**WAIMEA, KAUA`I, HAWAII**

**HISTORICAL SHORELINES**
- Jan 1926
- Nov 1950
- May 1966
- Apr 1975
- Jul 1987
- May 1992
- Nov 2006

**SHORELINE CHANGE RATES**

- **Accretion Rate**
- **Erosion Rate**

**AREA DESCRIPTION**

The Waimea study area is located on the southwest shore of Kauai. The study area is bounded in the west by Kika`iola Small Boat Harbor and in the east by the mouth of Waimea River. The shoreline is composed of volcanic and terrigenous sand transported alongshore from Waimea River as well as calcareous sand from the offshore fringing reef. The area is exposed to southern swell during the summer as well as persistent tradewinds.

The Waimea study area (transects 0 - 129) is experiencing accretion at an average rate of 2.4 ft/yr. Sea Engineering discusses the construction of Kika`iola Harbor in 1959 which reversed a trend of severe erosion in the area. The presence of the harbor traps sand moving to the west that is transported by alongshore currents generated by tradewind waves. Sand accumulates to the east of the harbor causing the accretion observed in this study.


Charles Fletcher, Matthew Babine, Siang-Chye Lim, Craig Senter, and Ayesha Genz

Charles Fletcher, Matthew Babine, Siang-Chye Lim, Craig Senter, and Ayesha Genz
University of Hawaii Coastal Geology Group
School of Ocean and Earth Sciences and Technology
1680 East West Road, Honolulu, HI 96822, U.S.A.