

CAPISTRANO BAY DISTRICT
AGENDA REPORT
October 29, 2024

Advisory Committee

ITEM 7c

Possible Addition to MHTL Survey Program

In a recent meeting with both our MHTL survey engineer (Guida Surveying) and the coastal engineer (Coastal Frontiers) currently working for the City of San Clemente on their Regional Beach Monitoring program, it was suggested that our MHTL survey program might benefit from the expanded data that would come from adding four new beach survey alignments that measure the beach profile from the back beach out to a water depth of about 35-40 ft. Our current survey program only measures from the back of beach out to about knee-deep water.

This 40 ft. depth is referred to as 'depth of closure', and refers to the last point where sandy bottom changes can be effectively measured. Beyond this depth, the tracking of sand processes fails to yield useful information for our purposes.

The information gained by this more comprehensive beach survey will begin to tell us how the sand behaves out there where we can't see it. This could help our efforts with sand replenishment by knowing the sand dynamics of the near-shore zone. What happens to the sand that gets placed on our beach? Will it stick around? Will it go to infill possible low spots out in the near shore or is the near-shore zone all filled in which might tell us that the sand deposited on the beach may last longer.

In any case, we are soliciting two proposals and will continue this discussion when we have an idea of the cost and a bit more sense of the value this might bring to the community. This is a new conversation with more to consider as we get further along.

The following page provides a sketch of how the new cross-section survey is laid out.

Beach Profile Surveys

