

HAWAII, ISLAND OF OAHU

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 mi².

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.F. Wong. Records fair.

AVERAGE DISCHARGE.--89 years (water years 1915-2003), 6.31 ft³/s (4,570 acre-ft/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 12,400 ft³/s, November 18, 1930, gage height, 13.81 ft, from rating curve extended above 280 ft³/s on basis of indirect measurements at gage heights 8.9 ft, 10.96 ft, and 11.27 ft; minimum, 0.09 ft³/s, October 22, 1933, July 29, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft³/s and maximum (*):

	Date	Time	Discharge (ft ³ /s)	Gage height (ft)		Date	Time	Discharge (ft ³ /s)	Gage height (ft)
	Sep 11	0145	*864	*7.73					No other peak greater than base discharge.

Minimum discharge, 0.20 ft³/s, Sept. 5, 6, 7, 9, 10, gage height, 2.00 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.77	0.75	0.74	0.52	4.7	2.2	2.0	0.96	0.44	0.51	0.54	0.30
2	1.1	0.74	0.83	0.52	2.2	2.1	1.6	0.99	0.47	0.55	0.62	0.30
3	0.97	0.68	0.80	0.51	1.5	1.5	1.5	0.92	0.52	0.51	1.6	0.28
4	0.92	0.58	0.68	0.45	1.1	1.3	6.8	0.89	0.51	0.50	0.80	0.35
5	0.93	0.68	0.72	0.46	0.99	1.2	2.9	0.85	0.44	0.50	0.64	0.32
6	0.84	0.77	1.7	0.45	0.94	1.3	2.4	0.93	0.40	0.36	0.46	0.20
7	0.93	0.77	1.6	0.43	0.83	1.9	2.8	1.1	0.40	0.36	0.33	0.61
8	1.0	0.78	0.92	0.44	0.75	1.2	1.8	0.96	0.35	0.33	0.33	0.28
9	0.93	0.67	0.99	0.45	0.73	1.0	2.6	0.93	0.35	0.32	0.33	0.22
10	0.81	0.68	0.95	0.45	0.66	1.0	1.7	0.91	0.33	0.34	0.33	30
11	0.85	0.85	1.4	3.7	0.70	1.00	1.6	0.80	0.31	0.38	0.35	125
12	0.84	2.5	1.7	0.94	0.91	0.96	1.5	0.76	0.36	0.28	0.32	11
13	0.76	2.6	1.1	0.72	0.78	0.91	1.3	0.86	0.39	0.35	0.33	5.6
14	1.2	1.0	0.83	0.95	54	0.89	1.1	0.81	0.42	0.34	0.45	4.3
15	4.9	4.6	0.75	1.5	5.3	0.88	1.0	0.99	0.45	0.34	0.47	3.1
16	0.87	2.7	0.70	0.82	2.6	16	1.2	0.77	0.44	0.67	0.52	2.7
17	1.2	1.4	0.72	0.64	1.8	4.7	2.0	0.76	0.45	0.43	0.59	2.2
18	0.88	1.1	0.63	0.55	1.7	2.5	1.5	0.71	0.53	0.44	0.61	2.0
19	0.86	0.91	0.59	0.52	1.5	1.8	1.2	0.67	0.82	0.40	0.59	1.7
20	0.71	0.83	0.59	1.3	1.7	1.7	3.3	0.66	0.60	0.50	0.49	1.6
21	0.66	0.75	0.56	0.60	1.9	1.3	1.5	0.64	0.49	0.42	0.44	1.5
22	0.60	0.72	0.61	0.55	2.8	1.1	3.4	0.61	0.46	0.33	0.31	1.5
23	0.58	0.73	0.72	0.52	1.6	1.0	1.5	0.58	0.47	0.31	0.39	1.4
24	1.3	0.69	0.71	0.59	1.6	1.1	1.3	0.63	0.58	0.72	0.52	1.3
25	1.5	0.66	0.59	0.66	2.0	1.0	1.1	0.63	0.76	2.7	0.38	1.3
26	0.65	0.72	0.73	0.46	3.0	0.96	0.96	0.54	0.52	3.9	0.30	1.2
27	0.58	0.73	0.87	0.48	2.5	3.5	1.1	0.52	0.60	1.3	0.32	1.1
28	0.55	1.2	1.1	0.46	3.8	2.4	1.1	0.51	1.3	0.91	0.37	0.97
29	0.60	5.4	0.84	0.48	---	6.8	1.1	0.46	0.72	0.62	0.30	0.95
30	0.63	0.98	0.64	9.4	---	6.1	1.00	0.46	0.58	0.52	0.41	0.99
31	1.1	---	0.56	20	---	2.9	---	0.44	---	0.51	0.28	---
TOTAL	31.02	38.17	26.87	50.52	104.59	74.20	55.86	23.25	15.46	20.65	14.72	204.27
MEAN	1.00	1.27	0.87	1.63	3.74	2.39	1.86	0.75	0.52	0.67	0.47	6.81
MAX	4.9	5.4	1.7	20	54	16	6.8	1.1	1.3	3.9	1.6	125
MIN	0.55	0.58	0.56	0.43	0.66	0.88	0.96	0.44	0.31	0.28	0.28	0.20
AC-FT	62	76	53	100	207	147	111	46	31	41	29	405

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2003, BY WATER YEAR (WY)

MEAN	4.48	7.17	8.16	8.93	7.02	8.31	8.13	6.37	3.63	4.40	4.89	4.46
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)

16229000 KALIHI STREAM NEAR HONOLULU—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1914 - 2003
ANNUAL TOTAL	1,933.20	659.58	
ANNUAL MEAN	5.30	1.81	
HIGHEST ANNUAL MEAN			6.31
LOWEST ANNUAL MEAN			13.5
HIGHEST DAILY MEAN	162	May 6	1.81
LOWEST DAILY MEAN	0.55	Oct 28	2003
ANNUAL SEVEN-DAY MINIMUM	0.62	Dec 19	951 Jan 19, 1923
ANNUAL RUNOFF (AC-FT)	3,830	1,310	0.11 Jul 29, 1966
10 PERCENT EXCEEDS	7.5	2.5	0.15 May 15, 1926
50 PERCENT EXCEEDS	1.9	0.78	
90 PERCENT EXCEEDS	0.74	0.37	

