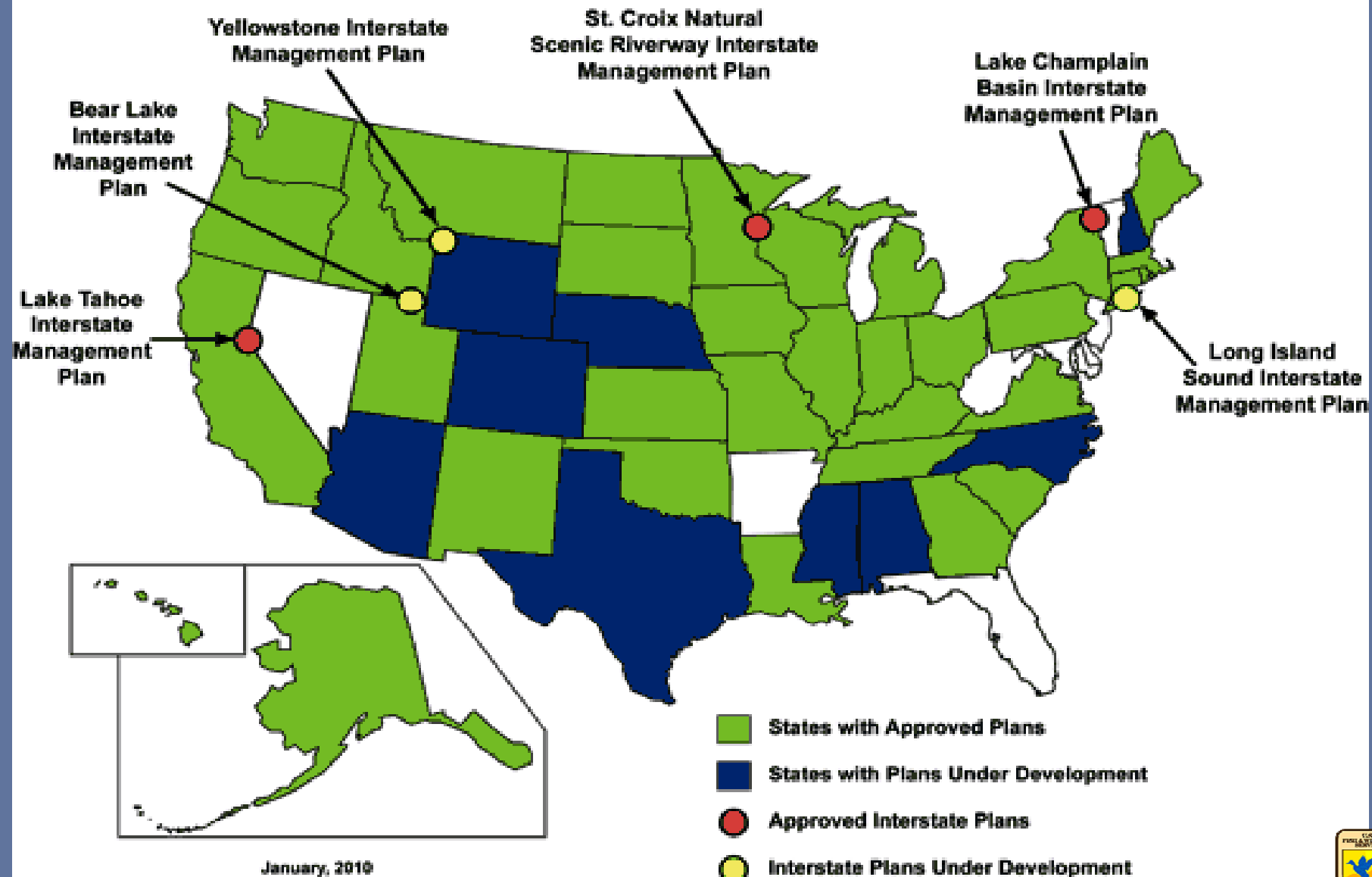
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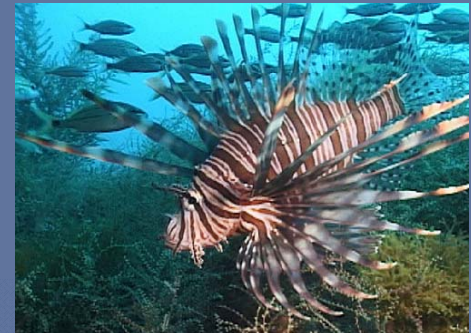
# Status of State ANS Management Plans

