

HAWAII, ISLAND OF KAUAI

16010000 KAWAIKOI STREAM NEAR WAIMEA

LOCATION.--Lat 22° 08'09", long 159° 37'22", Old Hawaiian Datum, Hydrologic Unit 20070000, on left bank 0.2 mi upstream from Kokee-Mohihi Road crossing, 2.5 mi east of Kokee Lodge, and 12.5 mi north of Waimea.

DRAINAGE AREA.--3.95 mi².

PERIOD OF RECORD.--April 1909 to October 1912, December 1912 to March 1913, May 1913 to June 1915, August 1915 to May 1916, July to December 1916, July 1919 to current year. Monthly discharge only for some periods, published in WSP 1319.

REVISED RECORDS.--WSP 555: 1920-21. WSP 1185: 1914-17(M), 1920-38(M), 1940-43(M), 1947(M). WSP 1719: 1912, 1921-25, 1927-32, 1936. WSP 2137: Drainage area.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 3,420 ft above mean sea level, by barometer. Prior to May 26, 1910, nonrecording gage at site 300 ft downstream at different datum.

REMARKS.--Records computed by Roy Taogoshi. Records good. No diversion upstream.

AVERAGE DISCHARGE.--86 years (water years 1912, 1914, 1920-2003), 34.1 ft³/s (24,740 acre-ft/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,300 ft³/s, January 13, 1967, gage height, 15.33 ft, from rating curve extended above 470 ft³/s on basis of slope-area measurements at gage heights 12.12 ft and 13.43 ft; minimum, 1.14 ft³/s, September 21, 22, 1953.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,100 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov 15	0415	*1,810	*7.35

Minimum discharge, 1.8 ft³/s, Nov 10, gage height 1.82 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	2.4	6.0	9.5	4.6	15	18	106	9.5	4.8	12	6.8	2.6
2	2.4	3.6	21	6.4	11	9.9	17	9.4	4.7	14	6.5	2.5
3	2.4	3.0	11	4.8	8.9	8.2	13	8.9	4.4	14	6.0	2.6
4	2.2	2.8	8.4	4.8	8.1	7.7	91	8.3	5.7	14	7.9	7.3
5	2.4	2.4	7.4	7.7	7.5	7.0	23	7.8	15	7.9	5.3	5.1
6	2.5	2.2	82	5.0	28	28	29	8.5	73	6.4	4.1	4.5
7	2.2	2.0	28	4.2	11	19	21	11	21	6.0	3.4	4.0
8	2.2	1.9	11	3.8	8.0	9.3	39	15	9.8	5.6	3.1	3.2
9	2.1	1.9	8.5	3.6	6.9	7.6	25	9.9	23	6.5	3.1	3.3
10	2.0	1.9	7.5	4.8	6.3	6.8	44	39	26	12	2.9	2.8
11	3.2	54	6.9	47	6.0	6.3	47	16	15	9.3	2.9	2.6
12	6.7	7.3	6.6	9.2	15	5.9	276	11	11	6.8	2.8	2.5
13	4.1	146	6.4	5.6	365	5.7	35	15	16	5.5	11	2.3
14	3.4	223	8.6	4.6	279	5.4	20	26	13	5.0	7.0	28
15	3.7	742	6.6	139	120	5.3	16	10	27	4.8	5.7	11
16	3.3	330	5.9	15	27	8.7	15	9.9	30	4.6	5.1	4.2
17	2.7	120	5.6	7.9	18	6.4	31	37	19	4.4	3.9	3.1
18	2.7	77	5.9	6.6	15	7.9	21	69	17	4.2	3.4	2.8
19	2.7	34	5.7	27	12	6.0	24	17	12	3.9	5.1	2.5
20	2.4	28	5.2	188	11	5.3	45	13	31	16	4.0	2.3
21	2.1	17	4.8	20	14	5.0	35	8.5	11	20	14	2.3
22	2.0	13	4.6	11	27	4.6	160	7.3	18	6.7	7.7	2.2
23	1.9	12	4.8	8.9	14	4.4	32	6.7	19	5.3	39	2.1
24	1.9	10	4.7	309	25	4.3	26	6.2	11	4.5	9.4	2.3
25	4.1	47	4.4	36	14	4.2	26	6.0	8.0	5.4	5.3	3.5
26	3.9	25	4.3	18	10	4.4	16	5.7	6.9	10	4.0	2.9
27	2.7	14	35	14	9.8	21	13	5.4	9.7	6.3	3.5	2.5
28	10	30	25	11	23	9.1	12	5.2	7.9	4.7	3.3	2.3
29	40	42	11	11	---	5.8	11	5.1	11	4.0	3.0	2.1
30	6.8	13	6.5	39	---	30	9.8	5.1	10	3.6	3.0	1.9
31	13	---	5.1	49	---	95	---	5.0	---	5.2	2.8	---
TOTAL	146.1	2,012.0	367.9	1,026.5	1,115.5	372.2	1,278.8	417.4	490.9	238.6	195.0	123.3
MEAN	4.71	67.1	11.9	33.1	39.8	12.0	42.6	13.5	16.4	7.70	6.29	4.11
MAX	40	742	82	309	365	95	276	69	73	20	39	28
MIN	1.9	1.9	4.3	3.6	6.0	4.2	9.8	5.0	4.4	3.6	2.8	1.9
AC-FT	290	3,990	730	2,040	2,210	738	2,540	828	974	473	387	245

16010000 KAWAIKOI STREAM NEAR WAIMEA—Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 2003, BY WATER YEAR (WY)

MEAN	21.4	44.9	52.9	53.2	41.6	48.0	45.8	27.0	17.1	23.1	21.2	14.2
MAX	60.3	170	176	343	165	152	115	86.2	68.7	94.7	195	58.1
(WY)	(1917)	(1929)	(1968)	(1921)	(1956)	(1951)	(1980)	(1927)	(1978)	(1989)	(1950)	(1992)
MIN	3.34	4.16	11.9	3.23	4.26	6.15	5.74	3.38	3.58	5.18	2.54	1.86
(WY)	(1985)	(1964)	(2003)	(1945)	(1945)	(1926)	(1992)	(1966)	(1951)	(1922)	(1984)	(1953)

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1911 - 2003

ANNUAL TOTAL	9,191.3	7,784.2	
ANNUAL MEAN	25.2	21.3	34.1
HIGHEST ANNUAL MEAN			60.7
LOWEST ANNUAL MEAN			15.3
HIGHEST DAILY MEAN	742	Nov 15	2,620
LOWEST DAILY MEAN	1.9	Oct 23	1.1
ANNUAL SEVEN-DAY MINIMUM	2.2	Nov 4	Sep 17, 1953
ANNUAL RUNOFF (AC-FT)	18,230	15,440	24,740
10 PERCENT EXCEEDS	44	35	74
50 PERCENT EXCEEDS	8.8	7.7	13
90 PERCENT EXCEEDS	3.3	2.6	4.3

