## POLICY GUIDANCE OFFICE OF NATIONAL MARINE SANCTUARIES

# INVASIVE SPECIES IMPACTS ON MARINE LIFE March 2009

## **PURPOSE**

The purpose of this policy guidance is to indicate how the Office of National Marine Sanctuaries (ONMS) will address the issue of invasive species impacts on marine life in national marine sanctuaries.

## DEFINITION

Invasive species are "a species that has been transported by natural processes or human activities, either intentionally or accidentally, into a region where it did not occur previously, and reproduces and spreads rapidly into new locations, causing economic or environmental harm or harm to human health," as defined by the Executive Order on Invasive Species.

## POLICY GUIDANCE

As appropriate, the ONMS may prohibit activities that promote invasive species within national marine sanctuaries and take appropriate actions to remove them and mitigate their impacts. In general, the ONMS will continue working with NOAA and other partners to monitor and research the presence and effects of invasive species within the sanctuaries. The issue of invasive species, however, reaches beyond the boundaries of the national marine sanctuaries. Therefore, the ONMS will manage, to the best of its ability, the potential impacts of invasive species on sanctuary ecosystems by participating in the advancement of the many programs already in place throughout NOAA.

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## BACKGROUND

Invasive species account for one of the largest present and future threats to coastal ecosystems, coastal economies, protected habitats, and human health in coastal regions. Aquatic species invasion has been identified by both Congress and the White House as a problem of national significance requiring federal action. Florida Keys National Marine Sanctuary is currently the only sanctuary that has regulations in place dealing with these non-native species. These regulations not only deal with the invasive animals, but the exotic species as well. In the three California sanctuaries (CBNMS, GFNMS, and MBNMS), the ONMS is proposing new regulations prohibiting the deliberate or non-deliberate introduction of any non-native or genetically altered species even if they are not invasive, except striped bass released during catch and release fishing activity.

Additionally, the ONMS conducts and partners on sanctuary-specific programs dealing with invasive species. The Broad-Scale Non-indigenous Species Monitoring along the West Coast in national marine sanctuaries and National Estuarine Research Reserves is a collaborative project between the Smithsonian Environmental Research Center, the National Estuarine Research Reserve System (NERRS) and the ONMS, focusing on the monitoring and research of invasive species in nine marine protected coastal areas along the U.S. west coast. The Reef Environmental Education Foundation (REEF) program, responsible for conducting fish surveys in most of the sanctuaries, and the National Centers for Coastal Ocean Science's (NCCOS) Beaufort lab are beginning to work with the Florida Keys NMS to set up early detection monitoring of lionfish and other ornamental fish. If detected early enough, measures can be taken to remove the invaders before the population is uncontrollable.

The National Invasive Species Act (NISA) of 1996, an amendment to the Nonindigenous Aquatic Nuisance Prevention Control Act (NANPCA) of 1990, identifies the need for early detection and monitoring of aquatic invasive species and mandates that NOAA, in conjunction with other federal agencies, develop a comprehensive national program. Therefore, the Aquatic Invasive Species Program was initiated to "protect the nation's aquatic resources from the increasingly costly challenge of invasive species," as a cooperative effort among NOAA Research, National Ocean Service, and National Marine Fisheries Service. Additionally, the Aquatic Nuisance Species Task Force was created to implement the NANPCA and, later expanded under NISA, as an intergovernmental organization dedicated to preventing and controlling aquatic nuisance species (co-chaired by U.S. Fish and Wildlife Service and NOAA).

The National Sea Grant Aquatic Nuisance Species Program is a coastal state program funded through NOAA and committed to the research of invasive species. Sea Grant research has helped to control invasions and minimize their impacts, reduce the cost and environmental impact of monitoring and control measures, prevent future invasions, and even completely eliminate invading species.

The NOAA National Center for Research on Aquatic Invasive Species was established in 2003 at the Great Lakes Environmental Research Laboratory (GLERL) in Ann Arbor, Michigan, and functions in conjunction with the NOAA Invasive Species Program. The Research Center was established to "provide leadership, communication, and coordination for the agency's research investments in support of understanding, preventing, responding to, and managing AIS invasions in U.S. coastal ecosystems." The research center supports a variety of research programs including the GLERL Nonindigenous Species Research Program, among others. Invasive species has also been identified as a major ecosystem stressor NCCOS, which is conducting research with the goal of providing resource managers with the necessary information to make better management decisions.