

Station name: Kawaikoi Stream nr Waimea, Kauai, HI

3.95

Flow diverted or regulated?: N

Latitude (decimal degrees): 22.13267463 Longitude (decimal degrees): -159.61998013 Latitude/Longitude accuracy: 1 second Horizontal datum: nad83 Altitude (feet): 3420 Altitude accuracy (feet): 50 Basin area (square miles):

Period of record: 1909-1917,1919-2005 Complete water years: 1912,1914,1920-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 1.1 number of occurrences: 1 most recent occurrence: 09/21/1953

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 2620 number of occurrences: 01/15/1921 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (88 complete years)

Percentage	οf	time	discharge	Discharge, in

equaled or exceeded	cubic feet per	
Mean	34	
50	13	
55	11	
60	9.8	
65	8.7	
70	7.7	
75	6.8	
80	6.0	
85	5.1	
90	4.3	
95	3.4	
99	2.3	

Station name: WAIAKOALI STREAM NEAR WAIMEA, KAUAI, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 22.12517939 Longitude (decimal degrees): -159.62136925

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 3490

Altitude accuracy (feet): not available Basin area (square miles): 1.58

Period of record: 1909-1910,1919-1925

Complete water years: 1920-1924

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.40 number of occurrences: 11/29/1909 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 314 number of occurrences: 01/12/1923 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (5 complete years)

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	9.0
50	3.4
55	3.1
60	2.8
65	2.5
70	2.2
75	1.9
80	1.9
85	1.6
90	1.4
95	0.93

0.77

Station name: KAUAIKINANA STREAM NEAR WAIMEA, KAUAI, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 22.13351055 Longitude (decimal degrees): -159.62998029

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 3440

Altitude accuracy (feet): not available Basin area (square miles): 0.84

Period of record: 1919-1925 Complete water years: 1920-1924

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.31 number of occurrences: 04/30/1925 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 212 number of occurrences: most recent occurrence: 01/15/1921

Flow-duration characteristics based on complete water years during period of record (5 complete years)

equaled or	exceeded	cubic	feet	per	second
Mean				 5.6	
Mean					
50				2.2	
55				1.9	
60				1.6	
65				1.4	
70				1.2	
75				1.1	
80			(0.93	
85			(.77	
90			(0.62	
95			(0.46	
99			(31	

Station name: MOHIHI STREAM AT ALT 3420 FT NR WAIMEA, KAUAI, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 22.11712165 Longitude (decimal degrees): -159.60109133

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 3420

Altitude accuracy (feet): not available

Basin area (square miles): 1.68

Period of record: 1920-1926,1937-1971 Complete water years: 1921-1926,1938-1971

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.02 number of occurrences: 10 most recent occurrence: 09/30/1970

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 684
number of occurrences: 1
most recent occurrence: 12/01/1957

Flow-duration characteristics based on complete water years during period of record (40 complete years)

Percentage of time discharge	Discharge,	in
equaled or exceeded	cubic feet per	second

equaled or	exceeaea	cubic	reet per	secona
 Mean	1		8.5	
50)		2.9	
55	·)		2.5	
60)		2.2	
65	·)		1.9	
70)		1.7	
75			1.4	
80)		1.2	
85	·)		1.0	
90)		0.80	
95)		0.57	
99)		0.19	

Station name: WAIMEA RIVER AT ALT 840 FT NEAR WAIMEA, KAUAI, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 22.07908378

Longitude (decimal degrees): -159.65109487

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 840

Altitude accuracy (feet): not available

Basin area (square miles): 20

Period of record: 1916,1918,1925-1968 Complete water years: 1926-1948,1952-1968

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 8.4 number of occurrences: 4 most recent occurrence: 11/13/1927

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 2970
number of occurrences: 1
most recent occurrence: 12/16/1951

Flow-duration characteristics based on complete water years during period of record (40 complete years)

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	52
50	19
55	18
60	17
65	16
70	15
75	15
80	14
85	14
90	13
95	12
99	11

Station name: KOAIE STREAM AT ALT 3770 FT NEAR WAIMEA, KAUAI, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 22.11266811 Longitude (decimal degrees): -159.56192394

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 3770

Altitude accuracy (feet): not available

Basin area (square miles): 1.68

Period of record: 1919-1932,1954-1968 Complete water years: 1920-1931,1955-1968

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.64 number of occurrences: 2 most recent occurrence: 07/10/1968

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 2770
number of occurrences: 1
most recent occurrence: 12/01/1957

Flow-duration characteristics based on complete water years during period of record (26 complete years)

Percentage	of	time	discharge	Discharge,	in
				_	

equaled or	exceeded	cubic	feet	per	second
Mean				28	
50				8.2	
55				7.1	
60				6.1	
65				5.5	
70				4.9	
75				4.3	
80				3.9	
85				3.4	
90				2.8	
95				2.3	
99				1.5	

Station name: Waialae Str at alt 3,820 ft nr Waimea, Kauai, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 22.08573716
Longitude (decimal degrees): -159.56886920
Latitude/Longitude accuracy: 1 second
Horizontal datum: nad83
Altitude (feet): 3820
Altitude accuracy (feet): 20
Basin area (square miles): 1.79

Period of record: 1920-1932,1952-2005 Complete water years: 1921-1931,1953-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.99 number of occurrences: 4 most recent occurrence: 06/01/1966

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 1440
number of occurrences: 1
most recent occurrence: 12/01/1957

Flow-duration characteristics based on complete water years during period of record (64 complete years)

Percentage of time discharge Discharge, in

rerections of time arbeitarge	Dibonar ge, in
equaled or exceeded	cubic feet per second
Mean	21
50	6.6
55	5.8
60	5.2
65	4.6
70	4.0
75	3.7
80	3.3
85	2.9
90	2.6
95	2.2
99	1.7

Station name: WAIALAE STREAM NR WAIMEA, KAUAI, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 22.08296337 Longitude (decimal degrees): -159.58498094

Latitude/Longitude accuracy: unknown nad83 Horizontal datum: Altitude (feet): 3500

Altitude accuracy (feet): not available Basin area (square miles): 2.81

Period of record: 1910-1916 Complete water years: 1913-1915

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 21 01/31/1916 21 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 317 number of occurrences: most recent occurrence: 01/09/1916

Flow-duration characteristics based on complete water years during period of record (3 complete years)

_____ Percentage of time discharge Discharge, in

rerectived or erme arbeitarge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	18
50	9.6
55	8.7
60	7.7
65	7.3
70	7.0
75	6.2
80	5.4
85	4.6
90	3.7
95	3.1

Station name: WAIALAE STREAM AT ALT 800 FT NR WAIMEA, KAUAI, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 22.05825099 Longitude (decimal degrees): -159.63192859

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 800

Altitude accuracy (feet): not available Basin area (square miles): 7.87

Period of record: 1917-1921 Complete water years: 1918-1920

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 01/31/1921 16 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 851 number of occurrences: number of occurrences: 1 most recent occurrence: 04/18/1918

Flow-duration characteristics based on complete water years during period of record (3 complete years)

exceeded	cubic	feet	per	second
			30	
			15	
			13	
			12	
			11	
			9.9	
			9.0	
			8.2	
			7.4	
			6.8	
			5.9	
			4.6	
	exceeded	exceeded cubic	exceeded cubic feet	30 15 13 12 11 9.9 9.0 8.2 7.4 6.8 5.9

Station name: WAIMEA R BL KEKAHA DTCH INTK NR WAIMEA, KAUAI, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 22.04130802 Longitude (decimal degrees): -159.64026321

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 490

Altitude accuracy (feet): not available Basin area (square miles): 44.2

Period of record: 1921-1956

Complete water years: 1926-1946,1949-1955

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0 number of occurrences: 1158 12/18/1955 1158 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 15500 number of occurrences: number of occurrences: 1 most recent occurrence: 08/16/1950

Flow-duration characteristics based on complete water years during period of record (28 complete years)

equaled or exceeded	cubic feet per second
Mean	77
50	1.4
55	0.77
60	0.62
65	0.46
70	0.31
75	0.28
80	0.19
85	0.15
90	0.05
95	0

Station name: WAIMEA RIVER NR WAIMEA, KAUAI, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.98075507 Longitude (decimal degrees): -159.66026649

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 19.7

Altitude accuracy (feet): not available

Basin area (square miles): 57.8

Period of record: 1910-1920,1944-1964,1966,1968,1970-1973,1975-1996 Complete water years: 1911-1917,1945-1964,1966,1968,1970-1972,1976-1996

Minimum daily mean discharge during period of record

discharge, cubic feer per second:
 number of occurrences:
 87
most recent occurrence:
 07/17/1913

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 17300 number of occurrences: 1 most recent occurrence: 08/16/1950

Flow-duration characteristics based on complete water years during period of record (53 complete years)

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Moan	122

Mean	123
50	16
55	12
60	10
65	7.9
70	6.4
75	5.2
80	4.0
85	3.0
90	2.2
95	1.3
99	0.54

Station name: WAIMEA AND MAKAWELI RIVER NR WAIMEA, KAUAI, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.96547798 Longitude (decimal degrees): -159.65554457

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 15

Basin area (square miles): not available 83.8

Period of record: 1945-1968 Complete water years: 1945-1968

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 6.2 number of occurrences: most recent occurrence: 07/20/1951

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 20400 number of occurrences: most recent occurrence: 08/16/1950

Flow-duration characteristics based on complete water years during period of record (24 complete years)

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	221

Mean	221
50	49
55	40
60	33
65	28
70	24
75	21
80	19
85	16
90	14
95	12
99	9.2

Station name: Makaweli River nr Waimea, Kauai, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.97214460
Longitude (decimal degrees): -159.64582172
Latitude/Longitude accuracy: 1 second
Horizontal datum: nad83

Horizontal datum: nad83
Altitude (feet): 18.2
Altitude accuracy (feet): 0.01
Basin area (square miles): 26

Period of record: 1943-2005 Complete water years: 1944-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 4.3
number of occurrences: 2
most recent occurrence: 07/20/1951

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 5170
number of occurrences: 1
most recent occurrence: 12/01/1957

Flow-duration characteristics based on complete water years during period of record (62 complete years)

Percentage	of	time	discharge	Discharge, in

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	85
50	26
55	23
60	21
65	19
70	17
75	16
80	14
85	13
90	12
95	10
99	8.2

Station name: MAKAWELI R BL POOWAIOMAHAIHAI D NR WAIMEA, KAUAI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.97075575 Longitude (decimal degrees): -159.64721073

