

Concept Paper
Florida Institute for Ocean and Coastal Studies
Academic Infrastructure Support Organization
February 6, 2009

Background

The State of Florida is inextricably connected to water with 2,276 miles of shoreline, 603 miles of beach, and 11,000 miles of rivers and waterways. Most of Florida's population (80%) is located within counties adjacent to the Atlantic and Gulf coasts, drawn by both the economy and ecology of these unique environments. Movement of Americans to the coast is a nationwide phenomenon, but nowhere is this more significant than in Florida with a growth rate exceeding 23% during the last decade of the 20th century.

Florida's ocean and coastal economies have a yearly gross domestic product in excess of \$500 billion, and much of this is directly or indirectly connected to tourism or coastal-dependent industries, e.g., shipping and fisheries. Unfortunately, the development of some of the infrastructure necessary to sustain these economic activities has threatened to damage or destroy the very resources necessary to maintain them. Sound science, informed citizens and effective decision making are critical to ensure that this does not occur, and are vital to the economic recovery of Florida.

Most of the public is unaware of the connection between its livelihood and the actions it takes and the health of the coastal and ocean environments. Only when a natural or human-induced disaster such as a toxic algal bloom, storm surge, hurricane, or oil spill decreases tourism or shuts down shipping is the connection between economy and the environment obvious. More insidious and difficult to remedy are the incremental decrease in marine fish stocks that lowers commercial and recreational catch, or decreases in water quality that threaten to close beaches or restrict recreational activities on our waterways. In addition, few problems along the coast and shore can be solved without an understanding of the entire watershed, much of which seems far from the coast. This AISO will provide support for State University System (SUS) activities focusing on all aspects of ocean processes from the shoreline to, and including, the open ocean.

Florida is well positioned to address today's problems and future coastal issues. These include adaptation to the impacts of climate change, the growing attention on the ocean as a source of both traditional and alternative renewable energy, and the creation of an educated workforce that is prepared to work on solutions to these problems. The State Legislature has established the Florida Oceans and Coastal Council (FOCC) that provides members with guidance on ocean and coastal research priorities; there is an active stakeholder group, the Florida Oceans Alliance (FOA), that promotes ocean and coastal sustainability; and the SUS and NOAA cooperatively have one of the nation's top ranked Sea Grant (SG) programs, hosted by the University of Florida. Within the SUS, there are more than 300 coastal and marine scientists and several coastal and ocean-going research vessels. Florida also has several well-established independent laboratories and aquariums, and government agencies with responsibility for ocean and coastal issues. In recent years,

considerable cooperation in marine research has developed through interactions among the Florida Institute for Oceanography (FIO), the FOCC, FOA, SG and State and federal agencies. The SUS can play a key role in expanding this collaboration, and in particular, supporting a strong education component, through a marine-focused Academic Infrastructure Support Organization with a clearly identified mission and strategic partnerships with other SUS entities.

Florida Institute for Ocean and Coastal Studies

The proposed Florida Institute for Ocean and Coastal Studies (FIOCS) will serve as an Academic Infrastructure Support Organization within the State University System. The mission of FIOCS will be to integrate via cooperative actions the physical and intellectual resources that already exist within the State to promote and support innovative, relevant and efficient ocean and coastal research and education statewide. There will be no additional initial costs for implementation because the existing resources of the Florida Institute of Oceanography (FIO) will be reorganized into the FIOCS. After it has established its revised role and identified where need exists, FIOCS is expected to bring forward a request for funding to support additional facilities at member organizations.

The Florida Institute for Ocean and Coastal Studies will serve as a statewide venue for promoting cooperative education and research opportunities in ocean and coastal studies, through:

- developing distributed course offerings to be shared through the Florida Higher Education Distance Learning Catalog, and facilitating research collaboration among members;
- serving as a statewide cooperative for achieving economic efficiencies in the use of high-cost research facilities and equipment (laboratories, research vessels, observatories, etc.) through shared services and cooperative buying;
- serving as an operational unit for research facilities and equipment for which primary responsibility is assigned and facilitate scheduling of research facilities at member institutions.

The Florida Institute for Ocean and Coastal Studies (FIOCS) will consist of the following functional units:

1. FIOCS Membership - Membership will consist of each institution in the SUS. An invitation to become a member of FIOCS will be extended to independent colleges and universities in Florida engaged in ocean and coastal research; independent, not-for-profit, marine research entities located in the State; and government organizations responsible for coastal and ocean issues. Members of FIOCS will pledge to make their research facilities and expertise available to other members at rates to be negotiated with the FIOCS Council. The Executive Director of the FIOCS and the Chancellor of the SUS Board of Governors or his/her designee shall serve in an ex officio capacity to FIOCS.

2. FIOCS Council – The FIOCS Council will consist of one representative from each member organization who is appointed by the president or CEO or respective designee and who is an active faculty member or professional practitioner in a field in a discipline related to ocean or coastal studies. The Council will serve as the primary planning unit and coordinating board for FIOCS. Through an executive committee elected by the membership, the FIOCS Council will provide administrative oversight of FIOCS in concert with the provost of the host university.
3. FIOCS Management - The Executive Director of FIOCS shall be appointed by the president of the host university, based upon the recommendations of the FIOCS Council. The host university will be determined by the MOU establishing the AISO. The Executive Director shall report to the provost of the host university who shall consider the recommendations of the FIOCS Council for any personnel actions. The Executive Director will be responsible for the day-to-day operation of FIOCS, with advice from the host university provost and the FIOCS Council. The host university shall be the fiscal agent for FIOCS and shall be responsible for providing administrative and support services and for annual budget development.
4. Ocean and Coastal Operations – Will maintain an inventory of FIOCS member facilities and equipment throughout the State, coordinate/facilitate access to and scheduling of existing research facilities of FIOCS member organizations (e.g., research vessels, laboratories, equipment), and operate specialized research facilities and equipment for which primary responsibility has been assigned by the FIOCS Council and under contractual agreement with the owner (e.g., research vessels, laboratories, and special equipment).
5. Ocean and Coastal Expert Network - Will consist of coastal and ocean scientists (broadest definition possible) from State and private universities, independent labs, and State and federal agencies who have appropriate credentials. This group will serve as a resource to the FIOCS, the SUS, and to State agencies in need of specific coastal/ocean expertise. In addition, the group of experts can form the foundation for an adjunct faculty to support highly specialized instruction in situations in which an institution or organization cannot justify a permanent member on the payroll. (It is possible that this network could be coordinated through ExpertNet at FSU.)