

## HAWAII, ISLAND OF OAHU

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## 16229000 KALIHI STREAM NEAR HONOLULU

LOCATION.--Lat 21°21'59", long 157°50'49", Old Hawaiian Datum, Hydrologic Unit 20060000, on right bank 1.9 mi upstream from Kamanaiki Stream, and 4.1 mi north of Honolulu Post Office.

DRAINAGE AREA.--2.61 mi<sup>2</sup>.

PERIOD OF RECORD.--September 1913 to April 1914, July 1914 to current year. Monthly discharge only for some periods, published in WSP 1319.  
CHEMICAL ANALYSES: Water years 1972, 1974-93, 1996, quarterly.

REVISED RECORDS.--WSP 1569: Drainage area. WSP 1719: 1921-22(M), 1923-24, 1925-26(M), 1927-28, 1929-32(M), 1935, 1937, 1938-39(M), 1943(M), 1948-52(P), 1955-56, 1957-58(M), 1959.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 464.40 ft above mean sea level (by stadia survey). Prior to October 12, 1923, at datum 2.00 ft lower.

REMARKS.--Records computed by M.T.J. Ball. Records fair.

AVERAGE DISCHARGE.--90 years (water years 1915-2004), 6.34 ft<sup>3</sup>/s (4,590 acre-ft/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 12,400 ft<sup>3</sup>/s, November 18, 1930, gage height, 13.81 ft, from rating curve extended above 280 ft<sup>3</sup>/s on basis of indirect measurements at gage heights 8.9 ft, 10.96 ft, and 11.27 ft; minimum, 0.09 ft<sup>3</sup>/s, October 22, 1933, July 29, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov 29	1400	*1,100	*8.24	May 11	2015	881	7.77
Feb 27	--	958	7.94	Aug 4	0615	873	7.75