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 30

Altitude accuracy (feet): not available Basin area (square miles): 25

Period of record: 1912-1917 Complete water years: 1913-1916

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 3.0 number of occurrences: , 12/19/1912 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 7070 number of occurrences: number of occurrences: 12/18/1916

Flow-duration characteristics based on complete water years during period of record (4 complete years)

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	100
50	23
55	20
60	19
65	17
70	15
75	13
80	11
85	11
90	9.3
95	7.0
۵۵	1 6

Station name: KOULA RIVER AT KOULA NR ELEELE, KAUAI, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.95741975 Longitude (decimal degrees): -159.54720397

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 300

Altitude accuracy (feet): not available Basin area (square miles): 12.6

99

Period of record: 1910-1917,1937-1939 Complete water years: 1911-1916,1938

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 9 12/31/1913 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 2130 number of occurrences: number of occurrences: 1 most recent occurrence: 09/26/1914

Flow-duration characteristics based on complete water years during period of record (7 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	85
50	34
55	29
60	26
65	23
70	21
75	19
80	17
85	15
90	14
95	13

Station name: Hanapepe Riv blw Manuahi Str nr Eleele, Kauai, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.95492007 Longitude (decimal degrees): -159.55081543 Latitude/Longitude accuracy: 1 second Horizontal datum: nad83 Altitude (feet): 222

Horizontal datum: nad83
Altitude (feet): 222
Altitude accuracy (feet): 0.01
Basin area (square miles): 18.5

Period of record: 1917-1921,1927-2005 Complete water years: 1918-1920,1928-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 5.3 number of occurrences: 1 most recent occurrence: 05/21/1954

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 10900
number of occurrences: 1
most recent occurrence: 12/03/1919

Flow-duration characteristics based on complete water years during period of record (81 complete years)

Percentage	of	time	discharge	Dischar	rge, in

rerecitede or erme arbenarge	Dibenarge, in
equaled or exceeded	cubic feet per second
Mean	83
50	29
55	26
60	24
65	22
70	20
75	19
80	17
85	16
90	15
95	13
99	10

Station name: Lawai Str nr Koloa, Kauai, HI

Flow diverted or regulated?: Y

Longitude (decimal degrees): -159.50303917
Latitude/Longitude accuracy: 1 second
Horizontal datum: nad83
Altitude (feet): 37
Altitude accuracy (feet): 0.01
Basin area (square miles): 6.62

Latitude (decimal degrees): 21.89992010

Period of record: 1963-1973 Complete water years: 1964-1972

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.13
number of occurrences: 3
most recent occurrence: 11/15/1967

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 422
number of occurrences: 1
most recent occurrence: 04/25/1971

Flow-duration characteristics based on complete water years during period of record (9 complete years)

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	8.4
50	3.0
55	2.7
60	2.4
65	2.1
70	1.9
75	1.6
80	1.3
85	1.0
90	0.81
95	0.59
99	0.34

Station name: KAMOOLOA STREAM NR PUHI, KAUAI, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.96686348 Longitude (decimal degrees): -159.44914788

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 390

Altitude accuracy (feet): not available Basin area (square miles): 5.79

Period of record: 1964-1970 Complete water years: 1965-1969

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.02 number of occurrences: 02/09/1967 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 1000 number of occurrences: 12/01/1968 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (5 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	17
50	0.56
55	0.36
60	0.29
65	0.22
70	0.17
75	0.14
80	0.11
85	0.09
90	0.07
95	0.06
99	0.04

Station name: KUIA STREAM NEAR PUHI, KAUAI, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.96547472 Longitude (decimal degrees): -159.45137010

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 393

not available Altitude accuracy (feet):

Basin area (square miles): 5.09

Period of record: 1964-1966

Complete water years: 1965

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.02 number of occurrences: most recent occurrence: 06/03/1966

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 676 number of occurrences: 01/05/1964 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (1 complete years)

Percentage of time discharge	Discharge,	in
equaled or exceeded	cubic feet per	second

Mean	20
50	3.3
55	2.5
60	1.7
65	1.4
70	1.1
75	0.71
80	0.59
85	0.51
90	0.41
95	0.34
99	0.23

Station name: Huleia Str nr Lihue, Kauai, HI

17.6

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.95242089 Longitude (decimal degrees): -159.42026042 Latitude/Longitude accuracy: 1 second Horizontal datum: nad83 Altitude (feet): 210 Altitude accuracy (feet): 20 Basin area (square miles):

Period of record: 1912-1916,1967-1971 Period of record: 1912-1916,1967-1971 Complete water years: 1913-1915,1968-1970

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 3.5 number of occurrences: 1 09/14/1970 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 3010 number of occurrences: most recent occurrence: 12/01/1968

Flow-duration characteristics based on complete water years during period of record (6 complete years)

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	31
50	10
55	9.7
60	9.0
65	8.3
70	7.4
75	7.2
80	6.2
85	5.7
90	5.6
95	4.7
99	3.9

Station name: SF Wailua River nr Lihue, Kauai, HI

22.4

Flow diverted or regulated?: Y

Basin area (square miles):

Latitude (decimal degrees): 22.03683435
Longitude (decimal degrees): -159.37998119
Latitude/Longitude accuracy: 1 second
Horizontal datum: nad83
Altitude (feet): 240
Altitude accuracy (feet): 20

Period of record: 1912-2005

Complete water years: 1913-1918,1920,1922-1924,1926-1956,1959-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 1.8
number of occurrences: 6
most recent occurrence: 08/22/1984

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 13800
number of occurrences: 1
most recent occurrence: 01/16/1921

Flow-duration characteristics based on complete water years during period of record (88 complete years)

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Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
equated of exceeded	
Mean	118
50	43
55	33
60	23
65	15
70	11
75	8.4
80	6.9
85	5.7
90	4.8
95	3.9
99	2.8

Station name: NF WAILUA RIVER AT ALT 650 FT NR LIHUE, KAUAI, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 22.06405228 Longitude (decimal degrees): -159.43636833

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 650 Altitude (feet):

Altitude accuracy (feet): not available Basin area (square miles): 5.29

95

Period of record: 1915-1985

Complete water years: 1916-1918,1920-1985

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.29 number of occurrences: 06/05/1968 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 1990 number of occurrences: number of occurrences: 1 most recent occurrence: 05/22/1967

Flow-duration characteristics based on complete water years during period of record (69 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	73
50	49
55	44
60	40
65	36
70	31
75	24
80	17
85	8.5
90	2.9

1.2 0.65

Station name: EB of NF Wailua River nr Lihue, Kauai, HI

Flow diverted or regulated?: N

Basin area (square miles):

Latitude (decimal degrees): 22.06876652
Longitude (decimal degrees): -159.41525753
Latitude/Longitude accuracy: 1 second
Horizontal datum: nad83
Altitude (feet): 500
Altitude accuracy (feet): 20

Period of record: 1912-2005

Complete water years: 1913-1914,1916-1917,1920-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 7.0
number of occurrences: 1
most recent occurrence: 07/08/1926

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 2570
number of occurrences: 1
most recent occurrence: 02/13/1994

Flow-duration characteristics based on complete water years during period of record (90 complete years)

-	
Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second

exceeded	Cubic	reer be	r second
		4	8
		3	1
		2	8
		2	6
		2	5
		2	3
		2	2
		2	0
		1	8
		1	6
		1	4
		1	1
	exceeded	exceeded Cubic	2 2 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

Station name: NF Wailua River nr Kapaa, Kauai, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 22.04904494
Longitude (decimal degrees): -159.36998119
Latitude/Longitude accuracy: 1 second
Horizontal datum: nad83
Altitude (feet): 18
Altitude accuracy (feet): 10

Basin area (square miles): 17.9

Period of record: 1952-2003
Complete water years: 1953-2003

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 2.2 number of occurrences: 5 most recent occurrence: 11/14/1953

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 7350
number of occurrences: 1
most recent occurrence: 01/25/1956

Flow-duration characteristics based on complete water years during period of record (51 complete years)

Percentage of time discharge Discharge, in

reicentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	116
50	64
55	55
60	47
65	39
70	32
75	25
80	18
85	12
90	8.9
95	6.5
99	4.1

Station name: Left Branch Opaekaa Str nr Kapaa, Kauai, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 22.07569977 Longitude (decimal degrees): -159.39581341 Latitude/Longitude accuracy: 1 second

Horizontal datum: nad83
Altitude (feet): 458.4
Altitude accuracy (feet): 0.01
Basin area (square miles): 0.65

Period of record: 1960-2005 Complete water years: 1961-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.09
number of occurrences: 2
most recent occurrence: 09/30/1968

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 218
number of occurrences: 1
most recent occurrence: 12/14/1991

Flow-duration characteristics based on complete water years during period of record (45 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	2.5
50	1.6
55	1.5
60	1.4
65	1.2
70	1.1
75	0.97
80	0.87
85	0.76
90	0.67
95	0.54
99	0.36

Station name: KAPAA STREAM NR KEALIA, KAUAI, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 22.10122690 Longitude (decimal degrees): -159.38386896

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 470

Altitude accuracy (feet): not available Basin area (square miles): 3.05

Period of record: 1910-1920

Complete water years: 1912-1913,1916-1919

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 3∪ 04/17/1914 30 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 631 number of occurrences: most recent occurrence: 11/21/1913

Flow-duration characteristics based on complete water years during period of record (6 complete years)

rerecitede or erme arbenarge	Dibenarge, in
equaled or exceeded	cubic feet per second
Mean	35
50	26
55	25
60	24
65	22
70	22
75	20
80	18
85	16
90	14
95	13
99	12

Station name: KAPAA STR AT KAPAHI DITCH INTK NR KAPAA, KAUAI, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 22.10094344 Longitude (decimal degrees): -159.37192481

Latitude/Longitude accuracy: unknown nad83 Horizontal datum: Altitude (feet): 381.8

Altitude accuracy (feet): not available Basin area (square miles): 3.86

Period of record: 1936-1985 Complete water years: 1937-1985

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0 6147 12/16/1984 number of occurrences: most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 1870 number of occurrences: number of occurrences: 1 most recent occurrence: 01/25/1956

Flow-duration characteristics based on complete water years during period of record (49 complete years)

equaled or exceeded	cubic feet per second
Mean	20
50	5.3
55	3.0
60	1.2
65	0.08
70	0
75	0
80	0
85	0
90	0
95	0

Station name: COMBINED RECORDS OF STATIONS 16079000, 16080000

Flow diverted or regulated?: Y

Latitude (decimal degrees): 22.10094344 Longitude (decimal degrees): -159.37192481 Latitude/Longitude accuracy: unknown

