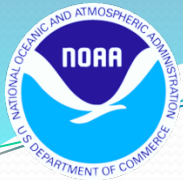




Overview: Aquatic Invasive Species Task Force & National Invasive Species Council



*Margaret M. (Peg) Brady, DOC/NOAA Senior Policy
Liaison to NISC & ANSTF
Gulf & S. Atlantic Panel Meeting, Ft. Lauderdale, FL
5 May 2015*



National AIS Strategy

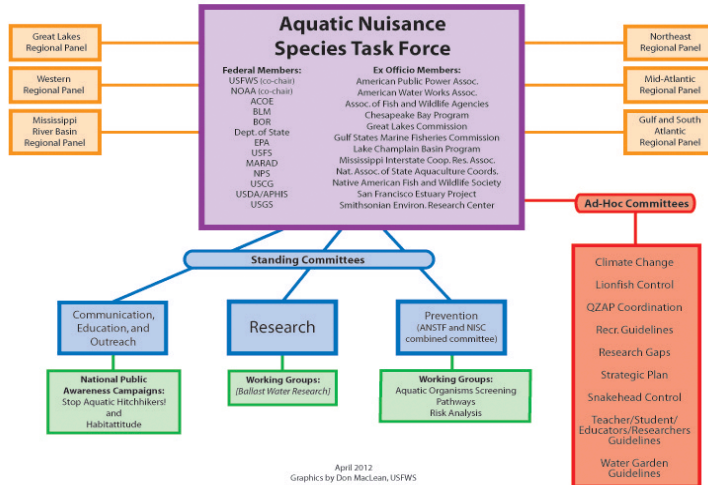
- **Prevention:** A key to solving AIS problems is to prevent them becoming established. Many AIS arrive our coasts via the ballast water and/or biofouling from ships.
- **Early Detection & Rapid Response:** Best prevention efforts cannot stop all AIS, therefore early detection, assessment and rapid response strategies may act as a critical second defense.
- **Control and Management:** Once an invasive is established efforts are needed to contain and reduce the spread of the populations to minimize their harmful impacts to NOAA trust resources.
- **Restoration:** Restoration of high-value habitats and ecosystems is critical to sustaining NOAA trust resources.
- **Research:** NOAA supports research and management studies exploring the recruitment habits.
- **Collaboration & Education/Outreach:** NOAA develops approaches for outreach to targeted user groups and businesses based on known pathways of AIS.





Aquatic Nuisance Species Task Force

Aquatic Nuisance Species Task Force Structure



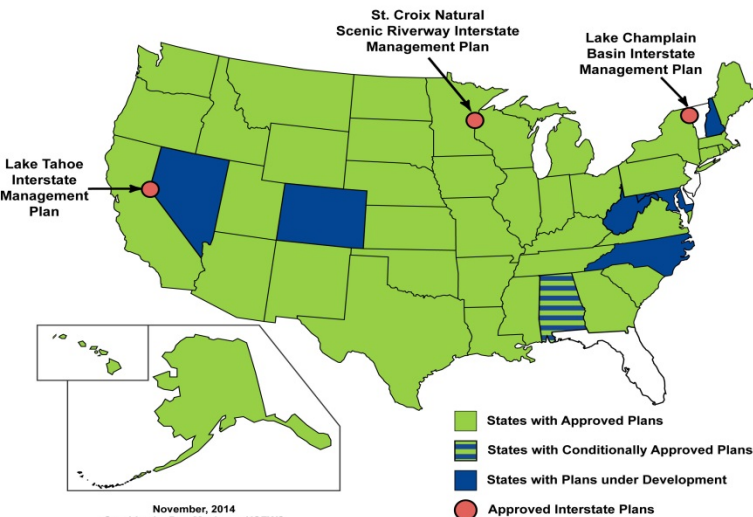
Mission: To develop and implement a program for waters of the United States that:

- Prevents the introduction and dispersal of ANS;
- Monitors and controls such species;
- Conducts research on methods to monitor, manage, control and/or eradicate;
- Coordinates ANS programs and activities of ANSTF members and State agencies; and
- Educates and informs the general public and stakeholders