(36 Approved Plans - 33 State, and 3 Interstate)



# Lionfish and Marine Fishes

- **USGS**--Non-native marine fishes: An emerging threat in the Southeastern US
- **NOAA/ USVI Division of Fish and Wildlife**  
--A ciguatera survey for invasive lionfish in the USVI
- **REEF**--Lionfish Impacts on FL Keys Commercial Lobster Fishery and Lionfish Public Outreach and Control Programs for Florida
- **USFWS/ NOAA/ NPS/ USGS/ REEF/ GSMFC**-- Invasive Lionfish Control Ad-hoc Committee



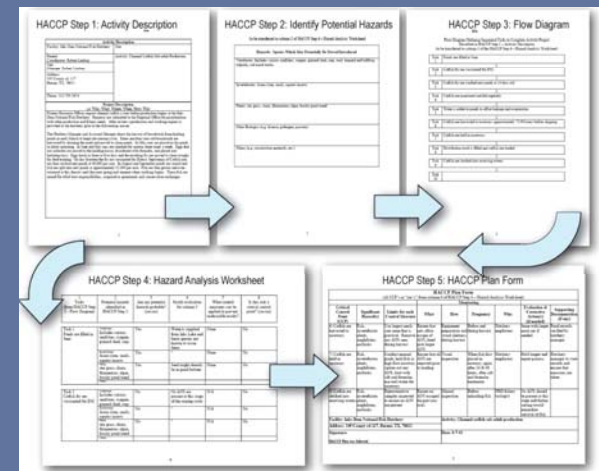
# Invasive Lionfish National Management Plan (October 2010-Nov 2011)





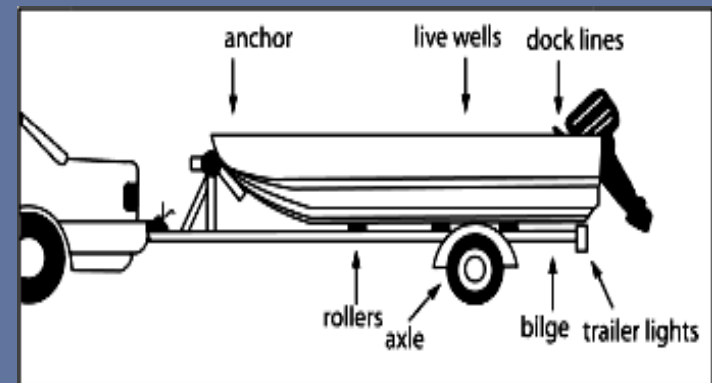
# Value of HACCP

- Hazard Analysis Critical Control Point (HACCP) planning 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)
- Training: NPS, USFWS, TVA and future– CISMAs, others



# Understanding pathways and risk: do we understand the risks

- AIS usage of FADs
- Oil Platforms and vessels with biofouling
- Port/ Harbor AIS Surveys to establish baseline
- Aquaculture



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



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National ANS Hotline and USGS website: resources for reporting aquatic invasive species

# Wanted!



## Information on All Invasive Lionfish Sightings

(Please Note the Location [GPS Coordinates] and Take a Photo If Possible)

To report a lionfish online go to <http://nas.er.usgs.gov/sightingreport.aspx>

or call: 1-877-STOP-ANS