Horizontal datum: nad83

Altitude (feet): not available Altitude accuracy (feet): not available Basin area (square miles): 3.86

Period of record: 1936-1979 Complete water years: 1937-1979

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 06/03/1955 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 1870 number of occurrences: number of occurrences: 1 most recent occurrence: 01/25/1956

Flow-duration characteristics based on complete water years during period of record (43 complete years)

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second

equaled or exceeded	cubic feet per second
Mean	25
50	12
55	10
60	8.7
65	7.3
70	6.2
75	5.5
80	4.8
85	4.2
90	3.6
95	3.0
99	2.4

Station name: ANAHOLA STREAM NR KEALIA, KAUAI, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 22.14809895 Longitude (decimal degrees): -159.35192495

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Basin area (square miles): 0.27 not available 4.27 Altitude (feet): 295.11

Period of record: 1913-1985

Complete water years: 1914-1917,1920-1985

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 5 09/24/1984 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 1750 number of occurrences: number of occurrences: 1 most recent occurrence: 05/13/1940

Flow-duration characteristics based on complete water years during period of record (70 complete years)

Dorgontago	٥f	+ imo	digaharas	Disabaras	in

entage of time discha equaled or exceeded	
 Mean	23
50	9.8
55	9.0
60	8.2
65	7.4
70	7.0
75	6.3
80	5.7
85	5.1
90	4.4
95	3.6

2.6

Station name: ANAHOLA STREAM AT ANAHOLA, KAUAI, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 22.14168656 Longitude (decimal degrees): -159.31359271 Latitude/Longitude accuracy: unknown

Horizontal datum: unknown nad83

Altitude (feet): not available Altitude accuracy (feet): not available

Basin area (square miles): 9.24

Period of record: 1965-1983 Complete water years: 1966-1982

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 2.5 number of occurrences: 2 most recent occurrence: 10/25/1975

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 1680
number of occurrences: 1
most recent occurrence: 11/29/1968

Flow-duration characteristics based on complete water years during period of record (17 complete years)

Percentage of time discharge	Discharge,	in
equaled or exceeded	cubic feet per	second

1	
Mean	37
50	16
55	14
60	12
65	11
70	10
75	9.1
80	8.2
85	7.0
90	6.1
95	5.0
99	3.7

Station name: POHAKUHONU STREAM NR KILAUEA, KAUAI, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 22.17783091 Longitude (decimal degrees): -159.42497898

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 401.7

Altitude accuracy (feet): not available Basin area (square miles): 1.73

Period of record: 1958-1972 Complete water years: 1959-1972

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.70 number of occurrences: , 10/17/1971 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 413 number of occurrences: 03/02/1960 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (14 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	7.9
50	3.4
55	3.0
60	2.8
65	2.6
70	2.4
75	2.1
80	1.9
85	1.8
90	1.6
95	1.4
99	1.1

Station name: HALAULANI STREAM NEAR KILAUEA, KAUAI, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 22.15923872 Longitude (decimal degrees): -159.41886797

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 900

Altitude accuracy (feet): not available Basin area (square miles): 0.12

Period of record: 1922-1925 Complete water years: 1923-1925

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 12/29/1924 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 97 number of occurrences: most recent occurrence: 03/31/1923

Flow-duration characteristics based on complete water years during period of record (3 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	4.5
50	2.6
55	2.5
60	2.5
65	2.3
70	2.2
75	2.2
80	2.0
85	1.9
90	1.7
95	1.4
99	1.1

Station name: Halaulani Str at alt 400 ft nr Kilauea, Kauai, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 22.17838209
Longitude (decimal degrees): -159.41859019
Latitude/Longitude accuracy: 1 second
Horizontal datum: nad83
Altitude (feet): 391.8
Altitude accuracy (feet): 0.01
Basin area (square miles): 1.19

Period of record: 1958-2005 Complete water years: 1959-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 1.9
number of occurrences: 4
most recent occurrence: 09/08/1968

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 879
number of occurrences: 1
most recent occurrence: 02/13/1994

Flow-duration characteristics based on complete water years during period of record (47 complete years)

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	12
50	7.3
55	7.0
60	6.6
65	6.3
70	5.9
75	5.6
80	5.3
85	5.0
90	4.6
95	4.2
99	3.5

Station name: KALIHIWAI RIVER NEAR HANALEI, KAUAI, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 22.14176866 Longitude (decimal degrees): -159.44025661

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 700

Altitude accuracy (feet): not available Basin area (square miles): 3.64

Period of record: 1914-1923 Complete water years: 1916-1922

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 9.3 number of occurrences: 6 12/25/1919 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 967 number of occurrences: number of occurrences: 1 most recent occurrence: 09/25/1914

Flow-duration characteristics based on complete water years during period of record (7 complete years)

10100110430 01 01 4120114130	21201101 30, 111
equaled or exceeded	cubic feet per second
Mean	48
50	31
55	30
60	28
65	26
70	24
75	22
80	20
85	19
90	17
95	14
99	11

Station name: HANALEI RIVER AT ALT 625 FT NR HANALEI, KAUAI, HI

Flow diverted or regulated?: Y
Latitude (decimal degrees): 22.11763414 Longitude (decimal degrees): -159.46442315

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 625 Altitude (feet):

Altitude accuracy (feet): not available Basin area (square miles): 7.17

Period of record: 1914-1955

Complete water years: 1915-1951,1953-1954

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 11/16/1950 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 4440 number of occurrences: number of occurrences: 1 most recent occurrence: 01/16/1921

Flow-duration characteristics based on complete water years during period of record (39 complete years)

rereemedge or erme dromarge	Dibeliar je, ili
equaled or exceeded	cubic feet per second
Mean	77
50	48
55	43
60	39
65	34
70	30
75	26
80	23
85	21
90	18
95	15
99	13

SUM OF STATIONS 16100000 AND 16101000 Station name:

Flow diverted or regulated?: N

Latitude (decimal degrees): 22.11763414 Longitude (decimal degrees): -159.46442315 Latitude/Longitude accuracy: unknown

Horizontal datum: nad83

Altitude (feet): not available
Altitude accuracy (feet): not available
Basin area (square miles): not available

Period of record: 1932-1955

Complete water years: 1933-1950,1953-1954

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 10/12/1953 3 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 1730 number of occurrences: number of occurrences: 1 most recent occurrence: 03/19/1937

Flow-duration characteristics based on complete water years during period of record (20 complete years)

_____ Percentage of time discharge Discharge, in

Discharge, in
cubic feet per second
97
67
63
60
57
54
51
48
46
43
40
35
_

Station name: Hanalei River nr Hanalei, Kauai, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 22.18034928
Longitude (decimal degrees): -159.46608966
Latitude/Longitude accuracy: 1 second
Horizontal datum: nad83
Altitude (feet): 60
Altitude accuracy (feet): 10

Altitude accuracy (feet): 10
Basin area (square miles): 18.7

Period of record: 1912-1920,1963-2005 Complete water years: 1913-1919,1964-2005

 ${\tt Minimum\ daily\ mean\ discharge\ during\ period\ of\ record}$

discharge, cubic feer per second: 31 number of occurrences: 1 1/03/1975

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 9580
number of occurrences: 1
most recent occurrence: 09/26/1914

Flow-duration characteristics based on complete water years during period of record (49 complete years)

Percentage of time discharge Discharge, in

equaled or e	exceeded	cubic	feet	per	second
Mean				226	
50				128	
55				120	
60				110	
65				103	
70				96	
75				90	
80				82	
85				74	
90				65	
95				55	
99				42	

Station name: WAIOLI STREAM NEAR HANALEI, KAUAI, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 22.16759963 Longitude (decimal degrees): -159.49525620

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 550

Altitude accuracy (feet): not available Basin area (square miles): 1.81

Period of record: 1914-1932

Complete water years: 1915-1917,1920-1931

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 1 07/22/1914 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 766 number of occurrences: most recent occurrence: 01/16/1921

Flow-duration characteristics based on complete water years during period of record (15 complete years)

_____ Percentage of time discharge Discharge in

equaled or exceeded	cubic feet per second
Mean	31
50	20
55	18
60	17
65	16
70	15
75	14
80	13
85	12
90	11
95	10
99	9.0

Station name: LUMAHAI RIVER NEAR HANALEI, KAUAI, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 22.14985110 Longitude (decimal degrees): -159.52386743

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 700

Altitude accuracy (feet): not available Basin area (square miles): 6.95

Period of record: 1914-1917,1920-1933 Complete water years: 1914-1917,1920-1933

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 05/17/1926 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 2710 number of occurrences: most recent occurrence: 11/04/1928

Flow-duration characteristics based on complete water years during period of record (16 complete years)

_____ Percentage of time discharge Discharge, in

reidentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	115
50	65
55	60
60	57
65	53
70	50
75	46
80	43
85	40
90	37
95	32
99	26

Station name: Wainiha River nr Hanalei, Kauai, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 22.13570783
Longitude (decimal degrees): -159.55775680
Latitude/Longitude accuracy: 1 second
Horizontal datum: nad83
Altitude (feet): 960
Altitude accuracy (feet): 20
Basin area (square miles): 10.2

Period of record: 1952-1956,1958-2005 Complete water years: 1953-1955,1959-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 32 number of occurrences: 1 most recent occurrence: 10/22/1984

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 3650
number of occurrences: 1
most recent occurrence: 11/21/1974

Flow-duration characteristics based on complete water years during period of record (50 complete years)

Percentage of time discharge Discharge in

equaled or exceeded	cubic feet per second
Mean	137
50	79
55	73
60	68
65	65
70	61
75	58
80	55
85	52
90	49
95	45
9.0	3.8

Station name: Limahuli Str nr Wainiha, Kauai, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 22.21757305
Longitude (decimal degrees): -159.57720096
Latitude/Longitude accuracy: 1 second
Horizontal datum: nad83
Altitude (feet): 200
Altitude accuracy (feet): 10

Basin area (square miles): 1.36

Period of record: 1995-2005 Complete water years: 1995-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 3.4 number of occurrences: 4 most recent occurrence: 09/30/2003

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 241
number of occurrences: 1
most recent occurrence: 02/02/2005

Flow-duration characteristics based on complete water years during period of record (11 complete years)

Percentage of time discharge	Discharge, in
ogualed or evaceded	gubia foot non gogond

equaled or exceeded	cubic feet per second
Mean	8.9
50	6.1
55	5.9
60	5.7
65	5.4
70	5.2
75	4.9
80	4.6
85	4.4
90	4.2
95	3.9
99	3.6