Members: Work in conjunction with Regional Panels and issue-specific committees to coordinate efforts amongst agencies as well as efforts of the private sector and other North American interests

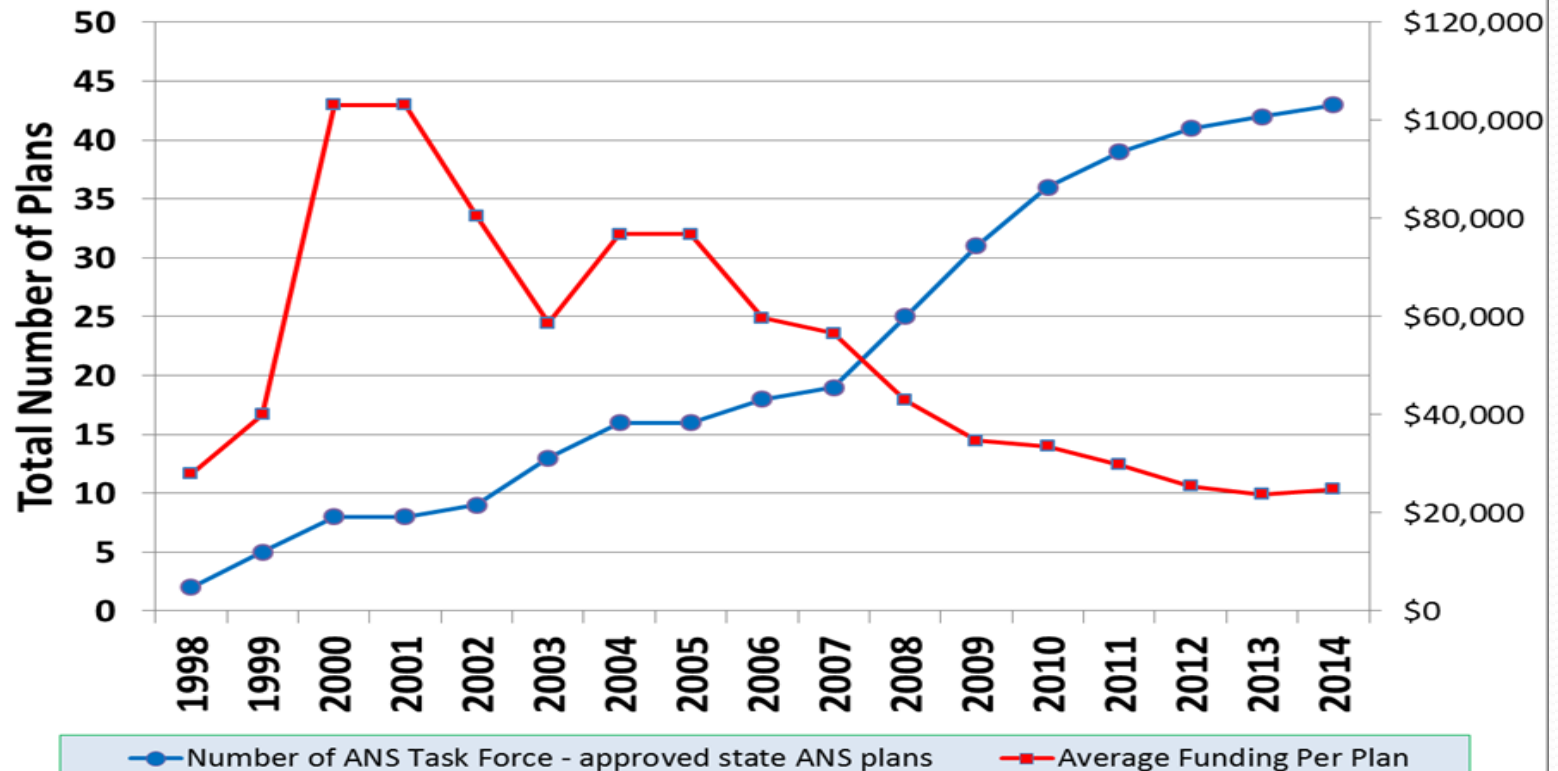
- Membership includes 13 Federal agency representatives and 13 representatives from *ex officio* member organizations.
- Co-chaired by the USFWS and the NOAA.
- Under Secretary is named in legislation as NOAA's co-chair.
- Next meeting: May 6 – 8, 2015
- <http://www.anstaskforce.gov/>
- Report to Congress - underway

