

## 16071500 LEFT BRANCH OPAEKAA STREAM NEAR KAPAA

LOCATION.--Lat 22°04'44", long 159°23'55", Old Hawaiian Datum, Hydrologic Unit 20070000, on left bank 0.4 mi upstream from mouth, 0.6 mi northeast of Wailua Reservoir, and 4.9 mi west of Kapaa.

DRAINAGE AREA.--0.65 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1960 to current year. Prior to July 1960, published as Left Branch Opaikaa Stream near Kapaa.

REVISED RECORDS.--WSP 2137: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 458.4 ft above mean sea level (by stadia survey).

REMARKS.--Records computed by Roy Taogoshi. Records good. Recording rain gage located at station.

AVERAGE DISCHARGE.--44 years (water years 1961-2004), 2.50 ft<sup>3</sup>/s (1,810 acre-ft/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,060 ft<sup>3</sup>/s, December 14, 1991, gage height, 6.60 ft, from rating curve extended above 415 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 5.01 ft; minimum, 0.09 ft<sup>3</sup>/s, September 27-30, 1968.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 70 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)
Feb 27	0300	*91	*2.52				No other peak greater than base discharge.

Minimum discharge, 0.46 ft<sup>3</sup>/s, Oct. 1, gage height, 0.76 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	0.46	0.92	2.9	3.1	1.4	2.7	6.6	2.4	1.5	2.2	1.2	2.1
2	1.2	0.85	2.6	1.5	1.3	3.0	8.4	2.2	1.3	2.0	1.4	1.6
3	0.67	0.80	2.1	1.3	1.2	2.3	5.0	2.0	1.3	1.9	2.1	1.3
4	0.61	0.75	3.3	1.2	1.2	2.2	5.1	2.0	1.2	1.9	11	1.2
5	0.54	0.75	6.4	1.2	1.1	2.1	4.3	2.0	1.2	1.8	2.4	1.3
6	0.53	0.75	5.0	1.1	1.2	2.1	3.7	1.9	1.2	1.9	1.7	1.6
7	0.72	0.80	4.9	1.1	2.3	3.5	3.6	2.0	1.2	1.8	1.5	1.3
8	0.63	0.94	4.6	1.1	1.4	4.7	3.4	1.9	1.4	1.7	1.6	6.0
9	0.87	0.74	4.7	1.1	1.2	2.8	3.4	1.8	2.0	1.8	1.5	2.6
10	0.68	0.68	3.8	1.0	1.2	2.5	3.1	1.8	1.8	1.6	1.4	2.1
11	0.69	0.67	3.3	1.0	1.1	2.3	3.0	1.7	3.4	1.8	1.5	1.8
12	1.0	0.67	2.8	1.0	1.1	2.3	3.3	5.1	2.9	1.8	1.7	2.1
13	2.4	0.68	2.6	1.00	1.1	4.6	3.2	2.0	2.5	1.8	1.7	2.1
14	1.2	0.71	2.5	4.1	1.1	3.1	3.1	3.0	6.1	1.5	1.5	1.9
15	1.0	0.64	2.3	1.4	1.0	2.7	2.8	2.3	2.6	1.5	1.5	1.9
16	1.0	0.61	2.2	1.2	0.96	2.8	3.1	2.1	2.3	1.5	1.3	2.0
17	0.91	0.63	2.2	1.2	0.95	2.6	2.5	1.9	2.1	1.4	1.3	1.9
18	0.85	0.60	1.9	1.1	0.95	2.8	2.4	1.8	2.8	1.6	1.2	1.7
19	0.80	0.66	1.7	1.1	0.92	2.7	2.3	1.7	3.1	1.8	1.2	4.1
20	0.80	0.59	1.6	1.1	0.87	3.3	3.3	1.6	2.4	1.4	1.2	2.5
21	0.79	0.59	1.5	1.0	0.87	3.7	3.5	1.6	2.4	1.3	1.4	3.0
22	0.90	0.59	1.5	3.2	0.87	3.8	3.1	1.6	3.5	1.3	1.3	2.9
23	0.77	0.62	1.4	9.7	0.87	3.5	2.7	1.6	2.9	1.3	1.2	3.1
24	0.75	1.2	1.4	3.1	0.83	4.1	2.6	1.5	2.5	1.2	1.2	2.7
25	0.85	1.1	1.3	2.4	0.82	4.1	2.5	1.5	2.3	1.3	1.4	2.7
26	0.70	0.71	1.3	2.1	1.4	5.2	4.6	1.5	3.3	1.2	1.2	2.6
27	0.63	0.64	1.3	2.1	27	4.9	2.9	1.4	2.4	1.6	1.1	2.5
28	1.7	0.64	1.3	1.8	5.2	5.9	2.7	1.5	2.4	1.7	1.2	2.4
29	1.2	0.70	1.2	1.6	3.3	6.1	2.6	1.7	2.3	1.3	1.1	2.2
30	1.5	10	1.3	1.5	---	8.4	2.5	1.5	2.1	1.3	1.5	2.1
31	1.1	---	1.3	1.5	---	8.1	---	1.4	---	1.2	1.2	---
TOTAL	28.45	31.23	78.2	57.90	64.71	114.9	105.3	60.0	70.4	49.4	53.7	69.3
MEAN	0.92	1.04	2.52	1.87	2.23	3.71	3.51	1.94	2.35	1.59	1.73	2.31
MAX	2.4	10	6.4	9.7	27	8.4	8.4	5.1	6.1	2.2	11	6.0
MIN	0.46	0.59	1.2	1.0	0.82	2.1	2.3	1.4	1.2	1.2	1.1	1.2
AC-FT	56	62	155	115	128	228	209	119	140	98	107	137

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2004, BY WATER YEAR (WY)

MEAN	2.10	3.65	3.58	3.07	2.49	2.77	3.12	2.71	1.80	1.63	1.57	1.51
MAX	8.29	14.3	11.0	12.4	10.8	14.7	11.8	9.66	5.68	3.80	4.24	4.67
(WY)	(1961)	(1966)	(1992)	(1989)	(1994)	(1982)	(1982)	(1965)	(1980)	(1989)	(1982)	(1980)
MIN	0.42	0.59	0.56	0.58	0.50	0.50	0.73	0.62	0.29	0.59	0.36	0.38
(WY)	(1985)	(1964)	(1963)	(1977)	(1986)	(1978)	(1998)	(1966)	(1968)	(1968)	(1984)	(1975)

## HAWAII, ISLAND OF KAUAI

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SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1960 - 2004
ANNUAL TOTAL	551.89	783.49	
ANNUAL MEAN	1.51	2.14	
HIGHEST ANNUAL MEAN			2.50
LOWEST ANNUAL MEAN			0.92
HIGHEST DAILY MEAN	24	Apr 2	5.72
LOWEST DAILY MEAN	0.46	Feb 10	0.92
ANNUAL SEVEN-DAY MINIMUM	0.47	Feb 6	1982
ANNUAL RUNOFF (AC-FT)	1,090	1,550	1984
10 PERCENT EXCEEDS	2.8	3.5	218 Dec 14, 1991
50 PERCENT EXCEEDS	0.89	1.6	0.09 Sep 28, 1968
90 PERCENT EXCEEDS	0.54	0.80	0.10 Jun 6, 1968
			1,810 4.3
			1.6
			0.67