Station name: HANAKAPIAI STREAM NEAR HANALEI, KAUAI, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 22.19621895 Longitude (decimal degrees): -159.59414557

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 450

Altitude accuracy (feet): not available Basin area (square miles): 2.73

Period of record: 1932-1953 Complete water years: 1933-1952

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 10/15/1945 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 459 number of occurrences: 08/17/1950 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (20 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	17
50	8.4
55	7.7
60	7.1
65	6.8
70	6.3
75	6.0
80	5.5
85	5.2
90	4.6
95	4.0
99	3.1

Station name: HANAKOA STREAM NEAR HANALEI, KAUAI, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 22.19040106 Longitude (decimal degrees): -159.61970150

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 470

Altitude accuracy (feet): not available Basin area (square miles): 0.5

Period of record: 1932-1953 Complete water years: 1933-1952

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.22 number of occurrences: 10/10/1952 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 452 number of occurrences: 08/15/1950 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (20 complete years)

_____ Percentage of time discharge Discharge, in

equaled or exceeded	cubic feet per second
Mean	5.6
50	1.7
55	1.5
60	1.3
65	1.2
70	1.1
75	0.93
80	0.82
85	0.73
90	0.66
95	0.56
99	0.43

Station name: KALALAU STREAM NEAR HANALEI, KAUAI, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 22.16487771 Longitude (decimal degrees): -159.63442418

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 960

Altitude accuracy (feet): not available Basin area (square miles): 1.55

Period of record: 1932-1955 Complete water years: 1933-1954

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 2.8 number of occurrences: 43 06/26/1945 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 257 number of occurrences: 12/21/1946 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (22 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	7.0
50	5.2
55	4.9
60	4.8
65	4.6
70	4.4
75	4.3
80	4.1
85	3.9
90	3.7
95	3.4
99	3.0

Station name: Nahomalu Valley nr Mana, Kauai, HI

3.81

Flow diverted or regulated?: N

Latitude (decimal degrees): 22.04158956 Longitude (decimal degrees): -159.75193177 Latitude/Longitude accuracy: 1 second Horizontal datum: nad83 Altitude (feet): 236.8 Altitude accuracy (feet): 0.1 Basin area (square miles):

Period of record: 1963-1971 Complete water years: 1964-1971

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 2406 12/31/1970 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 59 number of occurrences: 12/16/1964 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (8 complete years)

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	0.42
50	0
55	0
60	0
65	Λ

70 75 80 0 85 90 95 0

Station name: NF Kaukonahua Str abv RB, nr Wahiawa, Oahu, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.51599460 Longitude (decimal degrees): -157.94530708 Latitude/Longitude accuracy: 1 second Horizontal datum: nad83 Altitude (feet): 1150 Altitude accuracy (feet): 20 Basin area (square miles):

Period of record: 1913-1953,1960-2005

Period of record: 1913-1953,1960-2005 Complete water years: 1914-1924,1927-1952,1961-2005

1.38

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.12 number of occurrences: 03/13/1941 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 975 number of occurrences: number of occurrences: 1 most recent occurrence: 02/27/1935

Flow-duration characteristics based on complete water years during period of record (82 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	16
50	7.1
55	6.2
60	5.3
65	4.6
70	4.0
75	3.4
80	2.8
85	2.3
90	1.7
95	0.93
99	0.31

Station name: RB OF NF KAUKONAHUA STR NR WAHIAWA, OAHU, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.51655013 Longitude (decimal degrees): -157.94530707

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 1200

Altitude accuracy (feet): not available Basin area (square miles): 1.17

Period of record: 1913-1953

Complete water years: 1914-1924,1927-1932,1935-1952

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.14 number of occurrences: 04/05/1926 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 459 number of occurrences: most recent occurrence: 02/27/1935

Flow-duration characteristics based on complete water years during period of record (35 complete years)

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	11
50	4.8
55	4.3
60	3.6
65	3.1
70	2.8
75	2.3
80	1.9
85	1.5
90	1.2
95	0.77
99	0.43

Station name: NF Kaukonahua Str nr Wahiawa, Oahu, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.51182844
Longitude (decimal degrees): -157.98586267
Latitude/Longitude accuracy: 1 second
Horizontal datum: nad83
Altitude (feet): 930
Altitude accuracy (feet): 0.01
Basin area (square miles): 4.86

Period of record: 1947-1968 Complete water years: 1947-1968

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0
number of occurrences: 25
most recent occurrence: 11/15/1953

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 1720
number of occurrences: 1
most recent occurrence: 03/16/1968

Flow-duration characteristics based on complete water years during period of record (22 complete years)

Percentage of time discharge Discharge, in

equaled or exceeded	cubic feet per second
Mean	35
50	12
55	10
60	8.8
65	7.3
70	6.0
75	4.8
80	3.8
85	2.8
90	1.9
95	1.1
99	0.31

Station name: S F KAUKONAHUA STREAM NEAR WAHIAWA, OAHU, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.49849525 Longitude (decimal degrees): -157.94447408

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 1070

Altitude accuracy (feet): not available Basin area (square miles): 1.93

Period of record: 1911-1917,1944-1957 Period of record: 1911-1917,1944-1957 Complete water years: 1914,1916,1945-1956

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.01 number of occurrences: 11/14/1953 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 433 number of occurrences: number of occurrences: 1 most recent occurrence: 01/16/1949

Flow-duration characteristics based on complete water years during period of record (14 complete years)

_____ Percentage of time discharge Discharge in

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	13
50	5.6
55	4.6
60	3.9
65	3.1
70	2.4
75	2.0
80	1.5
85	1.1
90	0.77
95	0.48
99	0.14

Station name: SF Kaukonahua Str at E pump, nr Wahiawa, Oahu, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.48905176
Longitude (decimal degrees): -157.99558516
Latitude/Longitude accuracy: 1 second
Horizontal datum: nad83
Altitude (feet): 860.35
Altitude accuracy (feet): 0.01
Basin area (square miles): 4.04

Period of record: 1957-2004

Complete water years: 1958-1962,1965-2004

Minimum daily mean discharge during period of record

discharge, cubic feer per second:

number of occurrences:

most recent occurrence:

02/13/2003

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 1050 number of occurrences: 1 most recent occurrence: 02/01/1969

Flow-duration characteristics based on complete water years during period of record (45 complete years)

Percentage of time discharge Discharge in

rercentage of time discharge equaled or exceeded	cubic feet per second
Mean	21
Mean	21
50	8.7
55	7.6
60	6.6
65	5.7
70	4.9
75	4.1
80	3.4
85	2.6
90	1.9
95	1.1
99	0.14

Station name: R BR OF S F KAUKONAHUA STR NR WAHIAWA, OAHU, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.49599577 Longitude (decimal degrees): -157.98141848

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 980

Altitude accuracy (feet): not available Basin area (square miles): 0.86

Period of record: 1957-1972 Complete water years: 1958-1972

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 302 12/09/1971 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 216 number of occurrences: 01/05/1968 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (15 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	2.2
50	0.31
55	0.19
60	0.12
65	0.09
70	0.06
75	0.05
80	0.03
85	0.03
90	0.02
95	0
99	0
	ŭ

Station name: S F KAUKONAHUA STR AB WAHIAWA RES NR WAHIAWA, OA

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.48988506 Longitude (decimal degrees): -157.99586292

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 844.51

Altitude accuracy (feet): not available Basin area (square miles): 5.26

Period of record: 1947-1958 Complete water years: 1948-1957

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.42 number of occurrences: 04/14/1954 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 1300 number of occurrences: number of occurrences: 1 most recent occurrence: 01/16/1949

Flow-duration characteristics based on complete water years during period of record (10 complete years)

_____ Percentage of time discharge Discharge, in

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	25
50	12
55	11
60	9.1
65	7.9
70	7.0
75	5.6
80	4.5
85	3.3
90	2.2
95	1.2
99	0.68

Station name: POAMOHO STREAM NEAR WAHIAWA, OAHU, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.52016135 Longitude (decimal degrees): -157.97919590

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 1150

Altitude accuracy (feet): not available Basin area (square miles): 1.79

Period of record: 1947-1974 Complete water years: 1948-1973

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 190 12/30/1972 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 620 number of occurrences: 02/01/1969 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (26 complete years)

_____ Percentage of time discharge Discharge in

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	4.3
50	1.5
55	1.1
60	0.85
65	0.59
70	0.39
75	0.25
80	0.14
85	0.08
90	0.05
95	0.02
99	0

COMBINED RECORDS OF STATIONS 16210900, 16211000 Station name:

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.52016135 Longitude (decimal degrees): -157.97919590

Latitude/Longitude accuracy: unknown Horizontal datum: nad83

Altitude accuracy (feet): not available
Basin area (square miles): 1.79

Period of record: 1958-1974 Complete water years: 1959-1973

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.02 number of occurrences: 01/28/1973 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 805 number of occurrences: number of occurrences: 1 most recent occurrence: 03/16/1968

Flow-duration characteristics based on complete water years during period of record (15 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	9.3
50	3.0
55	2.6
60	2.3
65	1.9
70	1.7
75	1.4
80	1.2
85	0.93
90	0.65
95	0.42
99	0.16

Station name: Makaha Str nr Makaha, Oahu, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.50127721 Longitude (decimal degrees): -158.18030542 Latitude/Longitude accuracy: 1 second

Horizontal datum: nad83 Altitude (feet): 938.64 Altitude accuracy (feet): 0.01 Basin area (square miles): 2.31

Period of record: 1959-2005 Complete water years: 1960-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 2124 11/02/2004 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 283 number of occurrences:

most recent occurrence: 02/07/1976

Flow-duration characteristics based on complete water years during period of record (46 complete years)

_____ Percentage of time discharge Discharge, in

equaled or exceeded	cubic feet per second
Mean	1.7
50	0.49
55	0.40
60	0.31
65	0.25
70	0.18
75	0.13
80	0.08
85	0.03
90	0
95	0
0.0	0

Station name: Kaupuni Str at alt 374 ft nr Waianae, Oahu, HI

Flow diverted or regulated?: Y

Basin area (square miles):

Longitude (decimal degrees): -158.15447304
Latitude/Longitude accuracy: 1 second
Horizontal datum: nad83
Altitude (feet): 374
Altitude accuracy (feet): 0.01

Latitude (decimal degrees): 21.46905722

Period of record: 1960-1973 Complete water years: 1961-1972

Minimum daily mean discharge during period of record

3.58

discharge, cubic feer per second:
 number of occurrences: 910
most recent occurrence: 10/29/1966

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 217 number of occurrences: 1 most recent occurrence: 12/23/1964