Status of State ANS Management Plans (42 Approved Plans - 39 State, and 3 Interstate)



ANSTF state plans vs. funds

Figure 2: Total Number of State/Interstate ANS Mgmt Plans versus Total Amount of Funding Per Plan



ANSTF – approved plans receive approximately \$1 million annually for implementation. As more plans are approved, funds divided between the states to implement the plans are reduced.

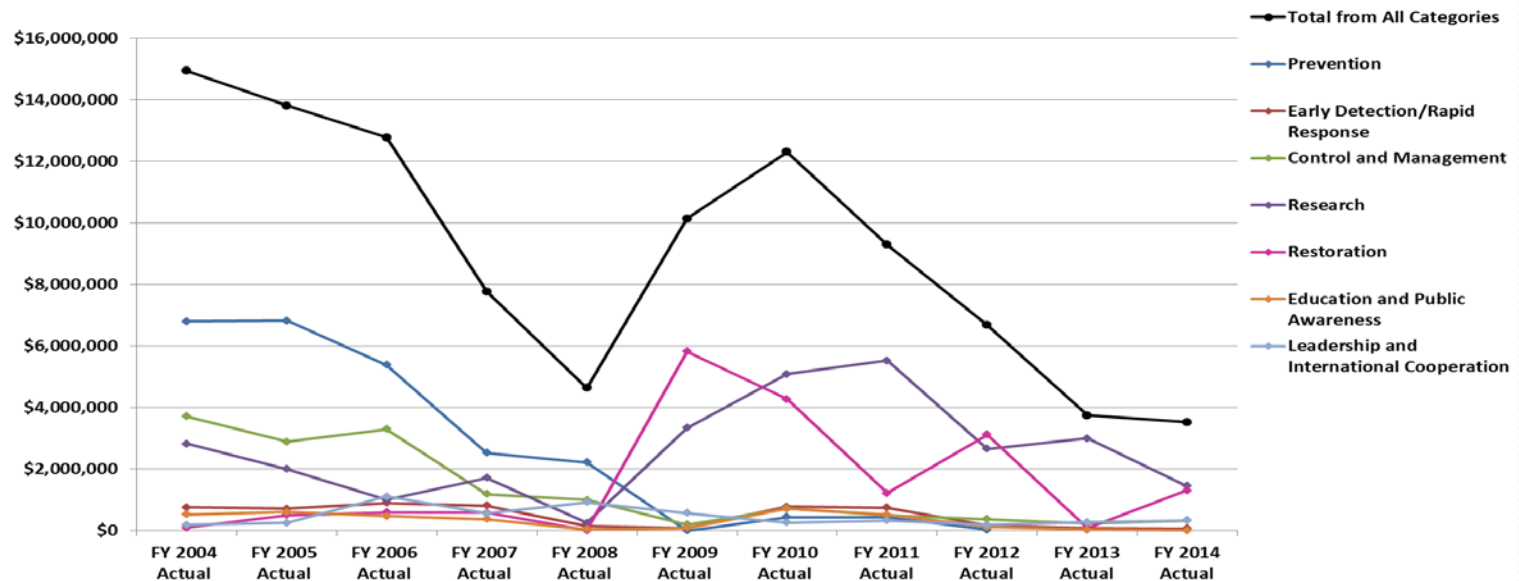


NOAA Budget Crosscut

NOAA INVASIVE SPECIES CROSS-CUT BUDGET - Last Updated April 10, 2015

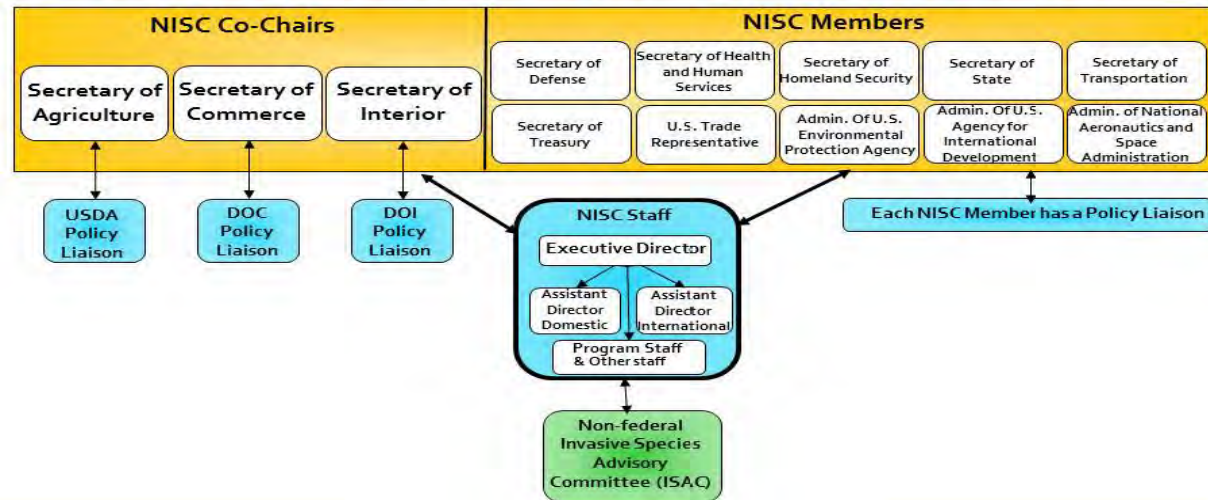
TOTAL spending: INCLUDES American Recovery and Reinvestment Act (ARRA)
and Great Lakes Restoration Initiative (GLRI) funds

	FY 2010 Actual	FY 2011 Actual	FY 2012 Actual	FY 2013 Actual	FY 2014 Actual	FY 2015 Enacted*
Prevention	\$ 441,273	\$ 436,273	\$ 35,000	\$ 10,000	\$ 8,000	TBD
Early Detection/Rapid Response	\$ 788,033	\$ 753,781	\$ 167,812	\$ 93,990	\$ 70,515	\$ 32,300 +TBD
Control and Management	\$ 732,163	\$ 506,583	\$ 375,102	\$ 240,349	\$ 336,827	\$ 26,000 +TBD
Research	\$ 5,081,991	\$ 5,523,605	\$ 2,661,454	\$ 2,998,377	\$ 1,450,301	\$ 1,340,200 +TBD
Restoration	\$ 4,279,093	\$ 1,224,564	\$ 3,126,228	\$ 95,751	\$ 1,314,934	\$ 1,539,826 +TBD
Education and Public Awareness	\$ 714,688	\$ 519,035	\$ 127,853	\$ 34,404	\$ 12,593	TBD
Leadership and International Cooperation	\$ 264,000	\$ 331,626	\$ 187,000	\$ 274,000	\$ 335,000	\$ 335,000 +TBD
