

NĀNĀKULI AREA DESCRIPTION

Nānākuli Beach Park (transects 0 - 17) and Ulehawa Beach Park (transects 18 - 138) are located in Lualualei on the west coast of O‘ahu. The shoreline is composed of carbonate sand and limestone rock with a deep fringing reef near the shore. The area is exposed to southerly swells in summer months and refracted northerly swells in winter months. Southerly waves from winter Kona storms may also impact this coast.

The shoreline at Nānākuli Beach Park has remained approximately stable since 1910. At Ulehawa Beach shoreline position is highly variable as limestone outcrops are intermittently exposed and buried by shifting sand. Limestone at the seaward edge of the beach may be helping to stabilize the shoreline. However, Ulehawa beach (marked at a beach toe or seaward edge of the sand) appears to be losing sand over the long-term with an average erosion rate of -0.6 ft/yr along its length.

A previous study (Hwang, 1981) found accretion (seaward movement of the vegetation line) at Nānākuli Beach Park from 1949 - 1979. Hwang (1981) found the vegetation line at Ulehawa was stable or moved seaward from 1949 - 1979. Sea Engineering (1988) found the vegetation line move landward (eroded) along most of Ulehawa from 1979 - 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; Nānākuli Beach Park; Ulehawa Beach Park