

Hillsboro Inlet Bypassing, Florida

regulatory permitting



Hillsboro Inlet is one of the most successfully managed coastal inlets along the east coast of Florida. The Hillsboro Inlet Improvement and Maintenance District (District) is a special taxing district created in 1957 consisting of representatives from Broward County and seven nearby municipalities. The District operates a hydraulic cutterhead dredge to maintain navigation through the inlet and to bypass sand to maintain the natural sediment transport along the beach annually. The District has maintained the inlet since the early 1960's, and Coastal Systems prepared the inlet management plan that was adopted by the Florida Department of Environmental Protection (DEP) in 1997. The plan establishes a goal of bypassing approximately 120,000 cubic yards of sand annually.

Coastal Systems was retained by the District to process environmental regulatory permits for the ongoing maintenance dredging and inlet bypassing. Permit applications were processed through the U.S. Army Corps of Engineers, DEP, and the Broward County Environmental Protection and Growth Management Department. Coastal Systems worked closely with the agencies to evaluate potential impacts to marine resources from the dredging operations. Marine resource surveys were conducted to evaluate seagrass beds within the inlet adjacent to the navigation channel that will be maintained at a depth of -12 feet. Coastal Systems designed and permitted the inlet exterior channel and sand trap expansion that was constructed in 2003. This exterior area is permitted for dredging to a depth of -20 feet. Nearshore hardbottom communities were mapped to evaluate potential impacts, and dredge operations and water quality constraints were negotiated with the agencies for the exterior sand trap and channel dredging area.

Bypassing operations place the sand on the beach immediately downdrift of the inlet. To protect the marine turtle nesting beach, permit conditions were negotiated with the U.S. Fish and Wildlife Service, as the biological opinion was issued. The beach fill design and operational constraints were also negotiated with the Florida Fish and Wildlife Conservation Commission, and permit conditions were processed for beach fill operations during marine turtle nesting season. Coastal Systems negotiated proprietary authorization for the dredging and beach fill placement through the DEP State Lands, and

a letter of consent to use sovereign submerged lands was granted for the inlet bypassing activities.

As part of the inlet management plan, the District acquired a new hydraulic cutterhead dredge in 2008. The new \$1.8M dredge will increase capacity and efficiency for operations at the inlet. Coastal Systems also processed DEP funding applications for cost-sharing of the dredge acquisition as part of the prioritized DEP inlet funding assistance program enacted by the Florida legislature in 2008.



Client:	Hillsboro Inlet District
Location:	Broward County, Florida
Date of Completion:	Ongoing
Construction Cost:	N/A