Total from All Categories	\$ 12,301,241	\$ 9,295,467	\$ 6,680,449	\$ 3,746,871	\$ 3,528,170	\$ 3,273,326 +TBD





National Invasive Species Council



- **Mission:** Provide national leadership and oversight on both terrestrial and aquatic invasive species and ensure that federal programs and activities to prevent and control invasive species are coordinated, effective, and efficient.
- **Members:** Include 13 member departments and their constituent agencies and small Council staff. (<http://www.invasivespecies.gov/>)
- **Invasive Species Advisory Committee:** FACA group consisting of ~30 non-federal experts and stakeholders that provide advice and recommendations on invasive species-related issues. Next meeting – May 20-22, 2015 Silver Spring, MD
- **Revised NISC Management Plan underway** - currently



Water Resources Reform & Development Act 2014

- GAO study is underway - U.S. Government Accountability Office (GAO) was directed to review the federal costs of, and spending on, AIS as mandated by Congress in the Water Resources Reform and Development Act of 2014 (WRRDA).
 - Underway
 - NOAA wide tasking was due Monday, April 6th
- WRRDA 2014 (PL # 113-121) also authorizes the Sec. of the Army to conduct a review of existing Federal authorities relating to responding to invasive spp. with applicable heads of Federal agencies. ACOE is beginning the process. Schedule - TBA

