



Water-Data Report 2010

## 16247500 Wailupe Gulch at Aina Haina, Oahu, HI

LOCATION.--Lat 21°17'33.4", long 157°45'19.9" referenced to North American Datum of 1983, Honolulu County, HI, Hydrologic Unit 20060000, (Koko Head quadrangle quadrangle, 1969, 1:24000), on right and left bank wingwalls downstream of Ani Street bridge, and 1.0 mi. upstream from Kalaniana'ole Highway in Aina Haina.

DRAINAGE AREA.--2.36 mi<sup>2</sup>.

### SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1957 to September 2004. October 2007 to September 2010 (discontinued).

REVISED RECORDS.--WDR HI-10-1: Drainage Area.

GAGE.--Crest-stage gage.

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 gage height and discharge for the period of record (1958-2004,2008-2010) 3,600 cfs and 5.72 ft. gage height (datum then in use) on December 18, 1967.

REVISIONS.--Drainage Area was revised based on USGS 10-meter Digital Elevation Model (DEM).

### MAXIMUM PEAK DISCHARGE WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Date	Discharge, in ft <sup>3</sup> /s	Gage height, in ft
Nov 25, 2009	253	10.43