## **Aquatic Invasive Species Research and Outreach Program**

**Federal Agency:** National Sea Grant College Program, National Oceanic and Atmospheric Administration, Department of Commerce

**Dates:** Next Announcement for this program will be June 30. 2006.

**Funding Opportunity Description:** The National Sea Grant College Program seeks to fund research and outreach projects addressing the introduction and spread of aquatic invasive species. The goal of the program is to discover and develop information and tools that can lead to the prevention, monitoring and control of aquatic invasive species threatening United States coastal, oceanic and Great Lakes communities, resources and ecosystems.

**Funding:** About \$3,900,000 was to be available to support invasive species research projects, and about \$1,700,000 supported invasive species outreach projects, in FY2005 and FY 2006

**Funding Instrument**: Either Grants or Cooperative Agreements are awarded through this program depending on the amount of substantial involvement.

**Funding Duration:** Projects can be for a maximum of two years' duration.

**Eligible Applicants:** Individuals, institutions of higher education, nonprofit organizations, commercial organizations, State, local and Indian tribal governments, foreign governments, and international organizations are eligible.

**Cost Sharing or Matching Requirement:** Each proposal must include additional non-federal matching funds equivalent to at least 50% of the federal funds requested; for example, a proposal requesting a total of \$200,000 in federal support would have to include at least an additional \$100,000 in matching funds.

## **FY2005 Program Priorities** (\*Priority maybe altered for FY2006)

- 1. <u>Biology and Life History</u>: Basic biological research into population dynamics, genetics, physiology, behavior, and parasites and diseases of nonindigenous species with the potential to lead to the development of ecologically safe, effective, and inexpensive control. Research on the ecological and environmental tolerances of nonindigenous species with the potential for prediction of eventual geographic and ecological impacts.
- 2. <u>Effects on Ecosystems</u>: Research on the impacts of nonindigenous species at each stage of their life history with the potential for helping natural resource managers determine how to minimize the impacts on established biota and their habitats.

- 3. <u>Socioeconomic Analysis (Costs and Benefits)</u>: Research on the potential impacts of nonindigenous species on human health in terms of spread of disease, concentration of pollutants, and contamination or purification of drinking water sources. Economic impact on sport, commercial and tribal fisheries, the recreation and tourism industry, the shipping and navigation industry, and municipal and industrial water users. Use of research results to provide a scientific basis for developing sound policy and environmental law, and for public education and technology transfer.
- 4. <u>Control and Mitigation</u>: Research into various types of control--engineering (redesigning water intakes, etc.), physical (scraping, filtering, etc.), chemical (biocides, antifoulants, etc.), biological (parasites, predators, etc.), and physicochemical (heat, salinity, pH, etc.)--to develop selective and effective controls that minimize adverse ecological/environmental impacts. Outreach activities that will transfer these technologies to the appropriate users.
- 5. <u>Preventing New Introductions</u>: Research and outreach into identifying vectors of aquatic invasive species introduction, developing cost-effective, realistic methods of prevention, and transferring the information to appropriate users. In particular, research to develop, or support the development of, workable and effective methods to reduce or eliminate nonindigenous species introductions by shipborne pathways such as ballast water or hull fouling, without imposing undue hardships on the shipping industry.
- 6. Reducing the Spread of Established Populations: Research and outreach to identify mechanisms for further dispersal of individual established species that will lead to the development of safeguards and protocols to prevent and/or slow the spread of nonindigenous species to uninfested areas, and transfer of that information to appropriate users. It is a programmatic priority to support projects that address regional priorities that have been identified by Regional Panels of the Aquatic Nuisance Species Task Force and in State ANS Management Plans, where these occur. Not all regions of the country have Regional Panels, and not all panels have published research and outreach priorities. Not all states have State ANS Management Plans, and not all State ANS Management Plans contain research and outreach priorities. Further information on Aquatic Nuisance Species Task Force Committees, Regional Panel sand State ANS Management Plans can be found at the Internet Web site, <a href="http://www.ANSTaskForce.gov/">http://www.ANSTaskForce.gov/</a>.

Potential investigators are encouraged to review the list of recent and currently funded Sea Grant projects related to aquatic invasive species that is available on Sea Grant's aquatic invasive species Web page, (http://www.seagrant.noaa.gov/research/nonindigenous).

Address to request Application Package:

Application criteria may be obtained from Sea Grant College Program Directors. The address of Sea Grant College Program Directors may be found on Sea Grant's World Wide Web home page

(http://www.seagrant.noaa.gov/SGDirectors.html) or may also be obtained by contacting Dorn Carlson at the National Sea Grant Office (mail address: National Sea Grant College Program, 1315 East-West Highway, R/SG, Rm 11839, Silver Spring, MD 20910; phone: 301-713-2435; or e-mail: Dorn.Carlson@noaa.gov).