Flow-duration characteristics based on complete water years during period of record (12 complete years)

Percentage	of	time	discharge	Discharge, in

referrage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	1.2
50	0.25
55	0.22
60	0.19
65	0.15
70	0.12
75	0.08
80	0.04
85	0
90	0
95	0
99	0

Station name: PUHAWAI STR AT LUALUALEI NEAR WAIANAE, OAHU, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.46628294 Longitude (decimal degrees): -158.13058420

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 600 Altitude (feet):

Altitude accuracy (feet): not available Basin area (square miles): 0.6

Period of record: 1931-1944 Complete water years: 1932-1943

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 09/30/1944 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 159 number of occurrences: most recent occurrence: 10/22/1939

Flow-duration characteristics based on complete water years during period of record (12 complete years)

_____ Percentage of time discharge Discharge, in

equaled or exceeded	cubic feet per second
Mean	0.38
50	0.15
55	0.14
60	0.12
65	0.12
70	0.11
75	0.09
80	0.09
85	0.08
90	0.08
95	0.04
99	0.03

Station name: Kipapa Str nr Wahiawa, Oahu, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.46710768

Longitude (decimal degrees): -157.95836355

Latitude/Longitude accuracy: 1 second

Horizontal datum: nad83

Altitude (feet): 690

Altitude accuracy (feet): 20

Altitude accuracy (feet): 20 Basin area (square miles): 4.29

Period of record: 1957-2004 Complete water years: 1958-2004

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0
number of occurrences: 389
most recent occurrence: 06/06/2000

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 852
number of occurrences: 1
most recent occurrence: 04/15/1963

Flow-duration characteristics based on complete water years during period of record (47 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	11
50	2.8
55	2.3
60	1.9
65	1.6
70	1.3
75	0.99
80	0.75
85	0.54
90	0.37
95	0.19
99	0

Station name: KIPAPA STREAM NEAR WAIPAHU, OAHU, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.40600035 Longitude (decimal degrees): -158.01780873

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 90

Altitude accuracy (feet): not available Basin area (square miles): 13.8

Period of record: 1967-1968

Complete water years: 1968

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 95 95 09/26/1968 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 911 number of occurrences: 01/05/1968 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (1 complete years)

_____ Percentage of time discharge Discharge, in

equaled or exceeded	cubic feet per second
Mean	16
50	2.1
55	1.1
60	0.62
65	0.34
70	0.11
75	0.008
80	0
85	0
90	0
95	0
0.0	0

Station name: Waikele Str at Waipahu, Oahu, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.38322381 Longitude (decimal degrees): -158.01086483 Latitude/Longitude accuracy: 1 second Horizontal datum: nad83 Altitude (feet): 1.37

Altitude accuracy (feet): 0.01 Basin area (square miles): 45.7

Period of record: 1951-2005

Complete water years: 1953-1959,1961-2004

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.61 number of occurrences: most recent occurrence: 02/25/1978

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 2590 number of occurrences: 03/21/1991 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (51 complete years)

_		•			
Percentage	of	time	discharge	Dischard	ge, in

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	40
50	23
55	22
60	20
65	19
70	18
75	17
80	15
85	14
90	12
95	9.6
99	4.9

Station name: PEARL HARBOR SPR AT WAIAWA NR PEARL CITY, OAHU, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.39016765 Longitude (decimal degrees): -157.98364278

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 2.25

Altitude accuracy (feet): not available Basin area (square miles): not available

Period of record: 1931-1934,1937-1964 Complete water years: 1932-1933,1938-1963

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 1.9 number of occurrences: 1 06/30/1964 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 29 number of occurrences: most recent occurrence: 02/27/1949

Flow-duration characteristics based on complete water years during period of record (28 complete years)

Percentage of time discharge	Discharge,	in
equaled or exceeded	cubic feet per	second

Mean	17
50	18
55	17
60	16
65	15
70	15
75	14
80	13
85	12
90	11
95	8.5
99	3.5

Station name: Waiawa Str nr Pearl City, Oahu, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.39600027
Longitude (decimal degrees): -157.97808710
Latitude/Longitude accuracy: 1 second
Horizontal datum: nad83
Altitude (feet): 1.81
Altitude accuracy (feet): 0.01
Basin area (square miles): 26.4

Period of record: 1952-2004 Complete water years: 1953-2004

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.70
number of occurrences: 1
most recent occurrence: 10/05/2003

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 5150
number of occurrences: 1
most recent occurrence: 03/24/1994

Flow-duration characteristics based on complete water years during period of record (52 complete years)

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second

equaled or exceeded	cubic feet per second
Mean	33
50	6.1
55	5.4
60	4.9
65	4.4
70	4.0
75	3.3
80	2.7
85	2.3
90	1.8
95	1.5
99	1.2

Station name: HAWN ELEC CO TUN AT WAIAU NR PEARL CITY, OAHU

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.38933443 Longitude (decimal degrees): -157.96253206

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 2.91

Altitude accuracy (feet): not available Basin area (square miles): not available

Period of record: 1940-1946,1952-1967 Complete water years: 1941,1945,1953-1966

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 9.3 number of occurrences: 1 most recent occurrence: 08/03/1941

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 27
number of occurrences: 2
most recent occurrence: 03/27/1940

Flow-duration characteristics based on complete water years during period of record (16 complete years)

_		_			
Percentage	of	time	discharge	Discharge.	in

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	16
50	16
55	16
60	16
65	15
70	15
75	15
80	15
85	15
90	14
95	14
99	12

Station name: Waimalu Str nr Aiea, Oahu, HI

5.97

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.39350015 Longitude (decimal degrees): -157.94614312 Latitude/Longitude accuracy: 1 second Horizontal datum: nad83 Altitude (feet): 1.0 Altitude accuracy (feet): 10 Basin area (square miles):

Period of record: 1952-1971

Complete water years: 1953-1961,1964-1970

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 174 12/31/1970 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 831 number of occurrences: 05/02/1965 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (16 complete years)

_____ Percentage of time discharge Discharge in

equaled or exceeded	cubic feet per second
	F
Mean	8.3
50	1.2
55	1.1
60	0.94
65	0.84
70	0.73
75	0.63
80	0.54
85	0.46
90	0.37
95	0.25
99	0.17

Station name: Kalauao Str at Moanalua Rd, at Aiea, Oahu, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.38211201 Longitude (decimal degrees): -157.93669907 Latitude/Longitude accuracy: 1 second Horizontal datum: nad83 Altitude (feet): 11.71

Altitude (feet): 11.71
Altitude accuracy (feet): 0.01
Basin area (square miles): 2.59

Period of record: 1957-1983 Complete water years: 1958-1982

Minimum daily mean discharge during period of record

discharge, cubic feer per second:

number of occurrences:

most recent occurrence:

0
10/25/1982

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 288 number of occurrences: 1 most recent occurrence: 04/15/1972

Flow-duration characteristics based on complete water years during period of record (25 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	3.1
50	0.20
55	0.18
60	0.15
65	0.13
70	0.11
75	0.09
80	0.08
85	0.06
90	0.04
95	0
0.0	•

Station name: KALAUAO STREAM AT AIEA, OAHU, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.38100120 Longitude (decimal degrees): -157.93864357

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet):

Altitude accuracy (feet): not available Basin area (square miles): 2.61

Period of record: 1953-1957 Complete water years: 1954-1956

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.34 number of occurrences: 05/09/1957 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 232 number of occurrences: number of occurrences: 1 most recent occurrence: 01/21/1957

Flow-duration characteristics based on complete water years during period of record (3 complete years)

_____ Percentage of time discharge Discharge, in

equaled or	exceeded	cubic fee	t per second
Mean			5.2
50			1.8
55			1.7
60			1.6
65			1.5
70			1.4
75			1.3
80			1.1
85			1.1
90			0.99
95			0.93
99			0.79

Station name: N. Halawa Str nr Kaneohe, Oahu, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.40599747

Longitude (decimal degrees): -157.86558762

Latitude/Longitude accuracy: 1 second

Horizontal datum: nad83

Altitude (feet): 646.52

Altitude (feet): 646.:
Altitude accuracy (feet): 0.01
Basin area (square miles): 1.64

Period of record: 1991-1999 Complete water years: 1992-1999

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0
number of occurrences: 455
most recent occurrence: 11/12/1998

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 213
number of occurrences: 1
most recent occurrence: 03/24/1994

Flow-duration characteristics based on complete water years during period of record (8 complete years)

Descentage of time discharge Discharge in

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	2.5
50	0.38
55	0.29
60	0.22
65	0.16
70	0.11
75	0.07
80	0.04
85	0
90	0
95	0
• •	

Station name: N. Halawa Str nr Aiea, Oahu, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.39294319
Longitude (decimal degrees): -157.89086564
Latitude/Longitude accuracy: 1 second
Horizontal datum: nad83
Altitude (feet): 320
Altitude accuracy (feet): 20
Basin area (square miles): 3.45

Period of record: 1929-1933,1953-2005 Complete water years: 1930-1932,1954-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0
number of occurrences: 5011
most recent occurrence: 12/21/2004

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 956
number of occurrences: 1
most recent occurrence: 11/18/1930

Flow-duration characteristics based on complete water years during period of record (55 complete years)

Percentage of time discharge Discharge, in equaled or exceeded cubic feet per second

equated of	choccaca	capie rece per	become
Mean		5.1	
50		0.36	
55		0.22	
60		0.12	
65		0.05	
70		0.02	
75		0.01	
80		0	
85		0	
90		0	
95		0	
99		0	

Station name: N. Halawa Str nr Honolulu, Oahu, HI

4.01

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.38127722 Longitude (decimal degrees): -157.90336581 Latitude/Longitude accuracy: 1 second Horizontal datum: nad83 Altitude (feet): 160 Altitude accuracy (feet): 10 Basin area (square miles):

Period of record: 1983-2005 Complete water years: 1984-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 1042 09/02/2005 1042 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 476 number of occurrences: most recent occurrence: 03/24/1994

Flow-duration characteristics based on complete water years during period of record (22 complete years)

_____ Percentage of time discharge Discharge, in

equaled or exceeded	cubic feet per second
M	
Mean	5.0
50	0.40
55	0.24
60	0.14
65	0.08
70	0.05
75	0.03
80	0.02
85	0.01
90	0
95	0
99	0

Station name: N. Halawa Str nr Quar. Stn. at Halawa, Oahu, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.37127786 Longitude (decimal degrees): -157.91364375 Latitude/Longitude accuracy: 1 second Horizontal datum: nad83

