



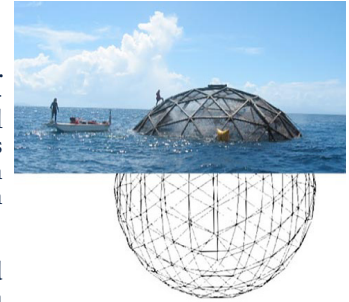
# DIVISION OF MARINE AFFAIRS AND POLICY

UNIVERSITY OF MIAMI ROSENSTIEL SCHOOL OF MARINE AND ATMOSPHERIC SCIENCE

The Division of Marine Affairs and Policy (MAF) conducts research and education contributing to policy development and management of marine resources. The academic program offers a broad curriculum linking core areas of Marine Affairs (coastal zone management, natural resource economics, political ecology and marine anthropology, underwater archaeology, weather and climate, ocean and coastal law and policy) with the marine sciences. MAF students tailor their course selections to match their individual career objectives. Graduates are equipped to deal with issues of conservation, preservation, allocation and utilization of natural resources.

## Division research and programs:

**Aquaculture Program:** The University of Miami (UM) has evolved into a world leader in aquaculture. Placing an emphasis on collaborations with academic and research institutions, industry leaders, environmental organizations, government agencies and regulators, the research conducted at the Rosenstiel School is helping to globally advance hatchery and growout technology. The program addresses issues shaping the future of sustainable aquaculture development, the technologies and policies that govern production, and the understanding of the limits and capacities of the environment. Emphasis has been primarily focused on pelagic species such as cobia, seriola, snapper and, most recently, tuna.



**Boating Research Center:** A research arm of the Division, most projects deal with boating related activities in and around South Florida, as well as the environmental, economic and social impacts on local communities. This interdisciplinary center features faculty from both Marine Affairs and Policy and UM's School of Business.



**Little Salt Spring Archeological and Ecological Preserve:** The Division manages an underwater site at Little Salt Spring (LSS), in North Port, Sarasota County, Fla. Donated to the University in 1982, the spring is surrounded by undisturbed native hardwood hammock containing several rare and endangered plant and animal species. During early prehistoric times (7,000 – 12,000 years ago) the sinkhole was an oasis that attracted seasonal hunters and gatherers. LSS has produced the second-oldest dated artifact ever found in the southeastern U.S., a sharpened wooden stake some 12,000 years old. The unique anoxic water that fills most of the sinkhole has preserved organic materials dating back to the Late Paleoindian and Early Archaic stages of Florida's prehistory, ca. 9,500 – 7,000 radiocarbon years ago. Recent research at the site was supported through a grant from the National Geographic Society.

**Natural Resource and Climate Economics:** The Division promotes the economic understanding of coastal and marine resource use. Research focuses on economic impacts, with particular emphasis on extreme weather and climate variations, including the value of predictions from the geosciences and how predictions are interpreted and used from a systematic view. Research in the economics of climate also focuses on the value of climate prediction for agricultural and water resources management in the southeastern United States and Argentina. As part of the Southeastern Climate Consortium, which represents eight universities, the research being done attests that climate risk must be assessed within the specific economic, institutional, land tenure, and technological contexts in which they occur.

**Climate Studies:** Marine Affairs researchers are involved with numerous interdisciplinary projects that study climate impacts, environmental perception, and the use of scientific information to help enhance decision support tools for agriculture, forestry and water resource management. Besides the participation of several faculty members on the Southeast Climate Consortium, another ongoing study is taking place in the state of Ceará, Brazil, a region that is a drought-prone and where year to year water availability can vary tremendously. Research being done addresses the role of participatory decision making in incorporating hydroclimatological information for water resource management in this vulnerable area. Investigations are also underway into how climate changes impact fisheries. There are large decadal variations in fish stocks, and recent work by Rosenstiel School faculty has linked these disparities to climate changes at various timescales.



**Anthropological Studies:** An important aspect of understanding climate's impact on society is to understand how the public responds to climate change. Researchers at the Rosenstiel School are involved in the creation of a National Science Foundation-funded Center for Research on Environmental Decisions, based at Columbia University.

**Integrated Coastal Management (ICM):** The Division leads the development of a coastal management plan for Bocas del Toro, Panama, in cooperation with the government of Panama. The project studies fisheries, tourism, planning, shoreline protection and beach



management, sea turtle conservation, and environmental education. The Division is also involved in a variety of studies in China and Southeast Asia; along the Pacific coast of South America in Chile, Peru and Ecuador; in The Bahamas; and in the Dominican Republic under the collaborative project PESCA. Collaborations are also underway with the Florida Department of Environmental Protection to create an interagency electronic database for impact and permit information and to develop a comprehensive environmental impact assessment and evaluation guide for coastal construction activities that affect resources in Southeast Florida. The Division is also involved in the evaluation of enforcement activities in the Galapagos Islands, Ecuador; Coiba Island, Panama; Cocos Island, Costa Rica; and Mapelo and Gorgona Islands, Colombia.

# DIVISION OF MARINE AFFAIRS AND POLICY FACULTY

UNIVERSITY OF MIAMI ROSENSTIEL SCHOOL OF MARINE AND ATMOSPHERIC SCIENCE



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