International

- Ballast Water Convention: IMO adopted in 2004 & will enter into force 12 months after ratification by 30 States (current 44), representing 35 per cent of world merchant shipping tonnage (current 32.6%)
- Arctic Council: *Arctic Climate Resilience Agenda*: U.S. chairmanship will lead the development of improved practices and policies to prevent the introduction of invasive species in marine, coastal, freshwater, and terrestrial ecosystems, and strengthen management of on-going invasions using risk based assessment and management.
(*proposed*)



NOAA-wide AIS activities





NOAA Aquatic Invasive Species Activities

Mission: *Prevent new invasions and eliminate, mitigate, or control existing invasive species in U.S. coastal, Great Lakes, and ocean ecosystems.*



- Work at the state, national and international levels to address AIS problems and to reduce effects on marine ecosystems, commerce, and trade.
- Engage in research and restoration activities to understand the threats posed by AIS, mitigate impacts, and prevent invasions.
- Provide leadership in the coordination of federal AIS programs (e.g., co-chair of ANSTF, NISC).
- Promote collaboration among NOAA Line Offices and programs to integrate and coordinate within a broader spectrum of NOAA capabilities.



NOAA Restoration Center

RC Funds Spent on Invasive Species Efforts:

2010*

- \$4, 061 K

2011*

- \$ 1, 225 K

2012*

- \$3, 126 K

2013

- \$95 K

2014

- \$1,315 K

2015

- \$1,540 K (+ TBD)*

* Includes ARRA and GLRI funding

Damage Assessment, Remediation, and Restoration Program We restore nature resources as hazardous waste sites and after oil spills and other physical impacts

Great Lakes Restoration Initiative We restore habitat in the Great Lakes to help delist "Areas of Concern."

Marine Debris Program We execute millions of dollars in marine debris removal for the program to help improve existing habitat quality.

Coral Reef Conservation Program By preventing runoff, we minimize pollution that damages these biologically diverse ecosystems and productive fish nurseries.

Estuary Restoration Act We represent NOAA in the interagency process to establish restoration best practices for the federal government.

Regional Initiatives We provide support and guidance on restoration to regional bodies such as the Gulf of Maine Council.



NOAA Habitat Blueprint Focus Areas & Invasive Species

The Habitat Blueprint is NOAA's strategy to integrate habitat conservation throughout the agency, focus efforts in priority areas, and leverage internal and external collaborations to achieve measurable benefits within key habitats such as rivers, coral reefs, and wetlands.

NOAA has identified state and federal invasive species experts and plans to consider invasive species prevention and management while developing Habitat Blueprint Focus Area Implementation Plans.

10 Focus Areas (as of January, 2015)

- Russian River, California
- Muskegon Lake, Michigan
- St. Louis River, Minnesota / Wisconsin
- Penobscot River, Maine
- Choptank River, Maryland / Delaware
- Manell-Geus, Guam
- West Hawaii
- Kachemak Bay, Alaska
- [Northeast Reserves and Culebra Island, Puerto Rico](#)
- [Biscayne Bay, Florida](#)



Culebra Island, Puerto Rico



NOAA's Ongoing AIS Actions

Hazard Analysis & Critical Control Point (HACCP) Planning to Prevent the Spread of Invasive Species:

- HACCP is international standard for reducing or eliminating the spread of unwanted species during natural resource management (NRM) activities
 - Team from NOAA and USFWS have revised manual, forms and teaching materials to better align with NRM work
 - Team also developed a "Train the Trainer" course
 - New website under development: hosted by the USFWS National Conservation Training Center
-
- Recent courses:
 - NEANS: December, 2014
 - Santa Cruz: April 2015
 - Future courses:
 - Alaska - TBD



Japan Tsunami Marine Debris

Response Protocols for Biofouled Debris and Invasive Species Generated by the 2011 Japan Tsunami



Outcome of the
Regional Preparedness and
Response Workshop to
Address Biofouling and
Aquatic Invasive Species on
Japan Tsunami Marine Debris

