Biscayne Bay Deep Holes Restoration, Florida

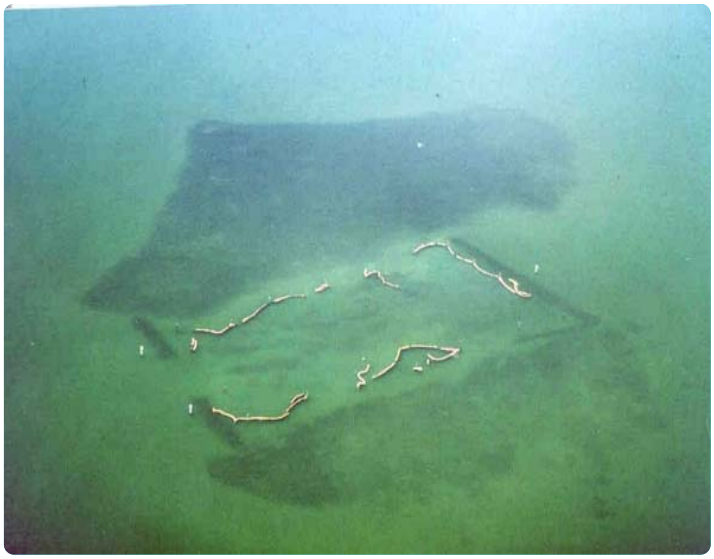
marine environmental

In the 1950's and 1960's, South Florida encountered an explosive increase in construction projects for development. Several holes were dredged throughout Biscayne Bay in Miami-Dade County to create islands, channels, and provide construction materials. Coastal Systems International, Inc. worked with Miami-Dade County DERM to develop a plan to restore these deep dredged holes to historic elevations and create seagrass habitat.

Coastal Systems conducted field investigations in the fill areas and to locate suitable sources of fill for the dredged holes. Riprap structures were designed to stabilize the ends of the fill area, and approximately 3,750 tons of limestone was utilized to construct the submerged sill for the Phase I site. Approximately 12,500 tons were utilized during Phase II.

Construction costs were minimized by utilizing 10,000 cubic yards of dredge spoil from the Port of Miami Expansion project. To cap the dredged material placement, an additional 5,000 cubic yards of clean sand was placed in the Phase I area, and 11,000 cubic yards was placed in Phase II. This sand was carefully placed to the optimum underwater elevation for seagrass planting.

The dredge hole fill project was one of the most successful seagrass habitat restoration projects completed in Miami-Dade County.



Client:	Miami-Dade County Department of Environmental Resources Management
Location:	Biscayne Bay, Miami-Dade County, Florida
Date of Completion:	1990
Construction Cost:	$300,000