

16284200 WAIHEE STREAM NEAR KAHALUU

LOCATION.--Lat $21^{\circ} 27' 04''$, long $157^{\circ} 51' 36''$, Old Hawaiian Datum, Hydrologic Unit 20060000, on right bank, 0.2 mi downstream from forest-reserve boundary, 1.0 mi south of Kahaluu School, and 1.6 mi west of Ahuimanu sewage treatment plant.

DRAINAGE AREA.--0.97 mi².

PERIOD OF RECORD.--October 1974 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 170 ft above mean sea level (from topographic map).

REMARKS.--Records computed by B. Shimizu. Records fair. Honolulu Board of Water Supply diverts water from tunnel and wells in drainage area.

AVERAGE DISCHARGE.--29 years (water years 1975-2003), 6.05 ft³/s (4,380 acre-ft/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,530 ft³/s, March 21, 1991, gage height, 7.93 ft, from rating curve extended above 100 ft/
s on basis of slope area measurement at gage height 7.93 ft; minimum, 1.1 ft³/s, April 7, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 280 ft³/s and maximum (*):

	Date	Time	Discharge (ft ³ /s)	Gage height (ft)		Date	Time	Discharge (ft ³ /s)	Gage height (ft)
	Sep 11	0330	*286	*5.02					No other peak greater than base discharge.

Minimum discharge, 4.2 ft³/s, on several days, gage height, 2.68 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	4.8	5.3	5.2	4.9	5.9	4.9	5.9	5.0	4.3	4.8	5.0	4.9
2	4.8	5.3	5.1	4.9	5.4	5.0	5.5	4.9	4.3	4.8	5.0	4.8
3	4.9	5.2	5.1	4.9	5.3	4.9	5.4	4.9	4.3	4.8	5.0	4.8
4	4.8	5.3	5.1	5.0	5.1	5.0	5.9	4.9	4.6	4.8	4.9	4.8
5	4.8	5.3	5.1	4.9	5.1	4.9	5.4	4.8	4.4	4.7	4.9	4.8
6	4.8	5.3	5.2	4.9	5.1	5.1	5.3	4.8	4.3	4.8	4.9	4.9
7	4.8	5.2	5.1	5.1	5.1	5.4	7.2	4.8	4.2	4.8	4.9	4.9
8	4.8	5.3	5.1	5.1	5.1	5.3	5.6	4.8	4.2	4.8	4.9	4.8
9	4.8	5.3	5.1	5.1	5.1	5.2	5.6	4.8	4.3	4.8	4.9	4.8
10	4.7	5.3	5.1	5.1	5.0	5.1	13	4.8	4.8	4.8	4.9	12
11	4.8	5.3	5.2	5.2	5.1	5.0	7.1	4.8	4.9	4.8	4.9	63
12	4.8	6.0	5.3	5.1	5.1	4.9	6.4	4.8	4.9	4.8	4.9	9.5
13	4.7	5.8	5.1	5.1	5.1	4.9	5.8	4.8	4.9	4.8	4.9	9.1
14	4.8	5.4	5.1	5.4	48	4.9	5.5	4.8	4.9	4.7	4.9	7.6
15	14	6.3	5.1	6.0	11	4.9	5.4	4.8	4.9	4.8	4.9	6.7
16	5.9	6.1	5.1	5.3	7.1	15	5.3	4.8	4.9	4.8	4.9	6.3
17	6.0	5.5	5.1	5.1	6.2	6.4	5.5	4.8	4.9	4.7	4.8	6.1
18	5.6	5.4	5.1	5.0	5.7	5.7	5.3	4.7	4.9	4.7	4.9	6.0
19	5.5	5.3	5.1	5.1	5.5	5.3	5.2	4.6	4.9	4.8	4.8	5.8
20	5.4	5.2	5.1	5.3	5.5	5.1	5.1	4.6	4.9	4.9	4.8	5.8
21	5.4	5.2	5.0	5.1	5.3	5.1	5.1	4.6	5.0	4.7	4.9	5.8
22	5.4	5.1	5.0	5.0	5.1	5.0	5.1	4.6	4.9	4.7	4.9	5.7
23	5.3	5.1	5.0	5.0	5.1	4.9	5.1	4.6	5.0	4.7	4.9	5.7
24	5.4	5.1	5.0	5.4	5.1	4.8	5.1	4.6	5.0	4.8	4.9	5.6
25	5.3	5.1	4.9	5.2	5.1	4.8	5.1	4.5	4.9	5.6	4.9	5.6
26	5.3	5.4	5.0	5.1	5.0	4.8	5.1	4.5	4.8	14	4.9	5.6
27	5.3	5.2	4.9	4.9	5.1	8.6	5.1	4.5	4.8	5.6	4.9	5.5
28	5.3	5.3	5.2	4.9	5.0	6.0	5.1	4.5	4.9	6.1	4.9	5.5
29	5.3	6.0	5.0	4.9	---	10	5.0	4.4	4.9	5.4	4.9	5.4
30	5.3	5.3	4.9	5.9	---	7.8	4.9	4.4	4.8	5.1	4.9	5.4
31	5.4	---	4.9	6.4	---	6.8	---	4.3	---	5.0	4.8	---
TOTAL	168.2	161.9	157.3	160.3	197.3	181.5	172.1	145.5	141.7	161.4	151.8	237.2
MEAN	5.43	5.40	5.07	5.17	7.05	5.85	5.74	4.69	4.72	5.21	4.90	7.91
MAX	14	6.3	5.3	6.4	48	15	13	5.0	5.0	14	5.0	63
MIN	4.7	5.1	4.9	4.9	5.0	4.8	4.9	4.3	4.2	4.7	4.8	4.8
AC-FT	334	321	312	318	391	360	341	289	281	320	301	470

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2003, BY WATER YEAR (WY)

MEAN	5.59	6.36	6.27	6.68	6.38	7.08	6.11	5.99	5.51	5.60	5.47	5.54
MAX	9.81	14.3	15.5	12.1	13.2	17.7	15.1	14.7	8.88	9.95	10.6	9.43
(WY)	(1983)	(1991)	(1988)	(1988)	(1979)	(1991)	(1989)	(2002)	(1982)	(1989)	(1982)	(1982)
MIN	2.70	3.97	3.60	3.71	3.05	2.85	2.72	3.18	3.36	2.40	2.61	2.74
(WY)	(1976)	(2000)	(1976)	(1977)	(1977)	(1977)	(1977)	(1977)	(1976)	(1977)	(1976)	(1976)

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SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1975 - 2003
ANNUAL TOTAL	2,574.6	2,036.2	
ANNUAL MEAN	7.05	5.58	6.05
HIGHEST ANNUAL MEAN			9.36
LOWEST ANNUAL MEAN			3.32
HIGHEST DAILY MEAN	195	May 6	195
LOWEST DAILY MEAN	4.5	Jan 3	1.3
ANNUAL SEVEN-DAY MINIMUM	4.6	Jan 1	1.4
ANNUAL RUNOFF (AC-FT)	5,110	4,040	4,380
10 PERCENT EXCEEDS	7.2	5.9	7.4
50 PERCENT EXCEEDS	5.7	5.1	5.3
90 PERCENT EXCEEDS	4.8	4.8	3.9