Altitude (feet): 60
Altitude accuracy (feet): 10
Basin area (square miles): 4.68

Period of record: 2002-2004 Complete water years: 2002-2003

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0
number of occurrences: 581
most recent occurrence: 11/28/2003

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 324
number of occurrences: 1
most recent occurrence: 05/06/2002

Flow-duration characteristics based on complete water years during period of record (2 complete years)

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
	2.0
Mean	3.9
50	0
55	0
60	0
65	0
70	0
75	0
80	0
85	0
90	0
95	0

Station name: HALAWA STREAM AT AIEA, OAHU, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.37072292 Longitude (decimal degrees): -157.92558820

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 16.52

Basin area (square miles):

0.32

not available
8.78

Period of record: 1953-1962 Complete water years: 1954-1961

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 11/22/1954 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 1250 number of occurrences: 03/05/1958 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (8 complete years)

_____ Percentage of time discharge Discharge in

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	11
50	3.6
55	3.4
60	3.0
65	2.8
70	2.6
75	2.3
80	1.9
85	1.5
90	1.1
95	0.68
99	0

Station name: MOANALUA STREAM NR KANEOHE, OAHU, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.38822016 Longitude (decimal degrees): -157.84864373

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 600 Altitude (feet):

Altitude accuracy (feet): not available Basin area (square miles): 0.94

Period of record: 1969-1978 Complete water years: 1969-1977

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 2190 12/31/1977 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 194 number of occurrences: 02/01/1969 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (9 complete years)

_____ Percentage of time discharge Discharge in

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	1.2
50	0
55	0
60	0
65	0
70	0
75	0
80	0
85	0
90	0
95	0
9.9	0

Station name: MOANALUA STREAM TRIB NR KANEOHE, OAHU, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.38766453 Longitude (decimal degrees): -157.84531044

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 700

Basin area (square miles): not available 0.62

Period of record: 1969-1978 Complete water years: 1969-1977

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 857 12/31/1977 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 02/01/1969 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (9 complete years)

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second

Mean	0.73
50	0.18
55	0.14
60	0.11
65	0.08
70	0.05
75	0.03
80	0
85	0
90	0
95	0
99	0

Station name: Moanalua Str nr Honolulu, Oahu, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.37822119 Longitude (decimal degrees): -157.87003279 Latitude/Longitude accuracy: 1 second Horizontal datum: nad83 Altitude (feet): 338.12

Altitude accuracy (feet): 0.01 Basin area (square miles): 2.73

Period of record: 1926-1978 Complete water years: 1927-1978

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 10673 12/31/1977 number of occurrences: most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 549 number of occurrences: 11/18/1930 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (52 complete years)

Percentage of time discharge equaled or exceeded	Discharge, cubic feet per	
Mean	3.1	
50	0	
55	0	
60	0	
65	0	
70	0	
75	0	
80	0	
85	0	
90	0	
95	0	
0.0	0	

Station name: Moanalua Str nr Aiea, Oahu, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.37377715

Longitude (decimal degrees): -157.88003282

Latitude/Longitude accuracy: 1 second

Horizontal datum: nad83

Horizontal datum: nad83
Altitude (feet): 230
Altitude accuracy (feet): 20
Basin area (square miles): 3.34

Period of record: 1969-1978 Complete water years: 1969-1977

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0
number of occurrences: 2850
most recent occurrence: 12/31/1977

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 546 number of occurrences: 1

most recent occurrence: 02/17/1969

Flow-duration characteristics based on complete water years during period of record (9 complete years)

Percentage of time discharge Discharge in

Discharge, in
cubic feet per second
5.4
0
0
0
0
0
0
0
0
0
0

Station name: Kalihi Str nr Kaneohe, Oahu, HI

0.6

Flow diverted or regulated?: N

Basin area (square miles):

Latitude (decimal degrees): 21.37322004
Longitude (decimal degrees): -157.82281115
Latitude/Longitude accuracy: 1 second
Horizontal datum: nad83
Altitude (feet): 840
Altitude accuracy (feet): 20

Period of record: 1967-1971 Complete water years: 1968-1971

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.06 number of occurrences: 1 most recent occurrence: 09/20/1971

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 182
number of occurrences: 1
most recent occurrence: 02/01/1969

Flow-duration characteristics based on complete water years during period of record (4 complete years)

Percentage of time discharge Discharge, in equaled or exceeded cubic feet per second

equaled or exceeded	cubic feet per second
Mean	1.5
50	0.38
55	0.34
60	0.30
65	0.26
70	0.23
75	0.18
80	0.16
85	0.14
90	0.10
95	0.10
99	0.08

Station name: Kalihi Str nr Honolulu, Oahu, HI

2.61

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.36349907 Longitude (decimal degrees): -157.84420002 Latitude/Longitude accuracy: 1 second Horizontal datum: nad83 Altitude (feet): 464.4 Altitude accuracy (feet): 0.01 Basin area (square miles):

Period of record: 1914-2005 Complete water years: 1915-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 07/29/1966 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 951 number of occurrences: 01/19/1923 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (91 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	6.3
50	2.8
55	2.5
60	2.3
65	2.0
70	1.8
75	1.6
80	1.4
85	1.1
90	0.93
95	0.65
99	0.35

Station name: Kalihi Str at Kalihi, Oahu, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.33822323

Longitude (decimal degrees): -157.87392256

Latitude/Longitude accuracy: 1 second

Horizontal datum: nad83

Altitude (feet): 70

Altitude accuracy (feet): 20

Basin area (square miles): 5.18

Period of record: 1962-2004 Complete water years: 1963-2004

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.05 number of occurrences: 1 most recent occurrence: 10/14/1999

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 781
number of occurrences: 1
most recent occurrence: 02/01/1969

Flow-duration characteristics based on complete water years during period of record (42 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	9.8
50	3.6
55	3.3
60	2.9
65	2.6
70	2.4
75	2.1
80	1.8
85	1.5
90	1.2
95	0.97
99	0.58

Station name: NUUANU STR BL RES 2 WASTEWAY NR HONOLULU, OAHU, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.34599946 Longitude (decimal degrees): -157.82503404

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 630.71

Altitude accuracy (feet): not available Basin area (square miles): 3.35

Period of record: 1914-1996

Complete water years: 1915-1916,1918-1920,1922-1995

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.14 number of occurrences: 9 08/30/1922 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 514 number of occurrences: number of occurrences: 1
most recent occurrence: 05/16/1927

Flow-duration characteristics based on complete water years during period of record (79 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	7.0

Mean	7.0	
50	3.6	
55	3.3	
60	2.9	
65	2.5	
70	2.2	
75	1.9	
80	1.6	
85	1.3	
90	0.93	
95	0.65	
99	0.31	

Station name: WAIHI STREAM AT HONOLULU, OAHU, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.32877767 Longitude (decimal degrees): -157.80059015

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 289.84

Altitude accuracy (feet): not available Basin area (square miles): 1.14

Period of record: 1913-1921,1925-1984 Complete water years: 1914-1920,1926-1983

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.08 number of occurrences: 19 01/17/1977 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 254 number of occurrences: most recent occurrence: 11/18/1927

Flow-duration characteristics based on complete water years during period of record (65 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	3.6
50	1.7
55	1.5
60	1.3
65	1.2
70	1.0
75	0.88
80	0.77
85	0.62
90	0.50
95	0.34
99	0.20

Station name: Waiakeakua Str at Honolulu, Oahu, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.32794436
Longitude (decimal degrees): -157.79947906
Latitude/Longitude accuracy: 1 second
Horizontal datum: nad83
Altitude (feet): 294.5
Altitude accuracy (feet): 0.01
Basin area (square miles): 1.06

Period of record: 1913-1921,1925-2005 Complete water years: 1914-1920,1926-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.62 number of occurrences: 2 most recent occurrence: 06/07/1926

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 183 number of occurrences: 1 most recent occurrence: 03/24/1994

Flow-duration characteristics based on complete water years during period of record (87 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	4.8
50	3.5
55	3.3
60	3.1
65	2.9
70	2.7
75	2.5
80	2.2
85	2.0
90	1.7
95	1.4
99	1.0

COMBINED RECORDS STAS 16239500 AND 16240500 Station name:

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.32794437 Longitude (decimal degrees): -157.80003461

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 294.5

Altitude accuracy (feet): not available Basin area (square miles): 1.06

Period of record: 1916,1918-1921,1925-1939 Period of record: 1916,1918-1921,1925-Complete water years: 1919-1920,1926-1937

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 08/26/1926 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 139 number of occurrences: number of occurrences: 1 1/16/1927

Flow-duration characteristics based on complete water years during period of record (14 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	5.5
50	4.1
55	3.9
60	3.7
65	3.4
70	3.1
75	2.8
80	2.5
85	2.2
90	2.0
95	1.7
99	1.3

Station name: MANOA STR AT COLLEGE OF HAWAII NR HONO, OAHU, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.29961286 Longitude (decimal degrees): -157.81392401

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 100

Altitude accuracy (feet): not available Basin area (square miles): 4.99

Period of record: 1909-1910,1913-1918

Complete water years: 1914-1918

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.31 number of occurrences: 03/14/1914 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 218 number of occurrences: number of occurrences: 1 most recent occurrence: 01/18/1916

Flow-duration characteristics based on complete water years during period of record (5 complete years)

Percentage	οf	time	discharge	Discharge, in

equaled or exceeded	cubic feet per second
equated of exceeded	
Mean	13
50	7.1
55	6.2
60	5.3
65	4.5
70	3.6
75	2.8
80	1.9
85	1.5
90	1.2
95	0.93
۵۵	0.46

Station name: Manoa Str at Kanewai Field, Honolulu, Oahu, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.29322431 Longitude (decimal degrees): -157.81281312 Latitude/Longitude accuracy: 1 second Horizontal datum: nad83

Horizontal datum: nad8
Altitude (feet): 38
Altitude accuracy (feet): 0.1
Basin area (square miles): 5.99

Period of record: 1999-2005 Complete water years: 2000-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.98
number of occurrences: 1
most recent occurrence: 10/04/2003

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 490
number of occurrences: 1
most recent occurrence: 10/30/2004

Flow-duration characteristics based on complete water years during period of record (6 complete years)

Descentage of time discharge Discharge in

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	11
50	5.7
55	5.3
60	4.9
65	4.5
70	4.1
75	3.7
80	3.3
85	2.9
90	2.5
95	2.0

Station name: Pukele Stream near Honolulu, Oahu, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.30683423
Longitude (decimal degrees): -157.78809076
Latitude/Longitude accuracy: 1 second
Horizontal datum: nad83
Altitude (feet): 344.78
Altitude accuracy (feet): 0.01
Basin area (square miles): 1.18

