16242500 MANOA STREAM AT KANEWAI FIELD

LOCATION.--Lat 21°17'47", long 157°48'56", Old Hawaiian Datum, Hydrologic Unit 20060000, on left bank, 0.5 mi northeast of Kaimuki High School, 0.4 mi northwest of St. Louis High School, and 0.3 mi upstream from confluence with Palolo Stream.

DRAINAGE AREA.--5.99 mi^2.

PERIOD OF RECORD.--January 1999 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 22 ft above mean sea level, from topographic map.

REMARKS.--Records computed by C. Yoshida. Records fair.

AVERAGE DISCHARGE.--5 years (water years 2000-2004), 9.88 ft^3/s (7,160 acre-ft/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,320 ft^3/s, Jan. 26, 2002, gage height, 15.59 ft. Minimum discharge, 0.66 ft^3/s, Jun. 7, 2003, gage height, 8.52 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 29	1430	881	12.65
Dec 5	1715	693	12.18
Jan 2	1815	1,190	13.37
Jan 23	0015	885	12.66
Feb 27	1500	1,250	13.51
Mar 13	1100	826	12.52
Mar 26	1715	671	12.12
May 11	2145	716	12.24
Aug 4	0615	*1,390	*13.81

Minimum discharge, 0.85 ft^3/s, Nov. 7, gage height, 8.59 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	1.5	1.8	78	50	8.3	16	23	6.5	8.5	15	5.5	e4.1
2	1.5	2.1	15	292	8.3	13	42	6.2	9.0	12	21	e4.2
3	1.4	1.4	10	90	8.2	9.5	36	7.6	8.1	9.5	15	e3.8
4	0.98	2.4	44	23	7.8	11	20	25	7.3	8.5	e139	e3.8
5	0.99	2.5	129	16	12	8.2	16	13	6.8	12	e6.6	e4.2
6	1.2	1.5	85	10	17	7.5	13	21	6.8	11	e5.2	e4.2
7	1.7	1.3	157	8.5	25	9.2	12	45	6.8	8.3	e8.4	e3.5
8	6.1	3.0	63	7.8	14	9.7	15	10	8.1	12	e5.1	e3.1
9	4.5	1.8	32	7.6	8.9	6.9	11	8.4	19	10	e5.2	e3.8
10	2.3	2.2	57	7.5	8.4	7.1	23	7.7	20	7.4	e4.8	e3.8
11	13	2.6	30	7.4	7.1	6.3	12	41	16	42	e6.5	e4.0
12	6.2	2.6	18	7.2	6.7	6.0	28	20	12	16	e6.5	e9.8
13	3.5	4.9	24	6.5	6.2	50	13	8.2	11	16	e4.5	e5.1
14	14	4.1	12	9.1	5.8	17	11	15	10	8.6	e4.3	e7.2
15	9.7	5.5	10	6.6	5.6	8.1	17	19	9.6	8.5	e4.2	e4.2
16	6.0	6.1	8.4	6.6	5.4	7.1	18	10	26	9.4	e3.9	e3.9
17	4.3	5.2	9.6	6.1	4.9	6.5	11	8.2	16	7.9	e3.9	e4.0
18	2.6	11	7.4	7.0	4.7	6.0	9.2	7.5	13	7.7	e3.7	e4.8
19	2.2	11	7.0	7.6	4.4	5.7	10	7.8	10	6.9	e3.5	e9.2
20	2.1	4.4	6.4	34	4.2	8.6	14	8.1	19	6.9	e3.4	e4.4
21	2.1	4.0	5.9	9.2	4.0	193	9.7	9.0	10	6.4	e6.7	e4.8
22	2.1	3.4	5.4	23	3.8	163	8.5	6.6	15	6.6	e4.1	e5.3
23	2.1	5.3	5.3	61	5.2	114	8.1	6.9	18	6.6	e5.8	e10
24	2.3	4.3	4.9	8.1	6.5	39	7.7	6.6	12	6.2	e6.1	e5.9
25	1.9	6.1	4.6	17	6.3	50	7.2	7.0	8.7	5.9	e5.3	e4.8
26	1.7	3.9	4.3	13	65	73	19	6.4	9.1	7.0	e17	e5.4
27	1.6	3.5	4.2	8.3	192	31	8.0	7.2	7.5	7.7	e7.4	e4.6
28	1.5	3.0	15	8.0	57	22	7.2	7.7	16	9.9	e5.7	e3.9
29	1.5	89	5.9	6.7	22	75	6.9	10	12	6.2	e5.3	e4.3
30	1.1	28	38	19	---	141	6.6	8.2	16	6.2	e4.9	e18
31	1.8	---	50	9.6	---	35	---	14	---	6.5	e4.4	---
TOTAL	105.47	227.9	946.3	793.4	534.7	1,155.4	443.1	384.8	367.3	310.8	332.9	162.1
MEAN	3.40	7.60	30.5	25.6	18.4	37.3	14.8	12.4	12.2	10.0	10.7	5.40
MAX	14	89	157	292	192	193	42	45	26	42	139	18
MIN	0.98	1.3	4.2	6.1	3.8	5.7	6.6	6.2	6.8	5.9	3.4	3.1
AC-FT	209	452	1,880	1,570	1,060	2,290	879	763	729	616	660	322

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2004, BY WATER YEAR (WY)

MEAN	6.51	10.6	13.5	16.9	10.6	13.1	10.4	8.53	6.47	6.65	7.82	7.33
MAX	9.02	18.0	30.5	26.8	18.4	37.3	15.7	15.1	12.2	10.0	10.7	13.1
(WY)	(2001)	(2001)	(2004)	(2000)	(2004)	(2004)	(2000)	(2002)	(2004)	(2004)	(2004)	(2000)
MIN	3.40	6.52	3.46	3.02	5.54	4.45	4.38	2.25	1.87	2.97	2.52	4.87
(WY)	(2004)	(2003)	(2003)	(2001)	(2000)	(2000)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)

16242500 MANOA STREAM AT KANEWAI FIELD—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2000 - 2004	
ANNUAL TOTAL	2,482.17		5,764.17			
ANNUAL MEAN	6.80		15.7		9.88	
HIGHEST ANNUAL MEAN					15.7	2004
LOWEST ANNUAL MEAN					4.58	2003
HIGHEST DAILY MEAN	157	Dec 7	292	Jan 2	292	Jan 2, 2004
LOWEST DAILY MEAN	0.98	Oct 4	0.98	Oct 4	0.98	Oct 4, 2003
ANNUAL SEVEN-DAY MINIMUM	1.1	Jun 6	1.3	Oct 1	1.1	Jun 6, 2003
ANNUAL RUNOFF (AC-FT)	4,920		11,430		7,160	
10 PERCENT EXCEEDS	11		30		17	
50 PERCENT EXCEEDS	2.6		7.6		5.2	
90 PERCENT EXCEEDS	1.2		3.3		2.4	

e Estimated