KEA'AU BEACH DESCRIPTION

Kea'au Beach (transects 0 - 50) is located on the west shore of O'ahu. The shoreline is composed of carbonate sand and limestone rock. The area is exposed to southerly swells in summer months, northerly swells in winter months, and southerly to westerly waves from Kona storms throughout the year but most often in the winter. Large waves may break on or near the shoreline causing temporary erosion as the deep nearshore reef provides little protection in most areas.

At Kea'au Beach shoreline position is highly variable as limestone outcrops are intermittently exposed and buried by shifting sand. However, Kea'au appears to be losing sand over the long-term with an average erosion rate of -0.7 ft/yr along its length. The highest erosion rates, over -2.3 ft/yr, occurred in the south of the beach.

A previous study (Hwang, 1981) found net long-term erosion from 1949 - 1979 along most of Kea'au Beach with variable shoreline positions over shorter time spans.

For more information see: http://www.soest.hawaii.edu/asp/coasts/oahu/index.asp

Keywords:

Oʻahu; Keaau Beach

¹ Hwang, D. (1981) "Beach changes on O'ahu as revealed by aerial photographs", State of Hawaii, Department of Planning and Economic Development.

² Sea Engineering, Inc. (1988) "O'ahu shoreline study", City and County of Honolulu, Department of Land Utilization.