

## HAWAII, ISLAND OF OAHU

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16295300 HAKIPUU STREAM NEAR WAIKANE

LOCATION.--Lat 21°30'42", long 157°51'27", Old Hawaiian Datum, Hydrologic Unit 20060000, on right bank, 100 ft downstream of Kamehameha Highway bridge, 1.7 mi north of Waiahole Elementary School, and 1.0 mi southwest of Kualoa Regional Park.

DRAINAGE AREA--0.85 mi<sup>2</sup>.

PERIOD OF RECORD.--October 2002 to current year.

GAGE--Water-stage recorder and concrete control. Elevation of gage is 30 ft above mean sea level (from topographic map).

REMARKS.--Records computed by B.H. Shimizu. Records fair. Small diversion upstream of gage for diversified agriculture.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 540 ft<sup>3</sup>/s, August 4, 2004, gage height, 3.30 ft, minimum, 0.24 ft<sup>3</sup>/s, November 5, 2003.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 80 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 30	0600	296	2.64	May 7	0630	166	2.22
Jan 2	1845	89	1.89	May 11	1845	116	2.02
Feb 27	1415	153	2.17	May 15	1245	111	2.00
Mar 2	0615	310	2.68	Aug 4	0515	*540	*3.30
Mar 26	1630	91	1.90				

Minimum discharge, 0.24 ft<sup>3</sup>/s, Nov. 5, gage height, 0.62 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	0.38	0.34	8.9	2.8	2.5	4.8	4.2	2.7	2.2	1.4	0.93	1.2
2	0.37	0.35	6.8	17	2.3	49	4.4	2.6	2.2	1.4	1.3	1.2
3	0.39	0.41	7.9	13	2.4	13	4.4	2.5	2.1	1.3	3.7	1.2
4	0.41	0.34	13	6.5	4.5	8.9	3.9	2.5	2.0	1.2	64	1.1
5	0.37	0.29	17	5.1	2.9	6.8	3.6	2.5	1.9	1.2	6.5	1.3
6	0.36	0.36	9.5	4.1	2.6	5.5	3.4	2.4	1.9	1.3	4.4	2.5
7	0.40	0.41	9.4	3.4	2.6	4.9	3.3	9.0	1.8	1.2	3.8	1.2
8	0.41	0.40	8.2	3.1	3.2	4.4	3.1	3.0	1.7	1.2	2.9	1.2
9	0.43	0.38	5.7	2.8	2.5	3.8	3.0	3.0	1.9	1.1	2.6	1.2
10	0.49	0.38	4.6	2.6	2.4	3.6	3.1	6.8	1.9	1.1	2.4	1.2
11	0.57	0.38	3.7	2.4	2.3	3.9	2.8	21	2.0	1.4	2.2	1.2
12	0.59	0.38	3.2	2.3	2.2	4.8	2.7	7.0	1.8	1.2	2.1	1.2
13	0.56	0.38	2.9	2.0	2.2	3.6	2.4	5.3	1.6	1.2	1.9	1.1
14	0.46	0.37	2.5	2.6	2.1	3.2	2.3	4.8	1.6	1.2	1.9	1.3
15	0.52	0.30	2.3	1.9	2.0	3.0	2.9	14	1.6	1.2	1.8	1.1
16	0.43	0.31	2.1	1.8	1.9	2.8	3.4	6.8	1.6	1.2	1.7	1.1
17	0.65	0.30	2.5	1.7	1.8	2.8	2.6	5.1	1.9	1.2	1.7	1.1
18	0.47	0.33	1.9	1.7	1.8	2.6	2.4	4.6	1.6	1.2	1.5	1.0
19	0.40	0.31	1.8	1.6	1.7	2.4	2.4	4.3	1.8	1.1	1.5	1.0
20	0.37	0.30	1.8	1.6	1.7	2.6	5.6	4.1	1.6	1.0	1.4	0.98
21	0.36	0.30	1.6	2.2	1.6	3.5	4.0	3.8	1.5	1.0	1.4	0.97
22	0.37	0.32	1.5	1.9	1.6	3.3	2.9	3.6	1.6	0.98	1.4	0.98
23	0.35	0.35	1.5	2.1	1.5	3.3	2.7	3.5	1.5	0.96	1.3	1.0
24	0.37	0.44	1.4	1.8	1.5	3.0	2.6	3.1	1.4	0.92	1.4	1.1
25	0.37	0.42	1.4	7.1	1.4	3.6	2.5	2.8	1.3	1.1	1.3	1.2
26	0.35	0.37	1.3	6.1	2.3	7.9	6.7	2.7	1.4	1.1	1.4	0.98
27	0.35	0.37	1.3	3.2	29	4.7	3.3	2.6	1.4	1.1	1.4	0.95
28	0.33	0.53	1.3	2.6	9.7	3.8	2.8	2.5	1.5	1.0	1.3	0.95
29	0.32	10	1.3	2.4	6.0	5.0	2.7	2.3	1.5	1.0	1.3	0.97
30	0.33	36	1.4	2.6	---	4.9	2.7	2.4	1.6	1.0	1.2	0.93
31	0.32	---	1.8	2.4	---	4.4	---	2.2	---	1.0	1.2	---
TOTAL	12.85	56.12	131.5	114.4	102.2	183.8	98.8	145.5	51.4	35.46	124.83	34.41
MEAN	0.41	1.87	4.24	3.69	3.52	5.93	3.29	4.69	1.71	1.14	4.03	1.15
MAX	0.65	36	17	17	29	49	6.7	21	2.2	1.4	64	2.5
MIN	0.32	0.29	1.3	1.6	1.4	2.4	2.3	2.2	1.3	0.92	0.93	0.93
AC-FT	25	111	261	227	203	365	196	289	102	70	248	68

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2004, BY WATER YEAR (WY)**

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## 16295300 HAKIPUU STREAM NEAR WAIKANE—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 2002 - 2004
ANNUAL TOTAL	471.09	1,091.27	
ANNUAL MEAN	1.29	2.98	1.95
HIGHEST ANNUAL MEAN			2.98
LOWEST ANNUAL MEAN			0.91
HIGHEST DAILY MEAN	36	Nov 30	64 Aug 4
LOWEST DAILY MEAN	0.29	Nov 5	0.29 Nov 5
ANNUAL SEVEN-DAY MINIMUM	0.31	Nov 15	0.31 Nov 15
ANNUAL RUNOFF (AC-FT)	934	2,160	1,410
10 PERCENT EXCEEDS	1.9	5.2	3.6
50 PERCENT EXCEEDS	0.59	1.8	0.98
90 PERCENT EXCEEDS	0.38	0.38	0.43