16587000 Honopou Stream near Huelo, Maui, HI

LOCATION.--Lat 20°53'08.3", long 156°15'09.2" referenced to North American Datum of 1983, Maui County, HI, Hydrologic Unit 20020000, on left bank 75 feet upstream from Wailoa Ditch intake, 2.2 mi southwest of Huelo, and 2.5 mi west of Kailua.

DRAINAGE AREA.--0.59 mi^2, from automated delineation using 10-meter National Elevation Dataset digital elevation model data dated September 2006 and Watershed Boundary Dataset dated May 2008, using UTM Zone 4 projection, NAD 83 horizontal datum.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--December 1910 to current year. Monthly discharge only for some periods, published in WSP 1319.

REVISED RECORDS.--WSP 1319: 1914(M), 1916-50(M). WSP 1249: 1948-50(P). WSP 1569: Drainage Area. WDR HI-10-1: Drainage Area.

GAGE.--Water-stage recorders and steel weir plate. Datum of gage is 1,208 ft above mean sea level (by vertical angles). Prior to June 19, 1914, nonrecording gage at same site and datum.

REMARKS.--Records computed by James Nelson and Casey Rita. Records fair. No diversion upstream of station.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--100 years (water years 1912-2012), 4.67 ft^3/s (3,390 acre-ft/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,710 ft^3/s, November 18, 1930, gage height, 7.28 ft from rating curve extended above 110 ft^3/s by test of physical model of station site; minimum, 0.02 ft^3/s, several days in 1933, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 270 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar 8	0355	*834	*3.83
Mar 9	0040	408	3.34
Mar 25	0615	358	3.28

Minimum discharge, 0.47 ft^3/s, on several days.

Suggested citation: U.S. Geological Survey, 2012, Water-resources data for the United States, Water Year 2012: U.S. Geological Survey Water-Data Report WDR-US-2012, site 16587000, accessed at http://wdr.water.usgs.gov/wy2012/pdfs/16587000.2012.pdf

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.77	0.87	2.2	4.4	0.76	1.2	4.3	2.9	15	5.7	2.8	1.4
2	0.66	5.6	2.4	4.0	0.76	1.3	3.8	2.2	4.6	5.2	2.6	2.0
3	0.66	4.7	2.0	3.6	0.76	2.8	3.5	6.5	3.6	7.4	2.5	1.3
4	0.80	1.4	1.8	4.4	0.75	1.8	3.2	10	4.3	5.0	2.4	1.2
5	0.66	0.84	2.6	3.1	0.78	2.9	3.0	7.3	3.7	11	2.3	2.3
6	0.66	0.76	2.0	2.9	0.78	2.3	3.4	4.9	3.2	7.9	2.3	4.1
7	0.65	0.76	2.8	2.7	0.68	12	3.1	7.4	2.9	8.8	2.1	5.3
8	0.66	1.3	2.6	2.5	0.69	114	3.1	7.4	3.4	13	2.3	13
9	0.88	3.9	2.4	2.4	0.66	30	8.4	4.5	2.7	6.6	2.1	2.7
10	0.59	3.3	11	2.2	0.66	17	4.8	4.7	2.6	5.8	1.9	2.0
11	0.56	9.2	39	2.4	0.66	8.6	3.4	3.6	2.4	5.1	1.8	3.3
12	0.52	17	9.9	2.0	0.75	18	2.5	3.3	2.3	5.8	1.8	2.1
13	0.47	3.0	6.8	1.8	0.72	9.3	2.4	3.1	2.2	6.0	1.7	1.9
14	0.96	2.3	5.4	1.7	0.57	7.2	2.2	2.9	2.0	4.1	1.7	1.9
15	4.0	2.0	4.7	1.6	0.56	6.1	2.1	2.8	1.9	4.4	1.5	3.0
16	0.78	1.8	4.2	1.5	0.56	5.4	2.0	2.6	2.0	4.7	1.5	1.8
17	0.64	1.7	4.6	1.4	0.91	4.8	1.9	2.4	1.8	6.4	1.4	1.9
18	0.56	1.6	4.7	1.4	6.0	4.6	1.8	2.3	1.7	5.5	1.2	2.7
19	0.56	2.0	11	1.3	8.8	4.4	1.8	2.6	5.7	3.6	2.9	2.0
20	0.55	2.2	28	1.2	1.8	3.6	2.1	4.1	27	3.3	7.4	4.6
21	0.56	1.7	19	1.2	5.6	6.3	1.8	2.2	4.9	3.1	1.6	1.7
22	0.56	2.9	12	1.1	3.2	5.1	1.6	1.9	3.6	3.0	7.1	1.8
23	0.51	7.2	14	1.1	5.9	4.3	9.3	3.8	14	2.8	16	8.5
24	0.48	2.0	19	1.0	1.7	20	2.9	3.0	4.8	2.8	1.8	8.8
25	0.47	1.8	14	0.98	1.4	41	2.2	2.3	12	3.2	1.6	2.8
26	0.47	4.6	9.8	0.94	1.2	11	2.0	3.9	5.2	2.4	1.5	3.9
27	0.47	3.8	8.0	0.87	1.2	8.6	1.8	18	7.4	2.5	2.0	3.9
28	0.49	2.0	8.1	0.88	1.3	6.5	1.8	4.3	22	4.3	2.9	3.2
29	1.1	2.1	6.7	1.2	1.3	5.7	2.5	3.1	7.8	8.8	3.2	2.3
30	0.66	2.2	5.5	0.93	---	5.1	3.5	2.9	6.5	8.6	1.6	2.2
31	1.7	---	4.9	0.83	---	4.6	---	3.6	---	4.8	1.5	---
Total	24.06	96.53	271.1	59.53	51.41	375.5	92.2	136.5	183.2	171.6	87.0	99.6
Mean	0.78	3.22	8.75	1.92	1.77	12.1	3.07	4.40	6.11	5.54	2.81	3.32
Max	4.0	17	39	4.4	8.8	114	9.3	18	27	13	16	13
Min	0.47	0.76	1.8	0.83	0.56	1.2	1.6	1.9	1.7	2.4	1.2	1.2
Ac-ft	48	191	538	118	102	745	183	271	363	340	173	198

