South Florida's Coastal Initiatives

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Stresses on the south Florida ecosystem continue to threaten its natural resources. In coastal areas, we are seeing undesirable changes such as loss of seagrass due to physical damage and die-offs, declines in commercial and recreational catches of fish, algal blooms, poor water quality, dying mangrove forests, bleached and diseased corals, contaminated groundwater, and deformed and diseased fish. These and other changes can affect the economy and lifestyle of south Floridians. For example, loss of coastal habitats can cause decreased catches of commercial and recreational fish and a subsequent reduction in the billions of dollars these fisheries generate each year. Degraded habitats and poor water quality can deter tourists causing economic losses for all the businesses that depend on their dollars.

What is being done to help being made to help our coastal resources?

Along with other efforts, two major, interrelated initiatives provide hope for the future of coastal resources in south Florida. The South Florida Ecosystem Restoration Task Force (Task Force) was created in 1993 and established in federal law by Congress in 1996 to coordinate restoration efforts in south Florida. The goals of the Task Force are to get the water right, restore, preserve and protect natural habitats and species, and foster compatibility of the built and natural systems.

In December 2000, Congress approved the Comprehensive Everglades Restoration Plan (CERP) with the primary goal of getting the "water right". CERP will by not only address changing the water quantity flowing through the Everglades, but also the water quality, timing and distribution. Addressing all these factors together is critical to the coastal marine environment since it will be the ultimate recipient of the changed water flow. CERP is one of the largest components and the framework for the South Florida Ecosystem Restoration efforts that will take 30 years to complete and cost over 8-billion dollars.

How is the National Oceanic Atmospheric Administration helping?

In south Florida, the National Oceanic and Atmospheric Administration, or NOAA is responsible for supporting many research studies that will improve the understanding of the impacts in the coastal areas resulting from restoration projects. In particular, NOAA is studying potential changes to the coastal systems arising from CERP.

NOAA's South Florida Ecosystem Research and Monitoring Program (SFP) coordinates relevant research between three NOAA offices: the National Ocean Service, the Oceanographic and Atmospheric Research, and the National Marine Fisheries Service. The SFP coordinates studies in Florida Bay, the Florida Keys National Marine Sanctuary, and other adjacent coastal waters. It provides support for research studies, modeling ecosystem change, and coastal monitoring. The overall goals of this effort are to predict the impacts of Everglades restoration on the south Florida coastal ecosystem, improve inland restoration plans, evaluate restoration options, and monitor outcomes.

Over the years, NOAA has supported a diverse suite of research, operational monitoring and modeling efforts. These studies represent valuable contributions to the pool of research conducted or sponsored by a variety of agencies. Topics currently being studied include:

- circulation and physical oceanography – movement, mixing and exchange of water,
- nutrient inputs and dynamics – sources and function of the nutrients that drive plant growth
- water quality – status and changes in water chemistry, especially nutrient loads
- fisheries and protected resources – status and function of fish, lobster, shrimp, turtles, and sponges
- characterization of habitats in Florida Bay and the Florida Keys – status and function of seagrasses and corals

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