16701600 Alenaio Stream at Hilo, HI

LOCATION.--Lat 19°42'59.5", long 155°05'16.8" referenced to North American Datum of 1983, Hawaii County, HI, Hydrologic Unit 20010000, 0.65 mi south of Hilo Post Office, 0.65 mi west of Kapiolani School, and 0.1 mi upstream from Kapiolani Street bridge.

DRAINAGE AREA.--8.75 mi^2, from automated delineation using 10-meter National Elevation Dataset digital elevation model data dated September 2006 and Watershed Boundary Dataset dated May 2008, using UTM Zone 4 projection, NAD 83 horizontal datum.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Crest-stage gage: May 1997 to September 2004, April 2006 to current year. Continuous surface-water gage: October 2004 to April 2006.

REVISED RECORDS.--WDR HI-12-1: Drainage Area.

GAGE.--Crest-stage gage. Datum of gage is 80 ft from topographic map.

REMARKS.--As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the U.S. Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low- or flood-flow analyses, depending on the type of data collected.

Prior to 1973, crest-stage partial-record station records for the State of Hawaii were published in an annual progress report entitled An Investigation of Floods in Hawaii. The following table contains the annual maximum discharge for this station. A crest-stage station is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for the current year is given. Information on some lower floods may have been obtained but is not published here. The years given in the period of record represent water years for which the annual maximum has been obtained.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,300 ft^3/s, November 2, 2000, gage height, 13.12 ft, site then in use; minimum, no flow for many days.

MAXIMUM PEAK DISCHARGE
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Date	Discharge, in ft^3/s	Gage height, in ft
Feb 21, 2013	532	6.87

Suggested citation: U.S. Geological Survey, 2014, Water-resources data for the United States, Water Year 2013: U.S. Geological Survey Water-Data Report WDR-US-2013, site 16701600, accessed at http://wdr.water.usgs.gov/wy2013/pdfs/16701600.2013.pdf