Portland State University
Portland, Oregon
July 31 – August 1, 2012

- Product of the *Regional Preparedness and Response Workshop to Address Biofouling and Aquatic Invasive Species on Japan Tsunami Marine Debris* (July 31 – Aug 1, 2012; Portland State University)
- Goal is to provide effectively and consistently response to potential AIS associated with JTMD. Includes:
 - Risk communication,
 - Outreach and engagement framework,
 - Science-based protocols for risk assessment and management response.
- Suggested guidance for jurisdictions impacted by JTMD.
 - Voluntary and adaptive
 - Work within or be superseded by potential federal, state, and provincial mandates





NOAA Regional Highlights

GULF / SOUTH ATLANTIC

- Capacity building for lionfish research and control in the Caribbean
- Development of Lionfish Web Portal

Great Lakes Environmental Research Lab (GLERL)

- Investigating links between quagga/zebra mussels and harmful algal blooms.
- Continued work on the GLANSIS database and factsheets

HAWAII / PACIFIC ISLANDS

- AIS Monitoring and vessel inspection on Papahānaumokuākea Marine National Monument
- Invasive algae removal on Hawaiian reefs

NORTHEAST / MID-ATLANTIC

- Coordinates the Chesapeake Bay Invasive Catfish Taskforce

WEST

- AIS management plan for the Sacramento-San Joaquin River Delta.
- Continued research by Monterey Bay NMS into *Watersipora subtorquata*.
- Invasive algae control and removal in Southern California
- Investigating the impacts on non-native species on ESA listed salmon



Recommendations from the June 2012 NOAA AIS Workshop

REPORT FROM THE NOAA AQUATIC INVASIVE SPECIES SYMPOSIUM AND WORKSHOP

June 5-6, 2012
Silver Spring, Maryland



- ❑ Adopt a NOAA” invasive species-conscious policy” to encourage accountability and communication across NOAA and to outside stakeholders.
- ✓ Raise awareness of NOAA actions that respond to AIS threats and solutions.
- ✓ Develop a NOAA invasive species portal to capture and communicate information
 - ✓ <https://sites.google.com/a/noaa.gov/invasive-species>
- ✓ Improve coordination and collaboration between NOAA and the ANSTF.
- ✓ Develop and distribute a NOAA list of taxonomic and AIS experts.



2015 NOAA AIS Workshop

March 31st to April 1st, 2015

HACCP Training April 2nd

Southwest Fisheries Science Center, Fish Ecology Division
110 Shaffer Road, Santa Cruz, CA 95060

- How can we use existing NOAA processes and priorities to advance AIS issues?
- Invasive species economics: example from Alaska
- Develop strategies to increase AIS support across NOAA
- AIS field trip to Elkhorn Slough National Estuarine Research Reserve
- Reframing the efforts of the NOAA AIS Team: past, present, and future of our group

Workshop Objectives:

- Examine AIS issues that impact NOAA trust resources and explore mitigation strategies.
- Identify ways to use existing NOAA processes, programs, and priorities to advance AIS prevention and control.
- Examine AIS case studies and issues where NOAA is making progress and those that need greater attention.
- Establish a prioritized list of objectives for the NOAA AIS Team and a framework for moving forward.





2015 NOAA AIS Workshop

Draft Recommendations:

- Draft a model for NOAA regional AIS team that is focused on coordination and efficiencies. Once the Western Team as a pilot is well-established, promote its benefits and encourage other regions to follow.
- Create a list of potential funding sources, in particular those that where NOAA has had previous success in securing AIS funds.
- Review the draft National Invasive Species Council NEPA guidance and identify information that may be relevant to NOAA projects.
- Identify environmental economists (inside and outside NOAA) to inquire about opportunities for including AIS in economic studies.
- Identify AIS training needs and capabilities within NOAA.
- Promote use and enhancement of AIS risk assessment tools; compile and distribute information on models and training opportunities.
- Construct a webinar series at NOAA to communicate AIS issues or tools AIS (e.g., risk assessment, economics).



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Questions ?



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ANSTF website: <http://www.anstaskforce.gov/>

NISC website: <http://www.invasivespecies.gov/>