

# *Sea Grant Association*

**STATEMENT FOR THE RECORD  
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BEFORE THE SUBCOMMITTEE ON COMMERCE, JUSTICE, SCIENCE &  
RELATED AGENCIES  
COMMITTEE ON APPROPRIATIONS  
UNITED STATES SENATE  
WASHINGTON, D.C.  
MARCH 2006**

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## *Sea Grant FY2007 Appropriations Request*

Mr. Chairman and Members of the Subcommittee. I am Jonathan Kramer, President of the Sea Grant Association and Director of the Maryland Sea Grant Program. The Sea Grant Association (SGA) is a non-profit organization dedicated to furthering the Sea Grant program concept. The SGA's regular members are the academic institutions that participate in the National Sea Grant College Program. SGA provides the mechanism for these institutions to coordinate their activities, to set program priorities at both the regional and national level, and to provide a unified voice for these institutions on issues of importance to the oceans and coasts. The SGA advocates for greater understanding, use, and conservation of marine, coastal and Great Lakes resources.

The Sea Grant Association joins with many other NOAA stakeholders to urge the Subcommittee to recognize and support the vital research and outreach programs of the National Oceanic and Atmospheric Administration (NOAA). SGA requests the subcommittee to fund NOAA at a level of \$4.5 billion in FY 2007 which would enable the agency to carry out its mission: to understand and predict changes in the Earth's environment and conserve and manage coastal and marine resources to meet our Nation's economic, social, and environmental needs.

As part of the overall FY 2007 NOAA appropriation, the SGA requests the Subcommittee to appropriate \$72 million for the National Sea Grant College Program. This amount is well within the \$100.5 million level authorized in P.L. 107-299, National Sea Grant College Program Act Amendments of 2002 for fiscal year 2007. Further, this recommended amount is the same as the amount provided in last year's Senate passed Commerce-Justice-State Appropriations bill. Appropriating this request would reverse the significant reduction taken by the program in FY 2006 and more importantly, would allow the Sea Grant program to provide the research support, information, education, and outreach needed to assist NOAA in carrying out its mission throughout the United States.

## *Sea Grant - Science Serving the Nation's Coasts*

Sea Grant is an investment in America's economic future. Attempts to balance our booming coastal economy with its associated impacts on the coastal and marine environment have raised the stakes for effective government action. America's coastal and ocean resources encompass an immense area with more than 95,000 miles of coastline and more than 3.4 million square miles of ocean within the U.S. territorial sea. Over half the nation's 280 million people live in coastal counties that comprise less than

one-fifth of the total land area of the United States. The economy of these coastal counties is critical to the economic well being of the entire nation, providing a wide array of goods and services that account for at least 50% of the gross national product of the United States. By 2010, U.S. foreign trade in goods is expected to double to \$5 trillion, with ocean-going cargo increasing by 30 percent. Coastal tourism and recreation account for 85 percent of all U.S. tourism revenues. The oceans, in one way or another, account for one out of every six jobs. Tax revenues in coastal areas are among the fastest growing revenue sources for state and local governments. In fact, the collective economic impact of the coastal economy far exceeds U.S. agriculture, and yet federal investments in Sea Grant colleges and universities are much smaller than investments in the Land Grant college and university system funded by the U.S. Department of Agriculture for agriculture and land-based natural resource activities, the program on which Sea Grant was modeled.

Research supported by Sea Grant is based on competition, undergoes rigorous peer-review, and is geared to address the many marine and coastal challenges and opportunities that face our citizens. The federal investment in Sea Grant enables a nationally coordinated network embedded in the best research universities to apply unparalleled intellectual capital to address these problems and opportunities. Cost-effectiveness is enhanced by access to university management infrastructure.

Sea Grant serves the nation in many ways. Sea Grant's unmatched access to local constituencies through its extension and outreach programs ensures that federal investment is targeted at relevant issues for the benefit of NOAA and other federal agencies, state and local governments, coastal environmental managers, local fishermen, other marine resource users, and the general public. This contact also provides an important conduit for recommendations back to Sea Grant and NOAA for needed research and improved policies and services. Sea Grant's non-regulatory and science-based focus has established the program as an honest broker among a wide range of constituencies. In addition, marine education programs supported by federal funds reach from kindergarten to marine-related business people to elder hostels. The matched federal investment also fills the enormous demand for expertise to tackle rapid growth, change, and pressure on coastal resources.

Sea Grant is a national program addressing national needs. It is a partnership of and depends on partnerships among government, academia, business, industry, scientists, and private citizens to help Americans understand and wisely use our precious coastal waters and Great Lakes for enjoyment and long-term economic growth. This network unites 30 State Sea Grant Programs, over 300 universities, and millions of people. Sea Grant is an agent for scientific discovery, technology transfer, economic growth, resource conservation, and public education. Study after study has shown that Sea Grant returns to the taxpayers many times its annual budget in goods and services. It is government as our citizens want it – visible, tangible, relevant, efficient, and effective.

### *Sea Grant - Initiatives for FY 2007*

When adequately funded, Sea Grant can serve as the gateway to relevant and reliable scientific information used to address local, regional and statewide resource management issues. Funding Sea Grant at the requested level will enable it to strategically invest in research and outreach programs targeted at important practical problems facing the nation and address those problems with science-based solutions. Two initiatives for FY 2007 demonstrate this objective.