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 2012, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	2.72	5.36	5.98	5.22	5.11	7.18	7.28	4.82	2.64	3.42	3.79	2.57
Max	15.9	21.4	20.0	20.9	24.5	33.0	43.4	24.3	9.97	14.6	18.1	14.6
(WY)	(1942)	(1991)	(1947)	(1921)	(1969)	(1942)	(1989)	(1916)	(1914)	(1997)	(1982)	(1992)
Min	0.15	0.25	1.04	0.57	0.62	0.79	0.58	0.76	0.37	0.41	0.40	0.25
(WY)	(1985)	(1963)	(1981)	(2001)	(1983)	(1992)	(1992)	(2008)	(2000)	(1981)	(1973)	(1984)

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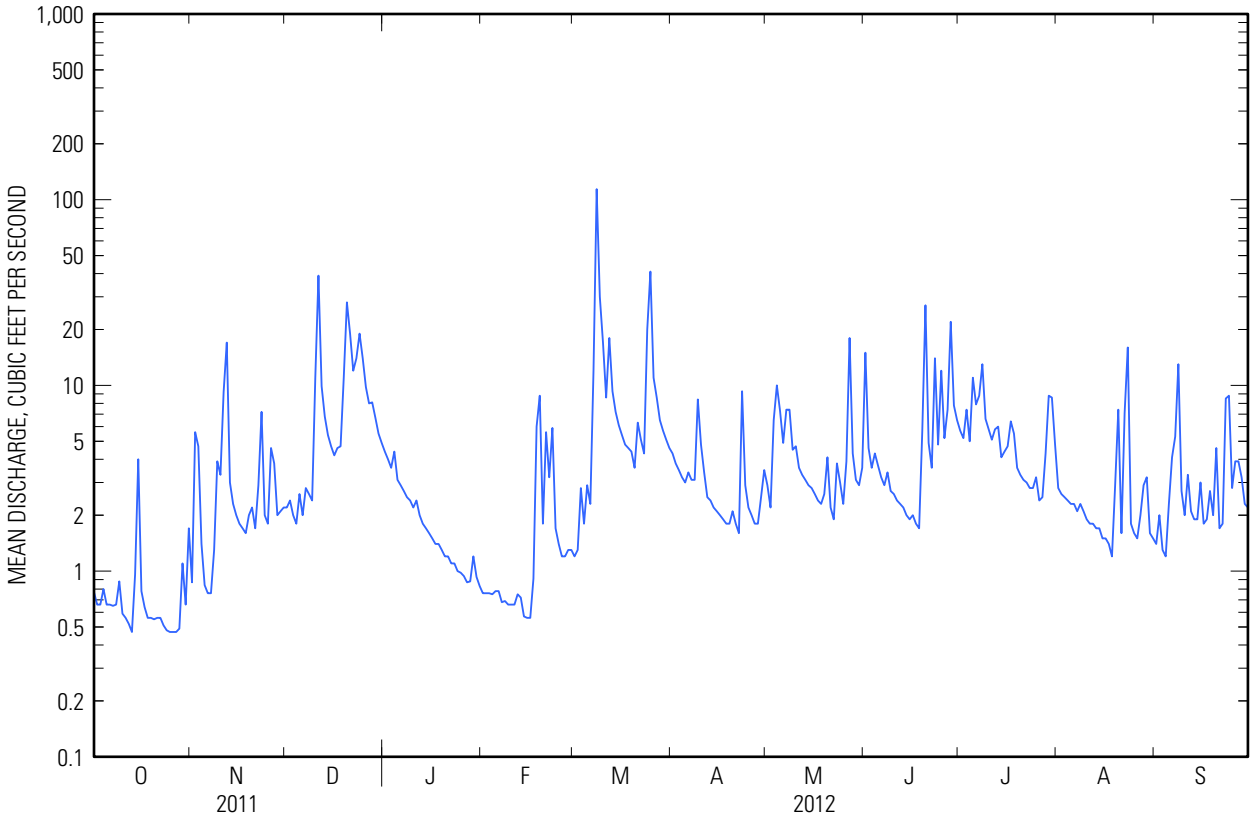
SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1912 - 2012	
Annual total	946.75		1,648.23			
Annual mean	2.59		4.50		4.67	
Highest annual mean					9.88	1914
Lowest annual mean					1.73	1981
Highest daily mean	39	Dec 11	114	Mar 8	305	Apr 7, 1989
Lowest daily mean	0.47	Oct 13	0.47	Oct 13	0.11	Oct 27, 1984
Annual seven-day minimum	0.49	Oct 22	0.49	Oct 22	0.11	Oct 26, 1984
Annual runoff (ac-ft)	1,880		3,270		3,390	
10 percent exceeds	5.1		8.8		9.6	
50 percent exceeds	1.5		2.6		2.3	
90 percent exceeds	0.73		0.76		0.70