Period of record: 1926-1983,2003-2005 Complete water years: 1927-1982,2003-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.08 number of occurrences: 1 most recent occurrence: 10/31/1929

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 155
number of occurrences: 1
most recent occurrence: 03/05/1958

Flow-duration characteristics based on complete water years during period of record (59 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	1.9
50	0.77
55	0.71
60	0.63
65	0.59
70	0.53
75	0.46
80	0.41
85	0.37
90	0.31
95	0.25
99	0.15

Station name: WAIOMAO STREAM NR HONOLULU, OAHU, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.30627862 Longitude (decimal degrees): -157.78364633

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 373.66

Altitude accuracy (feet): not available Basin area (square miles): 1.04

Period of record: 1911-1913,1926-1971

Complete water years: 1927-1971

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 761 09/22/1971 761 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 187 number of occurrences: 03/05/1958 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (45 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	1.9
50	0.46
55	0.40
60	0.34
65	0.31
70	0.25
75	0.19
80	0.14
85	0.09
90	0.06
95	0.02
99	0

Station name: Palolo Stream near Honolulu, Oahu, HI

Flow diverted or regulated?: Y

Longitude (decimal degrees): -157.80420225
Latitude/Longitude accuracy: 1 second
Horizontal datum: nad83
Altitude (feet): 95
Altitude accuracy (feet): 5
Basin area (square miles): 3.63

Latitude (decimal degrees): 21.28989100

Period of record: 1952-1980 Complete water years: 1953-1979

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.05 number of occurrences: 3 most recent occurrence: 06/25/1958

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 653
number of occurrences: 1
most recent occurrence: 03/05/1958

Flow-duration characteristics based on complete water years during period of record (27 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Moon	5.6
Mean	
50	1.7
55	1.5
60	1.3
65	1.2
70	1.1
75	0.93
80	0.82
85	0.70
90	0.57
95	0.46
99	0.32

Station name: Manoa-Palolo Drainage Canal at Moiliili, Oahu, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.28683591 Longitude (decimal degrees): -157.81864662 Latitude/Longitude accuracy: 1 second

Horizontal datum: nad83
Altitude (feet): 5
Altitude accuracy (feet): 5
Basin area (square miles): 10.6

Period of record: 2000-2005 Complete water years: 2000-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 1.6 number of occurrences: 3 most recent occurrence: 08/19/2003

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 651
number of occurrences: 1
most recent occurrence: 10/30/2004

Flow-duration characteristics based on complete water years during period of record (6 complete years)

Percentage of time discharge Discharge. in

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	16
50	7.4
55	6.8
60	6.2
65	5.7
70	5.3
75	4.8
80	4.3
85	3.9
90	3.4
95	2.8
9.9	1 Q

Station name: Waimanalo Str at Waimanalo, Oahu, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.35016358 Longitude (decimal degrees): -157.72836766 Latitude/Longitude accuracy: 0.5 second Horizontal datum: nad83 Altitude (feet): 20

Altitude (feet): 20
Altitude accuracy (feet): 10
Basin area (square miles): 2.16

Period of record: 1967-1971 Complete water years: 1968-1970

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.33 number of occurrences: 1 11/09/1968

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 434
number of occurrences: 1
most recent occurrence: 12/18/1967

Flow-duration characteristics based on complete water years during period of record (3 complete years)

Percentage of time discharge Discharge, in

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	4.7
50	1.6
55	1.4
60	1.2
65	1.2
70	1.0
75	0.87
80	0.76
85	0.68
90	0.60
95	0.44
۵۵	0.36

Station name: Makawao Str nr Kailua, Oahu, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.36044153 Longitude (decimal degrees): -157.76447842 Latitude/Longitude accuracy: 1 second Horizontal datum: nad83 Altitude (feet): 80

Altitude (feet): 80
Altitude accuracy (feet): 20
Basin area (square miles): 2.04

Period of record: 1913-1916,1958-2005 Complete water years: 1914-1915,1959-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.50 number of occurrences: 2 most recent occurrence: 09/10/1964

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 518
number of occurrences: 1
most recent occurrence: 12/31/1987

Flow-duration characteristics based on complete water years during period of record (49 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	4.9
50	2.8
55	2.5
60	2.3
65	2.2
70	2.0
75	1.9
80	1.7
85	1.5
90	1.4
95	1.2
0.0	0.07

Station name: MAUNAWILI STREAM AT HWY 61 NR KAILUA, OAHU, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.37766282 Longitude (decimal degrees): -157.76058912

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 9.79

Altitude accuracy (feet): not available Basin area (square miles): 5.34

Period of record: 1967-1971,1991-1996 Complete water years: 1968-1971,1991-1996

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 2.3 number of occurrences: 3 07/09/1993 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 875 number of occurrences: number of occurrences: 1 12/18/1967

Flow-duration characteristics based on complete water years during period of record (8 complete years)

_____ Percentage of time discharge Discharge in

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	15
50	7.4
55	6.8
60	6.4
65	6.0
70	5.6
75	5.3
80	5.0
85	4.6
90	4.3
95	3.8
99	2.8

Station name: RB of Kamooalii Str nr Kaneohe, Oahu, HI

1.11

Flow diverted or regulated?: N

Basin area (square miles):

Latitude (decimal degrees): 21.38627407
Longitude (decimal degrees): -157.79281090
Latitude/Longitude accuracy: 1 second
Horizontal datum: nad83
Altitude (feet): 195.16
Altitude accuracy (feet): 0.1

Period of record: 1983-1997 Complete water years: 1984-1997

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.03 number of occurrences: 1 11/16/1984

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 177
number of occurrences: 1
most recent occurrence: 12/31/1987

Flow-duration characteristics based on complete water years during period of record (14 complete years)

Percentage of time discharge Discharge in

equaled or exceeded	cubic feet per second
Mean	1.5
50	0.54
55	0.50
60	0.47
65	0.43
70	0.40
75	0.38
80	0.34
85	0.29
90	0.24
95	0.17
0.0	0 06

Station name: KAMOOALII STREAM NR KANEOHE, OAHU,HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.38571867 Longitude (decimal degrees): -157.79864419

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 180

Basin area (square miles): not available 1.48

Period of record: 1981 Complete water years: 1981

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 89 most recent occurrence: 12/13/1980

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 257 number of occurrences: 05/07/1981 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (1 complete years)

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	2.5
50	0.02

50	0.02
55	0.02
60	0.01
65	0.01
70	0.01
75	0.01
80	0
85	0
90	0
95	0
99	0

Station name: KAMOOLALII STREAM BL KUOU STR NR KANEOHE, OAHU, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.39182964 Longitude (decimal degrees): -157.80447726

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 118

Altitude accuracy (feet): not available Basin area (square miles): 3.21

Period of record: 1967-1970,1972-1976 Complete water years: 1967-1970,1972-1976

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 10/12/1973 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 810 number of occurrences: most recent occurrence: 02/01/1969

Flow-duration characteristics based on complete water years during period of record (7 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	11
50	7.0
55	6.7
60	6.4
65	6.2
70	5.6
75	5.2
80	4.9
85	4.5
90	4.1
95	3.9
99	3.4

Station name: Luluku Str at alt 220 ft nr Kaneohe, Oahu, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.39182980
Longitude (decimal degrees): -157.80947722
Latitude/Longitude accuracy: 1 second
Horizontal datum: nad83
Altitude (feet): 220
Altitude accuracy (feet): 20
Basin area (square miles): 0.44

Period of record: 1967-1971,1984-1998 Complete water years: 1968-1971,1985-1997

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.03 number of occurrences: 1 most recent occurrence: 10/14/1988

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 67
number of occurrences: 1
most recent occurrence: 02/01/1969

Flow-duration characteristics based on complete water years during period of record (17 complete years)

Percentage of time discharge Discharge in

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	1.4
50	1.2
55	1.1
60	1.0
65	0.92
70	0.85
75	0.79
80	0.71
85	0.59
90	0.42
95	0.25
99	0.09

Station name: Kamooalii Str blw Luluku Str nr Kaneohe, Oahu, HI

Flow diverted or regulated?: Y

Basin area (square miles):

Latitude (decimal degrees): 21.39321844
Longitude (decimal degrees): -157.80364389
Latitude/Longitude accuracy: 1 second
Horizontal datum: nad83
Altitude (feet): 116.39
Altitude accuracy (feet): 0.01

Period of record: 1977-2005 Complete water years: 1978-2005

Minimum daily mean discharge during period of record

3.81

discharge, cubic feer per second: 0.29 number of occurrences: 6 most recent occurrence: 10/16/1984

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 723
number of occurrences: 1
most recent occurrence: 01/01/1988

Flow-duration characteristics based on complete water years during period of record (28 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	10
50	7.1
55	6.7
60	6.2
65	5.8
70	5.5
75	5.0
80	4.7
85	4.3
90	3.8
95	3.2
99	2.4

Station name: KAMOOALII STREAM AT KANEOHE, OAHU, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.41099525 Longitude (decimal degrees): -157.80086571

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 38.75

Altitude accuracy (feet): not available Basin area (square miles): 4.38

Period of record: 1959-1963,1966-1980 Complete water years: 1959-1963,1966-1980

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 2.9 number of occurrences: 1 03/27/1978 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 1170 number of occurrences: number of occurrences: 1 most recent occurrence: 02/01/1969

Flow-duration characteristics based on complete water years during period of record (17 complete years)

_____ Percentage of time discharge Discharge in

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	14
50	10
55	9.4
60	9.0
65	8.5
70	7.9
75	7.5
80	7.0
85	6.5
90	6.0
95	5.4
99	4.5

Station name: SF Kapunahala Str at Kaneohe, Oahu, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.40266248 Longitude (decimal degrees): -157.80586583 Latitude/Longitude accuracy: 1 second Horizontal datum: nad83

Horizontal datum: nad83
Altitude (feet): 111.26
Altitude accuracy (feet): 0.01
Basin area (square miles): 0.4

Period of record: 1988-1998 Complete water years: 1988-1997

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 1.5 number of occurrences: 2 most recent occurrence: 10/25/1996

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 30
number of occurrences: 1
most recent occurrence: 04/08/1989

Flow-duration characteristics based on complete water years during period of record (10 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	2.4
50	2.1
55	2.1
60	2.0
65	2.0
70	2.0
75	1.9
80	1.9
85	1.8
90	1.8
95	1.7

1.6

Station name: Haiku Str nr Heeia, Oahu, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.40960713

