## CAPISTRANO BAY DISTRICT AGENDA REPORT September 28, 2009

Committee Reports

## ITEM H.1

## Beach Survey Report

From the survey conducted on 8/26/08 to the most recent on 6/15/09 (a 10-mo. period) the position of MHTL retreated toward the homes at all 13 measurement stations along our beach. The slightest was 3 feet at the extreme southerly station and the greatest was 38 feet about in the mid-section at 35401. Every measured station experienced a loss of beach during the period. In the overall 7-yr period since the District began surveying for MHTL (where the ocean reaches a point on the beach that is 1.92 feet above Mean Sea Level) this location has been steadily retreating inland or in other words: we have been steadily losing beach. Most notably, the beach area near the northerly end at 35101 has lost a total of 77 feet of beach since May 2001. Conversely, the beach at the extreme south end has seen no more than 1.4 feet of fluctuation from season to season for 7 years.

To briefly summarize recent developments in surveying techniques, the District joined with CoastalWatch last year to have a video camera mounted in a stationary position on the roof of the first Beach Road home, 35051. For several months now this camera has been collecting video data of several beach processes, including MHTL. Two weeks ago the engineers who conduct the beach survey met with the CoastalWatch scientists to compare their respective data to determine how accurate the video camera data collection process is. The results of this meeting of two completely different data collection processes will be reported on at the September meeting (*that report will not be available until the night of the meeting*).

Staff is hopeful that this process can lead to the use of new technology to more effectively and accurately measure the entire beach in real-time from daylight to sundown every day as opposed to a once-a-year field measurement by a survey crew on foot.

Having MHTL data in real-time, accessible within a few minutes from a computer will be valuable for property owners especially during those moments when confronted with a member of the public who is confused about the location of the public portion of the beach on any given day.