

PAIKŌ PENINSULA AREA DESCRIPTION

Paikō Beach and Peninsula (transects 0 - 60) are located on the south coast of O‘ahu at the east end of Maunalua Bay. Waves are typically small (< 1 ft) along all portions of this shoreline. A shallow fringing reef provides shelter from summer southerly swells and year-round easterly tradewind waves, which commonly affect this side of the island.

Paikō Peninsula is a coastal feature known as a barrier spit, which grows parallel to the coast as sand is carried eastward in alongshore currents and deposited at the end of the spit. Over the period of the study (1927-2015) the peninsula grew almost 1000 ft to the east, while the narrow central portion of the peninsula eroded as much as -0.4 ft/yr (around transect 17). In response to beach erosion, low rock walls were installed along much of the eastern half of the peninsula between 1949 and 1967. Much of the beach disappears in this area at high tide. The western half of Paikō Beach (transects 26 - 52) is accreting as much as 1.1 ft/yr (around transect 43). The beach at transects 54 - 59 was lost to erosion between 1971 and 1996 and the shoreline is now armored with seawalls. Rates are calculated for this segment up to and including the first historical shoreline with no beach and depict the speed at which the beach disappeared.

Previous studies also found net shoreline accretion in the western half of Paikō Beach (Hwang, 1981; Sea Engineering, 1988).

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

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.

Keywords:

O‘ahu; Paiko Beach; Maunalua Bay