



# The Florida Senate

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Committee on Environmental Preservation and Conservation

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## COASTAL MANAGEMENT

### Statement of the Issue

This brief will provide a comprehensive overview of Florida's coastal management program. This program is based on a network of agencies implementing 23 statutes that protect and enhance the state's natural, cultural and economic resources. Emphasis will be placed on issues involving the uses and management of the state's coastal submerged lands and federal consistency requirements. Additionally, it will describe upcoming federal issues related to oil and gas leases.

### Discussion

#### Coastal Aquatic Managed Areas

In 1966, the Florida Legislature created the first Aquatic Preserve, Estero Bay. Since that time, the legislature has continued to designate certain aquatic areas as "protected". This designation now protects all 41 of Florida's aquatic preserves. The Coastal and Aquatic Managed Areas (CAMA) is a program within the Florida Department of Environmental Protection (DEP) and is responsible for the management and assessment of the 41 Aquatic Preserves, three national Estuarine Research Reserves (Reserves), one National Marine Sanctuary and the Coral Reef Conservation Program. These protected areas comprise more than 4 million acres of submerged lands and select uplands in Florida.

CAMA also manages the three National Estuarine Research Reserves (NERRS) at Apalachicola, Guana Tolomato Mantanzas in St. Augustine, and Rookery Bay in Naples. The DEP manages these reserves in partnership with National Oceanic and Atmospheric Administration (NOAA). Federal matching funds are provided to each site and the DEP's reserve staff work together with NOAA staff on the national level to guide the NERRS program.

CAMA, a member of the U.S. Coral Reef Task Force, leads the Southeast Florida Coral Reef Initiative to protect coral reefs in Florida. CAMA is also a key partner in the management of the Florida Keys National Marine sanctuary with NOAA and the Florida Fish and Wildlife Conservation Commission. The Keys Sanctuary is one of 13 National Marine Sanctuaries within the nation. CAMA is also the host office for Florida's Oceans and Coastal Resources Council, an initiative to determine and coordinate coastal research needs and priorities<sup>1</sup>. CAMA is the state's lead in the Gulf of Mexico Alliance, a multi-state government initiative with federal support formed to increase regional collaboration and enhance the ecological and economic health of the Gulf of Mexico. CAMA welcomes the public's input and assistance. This relationship is crucial to the long term health of the preserves and allows the public to be a watchdog for their own communities and resources.

A good example of CAMA's activities concerning management of NERRS is found at the Apalachicola National Estuarine Research Reserve. It consists of 246,766 acres of river, floodplain, uplands, bay and barrier island habitats in Liberty, Franklin and Gulf Counties. There are over 1,300 plant species, 103 of which are threatened or endangered. There are over 46 species of amphibians, 83 species of reptiles, over 50 species of mammals, over 300 species of birds (22 of which are threatened or endangered), and over 180 species of fish. Duties of CAMA staff include:

- partnering with the local Diamondback Terrapin Working Group to monitor their habitat,

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<sup>1</sup> Oceans and Coastal Resources Act, s.1, ch.2005-166, L.O.F.

- working with an area research institute to determine the make-up of the nutrients within specific plant communities in the St. Martins Marsh Aquatic Preserve,
- coordinating with the Crystal River State Park staff to remove exotic species,
- conducting prescribed burning programs,
- monitoring oyster bed growth,
- tracking the population trends for state and federally listed species,
- observing the seasonal and migratory species' patterns,
- utilizing volunteers to conduct water samplings,
- recording sightings of listed species,
- participating in a NASA funded grant to conduct weather analysis,
- conducting water quality monitoring,
- reporting unusual changes in the physical condition of the aquatic preserves, and
- conducting seagrass monitoring.

In comparison, the Apalachicola Bay Preserve is approximately 80,000 acres of submerged lands and covers an area of approximately 210 square miles. The preserve staff conducts field work, physically manages the habitats, monitors vegetation and invasive species, and provides data and support to the reserve staff. They also provide local educational outreach and monitor the recreational facilities. Although the preserves and reserves staffs have similar duties, the NERRS' staff places an emphasis on research and reporting its findings to NOAA as well as to the DEP.

One of CAMA's newer initiations is the development of an ecosystem-based plan for each aquatic preserve. Geographic Information Systems (GIS) software is used to develop the maps. The staff verifies that satellite images provided using the remote sensing equipment are accurate. Staff is required to check the data through field samples and verify or note inconsistencies. This is one technique used to verify habitats and to document any changes to the ecosystem. The samples can document how possible changes in an oyster bed are also affecting seagrass growth downstream.

The health and condition of seagrasses is one indicator of the overall condition of the water and the species within it. Seagrass trends in each system are monitored through species abundance, distribution, health, and productivity measurements. Many marine species utilize seagrass habitats as feeding grounds and nursery areas. Further, seagrasses stabilize bottom sediments with their dense roots that form a secure mat. Sediment stabilization and erosion prevention are especially important during storms and hurricanes that often threaten Florida's coastline.<sup>2</sup>

One of CAMA's partnerships includes utilizing the Fish and Wildlife Research Institute to collect biological information on oysters growing within typical reef habitat and on seawalls, mangroves and on substrate deposited for restoring oyster populations. The data will be applied to estimate the potential importance of these habitats and their oyster populations to ecosystem function in other Florida estuaries and throughout the natural range of the species.<sup>3</sup> The collection of this data helps the CAMA staff implement management plans to protect, conserve, and increase the viability of species that are endangered or threatened.

CAMA conducts a variety of outreach programs to educate the local surrounding communities. The CAMA staff conducts teacher workshops, guest lectures, and provides materials to elementary, middle and high schools. One program offered throughout the state is the award winning Learning in Florida's Environment (LIFE). In November 2007, the DEP's LIFE program received a 2007 Coastal America Partnership Award from the federal government recognizing the partnership between the DEP and local schools to restore, protect and educate the public on the coastal environment. The LIFE initiative seeks to establish a series of field-based, environmental-science education programs around the state. Each of the nine existing programs has a partnership between the DEP and a local school district.

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<sup>2</sup> Florida Museum of Natural History website <http://www.flmnh.ufl.edu/fish/southflorida/seagrass/Importance.html>, (last visited 8/31/09)

<sup>3</sup> Southeast Aquatic Preserves Work Plan FY 09/2010, Office of Coastal & Aquatic Managed Areas, Department of Environmental Protection (DEP)

A potentially significant issue has emerged over the past year and concerns expanding Florida's coastal energy development. There is pending federal legislation entitled the Domestic Security Act of 2009 that would allow leasing in the Eastern Gulf of Mexico. These proposed areas are located near Pensacola and the Panhandle and are mostly under restriction until 2022 as part of the Gulf of Mexico Energy Security Act of 2006. In the past, Congress has imposed a restriction on what areas Minerals Management Service (MMS) could offer for U.S. Outer Continental Shelf (OCS) oil and gas leasing. In addition to potential Federal actions, during the 2009 Session, the Florida House of Representatives, passed CS/CS/CS HB 1219, which sought to create requirements for the acceptance of bids and granting of offshore oil and gas leases on state-owned submerged lands underlying the territorial waters of the state. The proposed legislation seeks to allow drilling in areas beyond 3 miles off the state's coasts. Developing these resources could affect the reserves and aquatic preserves as well as Florida's coastal areas.