



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
P. O. BOX 4970
JACKSONVILLE, FLORIDA 32232-0019

AUG 17 2004



Programs and Project Management Division
Coastal and Navigation Branch

Ms. Nicole Elko
Department of Environmental Management
512 South Fort Harrison Avenue
Clearwater, Florida 33756

Dear Ms. Elko:

This letter is in response to your question about the proposed Sand Key breakwaters, which were studied several years ago. The concept of constructing breakwaters at selected locations along the Federal Shore Protection Project at Sand Key was proposed in several U.S. Army Corps of Engineers (Corps) reports published in the 1980's, including the 1985 General Design Memorandum (GDM) for Sand Key, prior to construction of the various fill segments of the Sand Key Project. The original intent of constructing these breakwaters was to contain end losses from the three adjacent project segments on Sand Key (North Redington Beach, Indian Shores, and Indian Rocks Beach). End losses were anticipated to be high in these areas, particularly if the three fill segments were constructed separately, or if one or more segments were to not be built. At this time all three segments of the fill have been constructed. End losses between adjacent fill segments are negligible and the use of breakwaters is not warranted in these areas.

As you know, a breakwater was constructed at Redington Shores in 1987. At the time of the initial nourishment (1988-1992), it was decided that the nourished material would be monitored to determine whether additional structures were warranted. The Sand Key Nourishment Project has exceeded expectations such that the five-year nourishment interval was extended. The only locations where breakwaters remain relevant are at the extreme ends of the initial Sand Key Federal Project fill (the south end of North Redington Beach, and north end of Indian Rocks Beach). An examination of monitoring surveys in these regions indicates that erosion rates at the ends of the fill are not substantially higher than the background rates along the length of the Sand Key fill. End losses from these

regions provide sediment to adjacent beaches. This is consistent with the Corps' regional management approach. The use of breakwaters at the north and south ends of the Sand Key fill does not appear to be justified at this time. Furthermore, since beach fills tend to stabilize over time, it is not expected that breakwaters will be needed at these locations in the future. Due to the success of the Sand Key Project, the Corps has determined that an updated GDM is unnecessary.

If you have any questions or need additional information, please contact the project manager, Ms. Jackie Keiser, at 904-232-3915.

Sincerely,



Richard E. Bonner, P.E.
Deputy District Engineer
for Project Management