

## HAWAII, ISLAND OF KAUAI

## 16114000 LIMAHULI STREAM NEAR WAINIHA

LOCATION.--Lat 22° 13'15", long 159° 34'48", Old Hawaiian Datum, Hydrologic Unit 20070000, on left bank 0.2 mi upstream from intersection with Kuhio Highway, and entrance to Haena State Park.

DRAINAGE AREA.--1.36 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1994 to current year.

GAGE.--Water-stage recorders and natural control. Elevation of gage is 200 ft above mean sea level, by altimeter.

REMARKS.--Records computed by Clayton Yoshida. Records good except for discharge above 200 cfs which are poor. Limahuli Gardens diverts water through a 4-inch pipe, upstream of station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 985 ft<sup>3</sup>/s, December 11, 2000, gage height, 5.24 ft; minimum, 3.4 ft<sup>3</sup>/s, September 27-30, 2003.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 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 13	1745	*450	*3.88		Apr 12	1030	392	3.68

Minimum discharge, 3.3 ft<sup>3</sup>/s, Sept. 8, 27, 28, 29, 30, gage height, 0.35 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	4.1	4.7	5.4	4.4	10	6.3	11	4.5	3.6	3.6	3.8	3.6
2	4.0	4.6	9.4	5.1	6.8	5.3	5.9	4.4	3.6	3.6	3.7	3.5
3	4.1	5.6	5.8	4.3	5.8	5.0	5.3	4.3	3.6	3.8	3.7	3.6
4	4.1	4.7	5.0	4.1	5.4	4.8	12	4.2	4.0	3.9	3.7	3.6
5	4.2	4.4	4.7	3.9	5.0	4.6	6.5	4.2	4.1	3.7	3.6	3.7
6	4.2	4.3	26	3.8	29	5.9	5.7	4.2	3.8	3.7	3.6	3.6
7	4.1	4.2	10	3.8	9.4	5.7	5.1	4.5	3.7	3.7	3.6	3.7
8	4.1	4.2	6.5	3.8	6.5	5.4	14	4.1	3.7	3.8	3.8	3.7
9	4.0	4.1	5.5	3.6	5.5	4.6	15	4.0	3.5	3.7	3.8	3.6
10	4.0	4.0	5.1	8.9	5.0	4.3	35	4.7	3.8	3.8	3.8	3.5
11	4.1	7.0	4.9	13	4.9	4.0	39	4.2	3.5	3.7	3.8	3.6
12	4.2	4.5	5.0	5.9	20	3.9	103	4.0	3.7	3.6	3.8	3.6
13	4.2	22	5.4	4.9	130	3.8	15	6.7	3.6	3.6	3.9	3.6
14	4.2	22	5.2	4.6	45	3.7	8.0	5.7	3.5	3.6	3.7	3.7
15	4.2	62	4.6	15	15	15	6.4	4.6	3.5	3.6	3.6	3.6
16	4.2	31	4.6	6.4	8.5	12	5.8	4.2	4.2	3.7	3.6	3.5
17	4.2	15	4.6	5.2	6.8	6.4	7.0	4.4	3.8	3.6	3.6	3.5
18	4.2	10	7.5	6.1	5.9	5.1	6.8	8.6	3.9	3.6	3.6	3.5
19	4.2	7.7	5.1	11	5.3	4.7	6.5	5.7	4.0	3.7	3.7	3.5
20	4.1	6.7	4.7	8.7	5.9	4.4	7.8	4.7	4.2	5.0	3.6	3.5
21	4.1	5.7	4.4	5.9	6.5	4.3	6.7	4.3	3.8	4.4	4.1	3.6
22	4.1	5.2	4.3	5.1	7.0	4.1	15	4.1	3.9	3.7	3.9	3.6
23	4.0	4.9	5.1	4.7	5.8	4.0	10	3.9	4.6	3.7	6.3	3.5
24	4.0	4.6	4.3	8.9	15	4.0	8.5	3.8	3.9	3.6	4.0	3.5
25	4.4	4.6	4.2	6.5	7.3	3.9	7.4	3.8	3.7	3.9	3.7	3.5
26	4.2	4.5	4.2	5.0	6.6	3.8	6.1	3.8	3.7	6.3	3.6	3.5
27	4.1	4.2	5.9	4.6	5.6	7.1	5.3	3.7	3.9	4.8	3.6	3.4
28	8.9	22	8.3	4.4	7.0	5.0	5.0	3.6	3.8	4.1	3.6	3.4
29	10	17	5.9	10	---	4.3	4.7	3.6	3.8	3.8	4.2	3.4
30	5.5	7.1	5.0	29	---	6.4	4.5	3.6	3.6	3.8	3.8	3.4
31	5.5	---	4.5	37	---	7.7	---	3.6	---	3.8	3.6	---
TOTAL	141.5	312.5	191.1	247.6	396.5	169.5	394.0	137.7	114.0	120.9	118.4	106.5
MEAN	4.56	10.4	6.16	7.99	14.2	5.47	13.1	4.44	3.80	3.90	3.82	3.55
MAX	10	62	26	37	130	15	103	8.6	4.6	6.3	6.3	3.7
MIN	4.0	4.0	4.2	3.6	4.9	3.7	4.5	3.6	3.5	3.6	3.6	3.4
AC-FT	281	620	379	491	786	336	781	273	226	240	235	211

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2003, BY WATER YEAR (WY)

MEAN	6.67	9.32	10.7	9.95	9.16	7.63	13.2	9.19	6.86	7.13	6.77	6.19
MAX	9.62	12.5	14.5	23.8	14.2	15.7	32.6	22.4	12.2	9.28	9.84	9.32
(WY)	(1996)	(1996)	(2001)	(1997)	(2003)	(1997)	(1997)	(1997)	(1996)	(1998)	(1995)	(1996)
MIN	4.56	6.26	6.16	4.34	4.64	4.22	5.31	4.44	3.80	3.90	3.82	3.55
(WY)	(2003)	(2000)	(2003)	(2001)	(2000)	(2001)	(2002)	(2003)	(2003)	(2003)	(2003)	(2003)

## 16114000 LIMAHULI STREAM NEAR WAINIHA—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1995 - 2003
ANNUAL TOTAL	2,375.0	2,450.2	
ANNUAL MEAN	6.51	6.71	
HIGHEST ANNUAL MEAN			8.56
LOWEST ANNUAL MEAN			13.5
HIGHEST DAILY MEAN	62	Nov 15	6.65
LOWEST DAILY MEAN	3.9	Jun 29	2002
ANNUAL SEVEN-DAY MINIMUM	4.0	Aug 15	238 Jan 4, 1997
ANNUAL RUNOFF (AC-FT)	4,710	4,860	3.4 Sep 27, 2003
10 PERCENT EXCEEDS	11	9.6	3.4 Sep 24, 2003
50 PERCENT EXCEEDS	4.6	4.3	6.1
90 PERCENT EXCEEDS	4.1	3.6	4.2

