Clearwater Beach Island Coastal Management History

Clearwater Beach Island is now a highly developed barrier island that is a popular tourist destination. The photo sequence above illustrates the island's morphologic transformation over the last century. The morphologic changes were a result of closure of Dunedin Pass, the dramatic increase in width and subsequent stabilization of Clearwater Pass, and significant dredge-and-fill construction landward of the island.

Like many other coastal communities in the state of Florida, Clearwater Beach Island began to experience significant beach erosion in the 1950s. Unregulated coastal development, which included dredge-and-fill construction in the back barrier bays, led to this erosion. In 1950, the City of Clearwater restored the south beach and constructed two groins, as shown in this 1952 postcard.
By 1961, the city had built a total of 25 groins along the island including a short terminal groin at the south end of the island. The city also built two concrete-slab baffle piers, one of which fronts the Mandalay Condos, shown in this 1960 postcard image. Most of the length of the beach was lined with seawalls.

Although the structures were intended to retain sand on the beaches, they did not because of the lack of sediment supply. Once coastal engineers began recommending beach nourishment as an alternate form of shore protection, the beaches began to recover.

In the early 1980’s, the city owned and operated its own small dredge. In 1982, the city extended the south groin into an 800-ft long curved jetty and nourished the south beach.
The photo below was taken at the end of September 2004, after the worst hurricanes in at least a decade. It illustrates that the beaches are significantly wider than in the 1960's, compare to this 1960 postcard above (same condo).

Thanks to the erosion control measures taken by the city, Clearwater Beach is now a beautiful fine white native sand beach that does not require nourishment. The photo below looks south along Clearwater Beach during the spring of 2006.