

National Council for Science and the Environment  
Oceans 2011 Conference

**Breakout Number: 10**

**Breakout Session: Marine Bioinvasions**

The coastal areas of the United States possess some of the world's most diverse and fragile ecosystems and support numerous species that depend on these habitats for survival. Unfortunately, global climate change, human development, and the continuous degradation of coastal ecosystems have rendered these once pristine areas vulnerable to the introduction of opportunistic invasive species. Invasive species have a profound effect on aquatic ecosystems resulting in the displacement of native species, reduced biodiversity, and the alteration of

**Reauthorize the National Invasive Species Act.** The Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990 (NANPCA) was intended to identify, regulate, and control the introduction of nonindigenous species into the United States, to work toward minimizing economic and ecological damage from such species, and to establish a program to assist in the removal of such species. NANPCA was last reauthorized as the National Invasive Species Act (NISA); since this time a great deal has happened in regards to their introduction, management, and impact to human health. We recommend a reauthorization of NISA to address these issues. The Act should also be modified to include authorization of funding for including a national monitoring program to document the spread of such species, an emergency fund for the rapid response of newly detected invasions, and a comprehensive risk assessment on the vectors of non-native species.

**Task 2.**

**Coordinate Vector Management.** New invasions need to be prevented through coordinated vector management. Further, management goals need to be clearly articulated.

Working with other agencies, NOAA should continuously review the science for evaluating marine bioinvasions vectors. An invasive species “czar” should be established to coordinate this issue, and others related to invasive species, with other agencies. All marine vectors need to be evaluated (e.g., magnitude and volume of biota that is moved by different transfer mechanisms). Management schemes for addressing flux and reducing the propagule pressure should also be addressed.

**Task 3. Control and Management of Invasive Species.** In the short-term, plans should be developed for the necessary actions needed to respond quickly to newly detected non-native species that may cause ecosystem, public health and/or socioeconomic impacts. Risk assessments are needed to prioritize species that warrant a rapid response plan. Further, an emergency fund for such efforts should also be established. In the long-term, Federal agencies should develop and implement effective strategies for control and management of invasive species. As an example, environmentally-sound options should be reviewed for establishing markets for invasive species.

**Task 4. National strategy for monitoring.** When a new species is introduced, the best strategy is early detection and rapid response. This includes monitoring habitats to discover new species soon after introduction, reporting sightings of previously unknown species in an area, and working quickly to keep the species from becoming established and spreading. Extensive monitoring across environments is needed to document the distribution of native species, identify

**Task 7. Increased Coordination.** Partnerships should be built among international, Federal, state and local agencies, academic institutions, and others to enhance capacity for detecting, responding to, and managing invasive species. Interagency groups (e.g., Coral Reef Task Force) need to build partnerships that broadly implement the other recommendations. The dispersal of invasive species is a global problem; therefore international coordination and cooperation is an important part of the solution. Invasive species are moved around the globe as a result of trade, transport, and travel, thus it is important to develop an international agreement for the management of pathways and to disseminate information on the risks and impacts from invasive species.