



**US Army Corps
of Engineers**
Honolulu District



KAHAWAINUI STREAM FLOOD CONTROL LAIE, ISLAND OF OAHU

Project Location. The Kahawainui Stream watershed is located on the northeastern coast of the island of Oahu. Laie is the principal urban center in the Kahawainui watershed.

Authorization. The project was authorized under Section 205 of the Flood Control Act of 1948, as amended, and completed in 1990.

Local Sponsor. The local sponsor is the City and County of Honolulu.

Completed Work. Since the late 1800's, 12 damaging floods have occurred in the Laie area, with the most serious one in March 1982 that caused property damage estimated at \$630,000. At the request of the City and County of Honolulu, a Detailed Project Study was completed in 1985, which recommended federal participation in providing flood control improvements. The project consists of 550 feet of concrete channel; 450 feet of excavated earth channel; 500 feet of concrete floodwalls; 1,420 feet of levees; and, raising two roadways in elevation. Design discharge at the mouth of the stream is 17,800 cubic feet per second. The project is designed to provide standard project flood level of protection. The project was completed in 1990 and prevents an estimated \$675,000 in damages annually under present development conditions in the Laie coastal plain.

Present Status. It is estimated that the completed project prevented \$4.1 million in damages due to a storm that occurred in March 1991. Erosion of the levee toe along a portion of the Laiewai Stream bank near the floodwall was observed following the March 1991 storm event. Remedial repair work was approved by the Corps under the "Modification to Completed Projects" program. The modification project was physically completed and accepted on August 3, 1998. The construction contract was \$578,885, bringing the project total cost to the amount of \$5,825,000 (federal: \$4,369,000; non-federal: \$1,456,000).