Minimum discharge, 0.36 ft<sup>3</sup>/s, Nov. 11, gage height, 2.04 ft.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	0.79	42	24	e5.3	e12	17	4.5	3.5	4.4	1.9	1.4
2	1.4	0.78	17	139	e4.9	e9.4	15	3.8	3.6	3.7	4.7	1.6
3	1.4	0.82	13	73	e4.7	7.6	22	3.6	2.9	3.3	10	1.6
4	1.2	0.73	56	25	e4.5	7.5	15	5.7	2.8	2.9	84	1.4
5	0.97	0.68	137	15	e5.5	6.1	12	6.1	2.3	3.4	5.6	1.5
6	1.0	0.83	55	12	e7.2	6.0	10	6.4	2.8	3.1	2.5	1.9
7	1.7	0.90	146	9.6	e36	5.7	8.6	14	2.5	2.7	6.0	1.3
8	2.2	0.98	55	8.5	e22	5.7	7.7	4.9	2.5	2.4	2.6	1.3
9	2.4	0.67	27	7.0	e8.5	5.1	7.0	4.1	3.9	2.7	2.3	1.2
10	1.2	0.66	30	6.1	e7.3	5.7	12	4.3	5.0	2.4	2.2	0.99
11	3.9	0.75	22	5.8	e6.6	5.3	7.4	58	4.6	2.7	3.3	1.5
12	3.8	0.77	14	5.9	e5.6	4.9	12	15	3.7	2.6	3.6	2.0
13	2.1	0.90	11	e4.0	e4.6	14	7.5	6.6	3.1	2.4	2.4	1.2
14	3.3	1.1	8.9	e6.4	e4.4	9.5	7.9	6.2	3.3	2.1	2.0	3.1
15	2.5	1.2	e7.9	e4.5	e4.1	6.6	11	25	2.6	2.4	1.7	1.6
16	1.8	1.4	6.7	e4.4	e4.0	6.0	9.1	8.2	6.5	4.4	1.6	1.2
17	1.6	2.0	6.2	e4.2	e4.0	5.7	6.5	5.6	6.1	2.0	2.3	0.91
18	1.4	4.1	5.6	e4.2	e3.6	4.6	6.1	5.0	3.6	1.7	1.5	0.72
19	1.2	2.0	5.1	e4.2	e3.3	4.0	5.9	4.8	4.0	1.8	1.1	2.3
20	1.2	1.4	5.0	e6.3	e3.3	8.3	17	4.3	5.7	1.6	1.0	1.0
21	1.1	1.3	4.5	e4.5	e3.2	100	8.9	3.9	4.5	1.5	3.0	1.2
22	1.0	0.90	4.2	e8.3	e3.3	79	6.5	3.5	6.1	1.5	1.6	1.4
23	0.99	1.2	4.2	e20	e3.4	59	5.6	3.6	6.1	1.4	1.9	7.9
24	0.95	1.2	3.8	e6.0	e3.3	26	5.4	3.5	5.3	1.1	2.1	2.8
25	0.91	1.4	3.6	e17	e3.5	24	5.4	4.1	3.8	1.1	2.5	2.0
26	0.88	0.79	3.3	e9.4	e36	25	12	4.1	3.1	1.2	10	1.7
27	0.84	0.64	3.4	e5.8	e124	20	5.8	4.2	3.0	1.4	4.8	1.7
28	0.84	0.74	5.2	e4.9	e30	15	5.1	3.9	3.9	2.5	2.7	1.5
29	0.82	115	3.7	e4.3	e14	35	5.2	3.6	4.1	1.6	2.6	1.9
30	0.75	45	11	e4.9	---	78	4.6	3.5	4.1	1.7	2.2	3.8
31	0.73	---	27	e5.9	---	24	---	4.0	---	1.9	1.7	---
TOTAL	47.18	191.63	744.3	460.1	370.1	624.7	281.2	238.0	119.0	71.6	177.4	55.62
MEAN	1.52	6.39	24.0	14.8	12.8	20.2	9.37	7.68	3.97	2.31	5.72	1.85
MAX	3.9	115	146	139	124	100	22	58	6.5	4.4	84	7.9
MIN	0.73	0.64	3.3	4.0	3.2	4.0	4.6	3.5	2.3	1.1	1.0	0.72
AC-FT	94	380	1,480	913	734	1,240	558	472	236	142	352	110

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2004, BY WATER YEAR (WY)

MEAN	4.44	7.16	8.33	8.99	7.09	8.44	8.15	6.38	3.63	4.38	4.90	4.43
MAX	18.9	35.0	35.0	65.7	48.6	40.6	36.0	37.5	12.9	16.6	26.7	31.3
(WY)	(1937)	(1928)	(1930)	(1923)	(1932)	(1951)	(1989)	(1927)	(1934)	(1954)	(1958)	(1914)
MIN	0.29	0.46	0.74	0.50	0.34	0.74	0.63	0.27	0.32	0.60	0.43	0.30
(WY)	(1985)	(1954)	(1977)	(1977)	(1978)	(1926)	(1926)	(1926)	(1966)	(1984)	(1984)	(1984)

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## 16229000 KALIHI STREAM NEAR HONOLULU—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1914 - 2004
ANNUAL TOTAL	1,546.63	3,380.83	
ANNUAL MEAN	4.24	9.24	
HIGHEST ANNUAL MEAN			6.34
LOWEST ANNUAL MEAN			13.5
HIGHEST DAILY MEAN	146	Dec 7	1.81
LOWEST DAILY MEAN	0.20	Sep 6	2003
ANNUAL SEVEN-DAY MINIMUM	0.29	Aug 31	951 Jan 19, 1923
ANNUAL RUNOFF (AC-FT)	3,070	6,710	0.11 Jul 29, 1966
10 PERCENT EXCEEDS	5.0	18	0.15 May 15, 1926
50 PERCENT EXCEEDS	0.95	4.0	4,590 11
90 PERCENT EXCEEDS	0.37	1.1	2.8 0.93

e Estimated