**Building Resilient Coastal Communities.** Coastal areas of the United States comprise only 10% of our nation's land mass, yet they are home to more than 54% of Americans. As witnessed by the aftermath of Hurricanes Katrina, Rita, and Wilma, coastal communities and the natural

resources and infrastructure on which they depend are at increasing risk from hurricanes, tsunamis, coastal storms, shoreline change, and sea level rise. Sea Grant research and outreach provide coastal communities with the best available science-based information for sustainable community decision-making, coupled with the knowledge, experience and tools needed to bring diverse coastal interests together. The knowledge, programs and approaches developed by Sea Grant in one state or region can be applied broadly throughout the national network. The Sea Grant network will expand its efforts to improve coastal community leadership and planning capacities to jointly address economic, environmental and social issues. Our aim is to encourage and equip coastal communities to utilize long-term, integrated approaches to developing sustainable communities. This initiative would engage the research, education and outreach capabilities of Sea Grant's universities and partners to enhance mitigation, preparedness, planning, education, response, and recovery in coastal communities throughout the nation.

**Ensuring Safe and Sustainable Seafood for Americans.** The U.S. seafood industry faces many challenges and opportunities as it enters the 21st century. These include an increasingly competitive global marketplace, complex trade policies, stricter safety regulations, rising energy costs, food security concerns and an increasingly limited seafood supply. Change also brings new opportunities to expand markets, form strategic alliances and encourage innovations to lower production costs, create new products, add value to existing ones, increase safety and reduce waste. In this new seafood era, science and education are cornerstones for maintaining the vitality of the nation's \$27 billion seafood industry (\$55 billion including consumer expenditures) and its 250,000- member workforce. To remain competitive, the industry must control the costs of catching, transporting, processing, storing, and distributing seafood. The U.S. seafood industry recognizes the benefits of innovation, but it is comprised of mostly small and medium-sized, independent enterprises that simply cannot afford research and development programs. Through its unique capabilities in research and technology transfer, the national Sea Grant network is poised to help the industry increase quality and safety, add value, lower costs and expand seafood supplies and markets.

### *Sea Grant-- Selected Accomplishments*

**Aquaculture.** Sea Grant research and extension results have created the growth and development of fish farming in the United States. As a result, the growing of hybrid striped bass in ponds has expanded in just 10 years from a small demonstration project to an industry that produces 10 million pounds of fish valued at \$25 million annually. Sea Grant also developed a sterile oyster that can be grown year-round and that now comprises one-third of the \$86 million U.S. oyster market.

**Coastal Hazards.** Based on Sea Grant recommendations, in 1986 the state of North Carolina implemented revisions in the state's hurricane resistant building code which increased the required minimum depth of foundation pilings for erosion prone coastal buildings. In 1996, Hurricane Fran was the first test of those standards. As a result, on Topsail Island, 200 of the 205 newer oceanfront houses built to the "Sea Grant" standards survived the hurricane with minimal foundation damage. In comparison, over 500 older oceanfront houses were destroyed in the same area.

**Coastal Communities and Economies.** Much of the 32-mile river front along the Detroit River is bulkheaded and in disrepair thus requiring major revitalization investment. "Soft" engineering offered developers cost, maintenance and environmental advantages over traditional hard structures and promoting these advantages was necessary to meet river front renewal goals. Sea

Grant has been extensively involved in this effort and chairs the steering committee for the Greater Detroit American Rivers Heritage initiative. As a result, Sea Grant sponsored conferences and workshops and published best management practice manuals which led General Motors to utilize less expensive “soft” engineering techniques in the development of its multi-million dollar, 32 mile long urban river promenade in the heart of Detroit, thus providing substantial savings to the project while simultaneously helping the environment.

**Fisheries.** Sea Grant research has shown that visually modifying salmon gillnets and adjusting fishing schedules can reduce entanglements of seabirds. As a result, these findings, coupled with an observer program coordinated by Sea Grant, prevented the closure of the Puget Sound sockeye salmon fishery, saving hundreds of jobs and millions of dollars in the region’s economy.

**Ocean/Coastal Technology and Marine Biotechnology.** Sea Grant organized the first systematic research effort in the United States to develop new drugs from marine organisms. As a result, Sea Grant researchers have discovered and described more than 1,000 compounds that may be vitally important as new anticancer, anti-inflammatory, and antibiotic agents.

**Seafood Science and Safety.** To aid the seafood industry in meeting educational and training needs called for by new FDA regulations, Sea Grant spearheaded the formation of the “Seafood HACCP Alliance,” an intergovernmental agency partnership with industry and academia. As a result, the Alliance’s programs reached over 5,000 U.S. processing plants, and 6,000 importers and international suppliers with training on new seafood handling and processing techniques. In addition, it has been estimated that the program has prevented 20,000 to 60,000 seafood-related illnesses a year, thereby saving as much as \$115 million annually.

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The SGA recognizes the Subcommittee is facing an extremely constrained funding environment and must make difficult choices among many competing priorities. We urge you to consider Sea Grant has an investment in the future health and well being of our coastal communities and to support the program in line with this request.

Thank you for the opportunity to present these views.