Longitude (decimal degrees): -157.82308769

Latitude/Longitude accuracy: 1 second

Horizontal datum: nad83

Altitude (feet): 271.9 Altitude accuracy (feet): 0.1 Basin area (square miles): 0.97

Period of record: 1914-1919,1939-1978,1983-2005 Complete water years: 1915-1919,1940-1977,1983-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.29 number of occurrences: 22 most recent occurrence: 12/09/1962

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 620 number of occurrences: 1 most recent occurrence: 05/02/1965

Flow-duration characteristics based on complete water years during period of record (66 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	2.6
50	1.6
55	1.5
60	1.5
65	1.4
70	1.4
75	1.3
80	1.2
85	1.1
90	1.0
95	0.67
99	0.39

Station name: IOLEKAA STREAM MAUKA NEAR HEEIA, OAHU, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.41766246 Longitude (decimal degrees): -157.82836524

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 320

Altitude accuracy (feet): not available Basin area (square miles): 0.29

Period of record: 1940-1970

Complete water years: 1941-1942,1944-1969

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.09 number of occurrences: 02/11/1967 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 67 number of occurrences: number of occurrences: 1 most recent occurrence: 05/02/1965

Flow-duration characteristics based on complete water years during period of record (28 complete years)

_____ Percentage of time discharge Discharge, in

rendentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	0.67
50	0.50
55	0.46
60	0.45
65	0.43
70	0.40
75	0.39
80	0.35
85	0.31
90	0.26
95	0.22
99	0.19

Station name: KAHALUU STREAM NR HEEIA, OAHU, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.43571783 Longitude (decimal degrees): -157.85308695

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 357.52

Altitude accuracy (feet): not available

Basin area (square miles): 0.28

Period of record: 1936-1971 Complete water years: 1937-1971

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.05 number of occurrences: most recent occurrence: 12/09/1962

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 60 number of occurrences: 05/02/1965 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (35 complete years)

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	2.0
50	0.77
	2 6 7

50	0.77
55	0.67
60	0.60
65	0.53
70	0.45
75	0.36
80	0.31
85	0.26
90	0.22
95	0.17
99	0.12

Station name: Kahaluu Str nr Ahuimanu, Oahu, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.43905076 Longitude (decimal degrees): -157.84364254 Latitude/Longitude accuracy: 1 second Horizontal datum: nad83

Altitude (feet): 150
Altitude accuracy (feet): 20
Basin area (square miles): 0.84

Period of record: 1984-2005 Complete water years: 1984-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.47 number of occurrences: 6 most recent occurrence: 10/26/2001

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 142
number of occurrences: 1
most recent occurrence: 05/06/2002

Flow-duration characteristics based on complete water years during period of record (22 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	3.1
50	2.5
55	2.2
60	2.0
65	1.6
70	1.4
75	1.3
80	1.1
85	0.97
90	0.85
95	0.73
99	0.60

Station name: KAHALUU STREAM AT KAHALUU, OAHU, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.45377196 Longitude (decimal degrees): -157.83475349

Latitude/Longitude accuracy: unknown Horizontal datum: nad83

Altitude (feet): not available Basin area (square miles): 3.73

Period of record: 1967-1969 Complete water years: 1968-1969

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 2.8 number of occurrences: 15 most recent occurrence: 09/20/1968

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 1010 number of occurrences: 02/01/1969 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (2 complete years)

Percentage of time discharge	Discharge,	in
equaled or exceeded	cubic feet per	second

 Mean		16	
50		7.5	
55		6.7	
60		6.1	
65		5.9	
70		5.4	
75		5.0	
80		4.6	
85		4.2	
90		3.8	
95		3.5	
99		2.8	

Station name: SF WAIHEE STR NR HEEIA, OAHU, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.44321779 Longitude (decimal degrees): -157.86725331

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 615.74

Altitude accuracy (feet): not available

Basin area (square miles): 0.03

Period of record: 1962-1996 Complete water years: 1963-1996

Minimum daily mean discharge during period of record

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 33
number of occurrences: 1
most recent occurrence: 05/02/1965

Flow-duration characteristics based on complete water years during period of record (34 complete years)

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	1.2
50	1 0

Mean	1.2
50	1.0
55	0.91
60	0.85
65	0.75
70	0.68
75	0.61
80	0.56
85	0.49
90	0.39
95	0.29
99	0.24

Station name: NF WAIHEE STREAM NR HEEIA, OAHU, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.44349559 Longitude (decimal degrees): -157.86891995

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 639 Altitude (feet):

Altitude accuracy (feet): not available Basin area (square miles): 0.03

Period of record: 1962-1996 Complete water years: 1963-1996

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 07/08/1977 2 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 32 number of occurrences: 05/02/1965 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (34 complete years)

_____ Percentage of time discharge Discharge in

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	1.5
50	1.4
55	1.3
60	1.3
65	1.2
70	1.1
75	1.0
80	0.98
85	0.92
90	0.83
95	0.76
99	0.54

Station name: WAIHEE STREAM AT ALT 260 FT NEAR HEEIA, OAHU, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.44710634 Longitude (decimal degrees): -157.86141995

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 259.28

Basin area (square miles):

237.20

not available

0.31

Period of record: 1961-1966 Complete water years: 1962-1965

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 10 10/11/1962 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 115 number of occurrences: 05/02/1965 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (4 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	4.6
50	4.2
55	4.2
60	4.0
65	3.9
70	3.7
75	3.5
80	3.3
85	3.2
90	3.1
95	2.9
99	2.7

Station name: WAIHEE STREAM NR HEEIA, OAHU, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.44710625 Longitude (decimal degrees): -157.85780889

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 193.44

Basin area (square miles): not available 0.93

Period of record: 1936-1982 Complete water years: 1937-1982

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 1 07/08/1977 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 387 number of occurrences: 05/02/1965 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (46 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	7.7
50	7.2

Mean	7.7
50	7.2
55	6.8
60	6.2
65	5.9
70	5.4
75	4.9
80	4.2
85	3.2
90	2.6
95	2.0
99	1.3

Station name: Waihee Str nr Kahaluu, Oahu, HI

0.97

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.44793953 Longitude (decimal degrees): -157.85725332 Latitude/Longitude accuracy: 1 second Horizontal datum: nad83 Altitude (feet): 170 Altitude accuracy (feet): 20 Basin area (square miles):

Period of record: 1975-2005 Complete water years: 1975-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 1.3 number of occurrences: most recent occurrence: 04/16/1977

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 195 number of occurrences: 05/06/2002 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (31 complete years)

		-
Percentage of time discharge	Discharge, in	
equaled or exceeded	cubic feet per second	ŀ

equaled or	exceeded	cubic	feet	per	second
Mean				6.2	
50				5.4	
55				5.2	
60				5.0	
65				4.9	
70				4.7	
75				4.6	
80				4.4	
85				4.1	
90				3.9	
95				3.6	
99				2.5	

Station name: WAIHEE STREAM AT KAHALUU, OAHU, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.45571637 Longitude (decimal degrees): -157.83780896

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet):

Altitude accuracy (feet): not available Basin area (square miles): 2.26

Period of record: 1967-1971 Complete water years: 1968-1971

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 7.9 number of occurrences: 09/30/1970 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 669 number of occurrences: most recent occurrence: 02/01/1969

Flow-duration characteristics based on complete water years during period of record (4 complete years)

_____ Percentage of time discharge Discharge, in equaled or exceeded cubic feet per second

Mean	16
50	12
55	12
60	12
65	11
70	11
75	11
80	11
85	10
90	9.9
95	9.2
99	8.0

Station name: WAIAHOLE STR AT ALT 250 FT WAIAHOLE, OAHU, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.47321640 Longitude (decimal degrees): -157.87169690

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 250

Altitude accuracy (feet): not available Basin area (square miles): 0.99

Period of record: 1955-1968 Complete water years: 1956-1968

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 2.3 number of occurrences: 10/10/1962 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 212 number of occurrences: most recent occurrence: 10/23/1958

Flow-duration characteristics based on complete water years during period of record (13 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	9.5
50	5.2
55	4.8
60	4.5
65	4.3
70	4.1
75	3.9
80	3.7
85	3.4
90	3.3
95	3.1
99	2.6

Station name: WAIAHOLE STREAM NR WAIAHOLE, OAHU, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.47738277 Longitude (decimal degrees): -157.86669690

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 160 Altitude (feet):

Altitude accuracy (feet): not available Basin area (square miles): 1.22

Period of record: 1911-1916 Complete water years: 1913-1915

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 34 06/30/1916 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 260 number of occurrences: 08/05/1914 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (3 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	43
50	43
55	39
60	37
65	37
70	36
75	22
80	22

21

20

85

90 95

Station name: Waiahole Stream above Kamehameha Hwy, Oahu, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.48154854 Longitude (decimal degrees): -157.84641933 Latitude/Longitude accuracy: 1 second Horizontal datum: nad83 Altitude (feet): 14 Basin area (square miles): 0.1

Period of record: 2002-2005 Complete water years: 2002-2005

Minimum daily mean discharge during period of record

3.76

discharge, cubic feer per second: number of occurrences: 9 11/13/2003 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 1150 number of occurrences: 05/06/2002 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (4 complete years)

Percentage	of	time	discharge	Discharge, in

Discharge, in
cubic feet per second
43
39
37
34
32
30
28
26
24
22
20
18

Station name: Waikane Str at alt 75 ft at Waikane, Oahu, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.49682633 Longitude (decimal degrees): -157.86225211 Latitude/Longitude accuracy: 1 second Horizontal datum: nad83

Altitude (feet): 75
Altitude accuracy (feet): 20
Basin area (square miles): 2.22

Period of record: 1960-2005 Complete water years: 1961-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 1.1 number of occurrences: 3 most recent occurrence: 09/22/1984

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 868
number of occurrences: 1
most recent occurrence: 02/04/1965

Flow-duration characteristics based on complete water years during period of record (45 complete years)

Percentage	of	time	discharge	Discharge, in

rerective or erme discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	8.8
50	4.3
55	3.9
60	3.6
65	3.3
70	3.0
75	2.8
80	2.6
85	2.4
90	2.1
95	1.8
99	1.5

Station name: Hakipuu Stream near Waikane, Oahu, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.50849216
Longitude (decimal degrees): -157.85475203
Latitude/Longitude accuracy: 1 second
Horizontal datum: nad83
Altitude (feet): 30

Altitude accuracy (feet): 5
Basin area (square miles): 0.85

Period of record: 2003-2005 Complete water years: 2003-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.29 number of occurrences: 1 1/05/2003

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 64
number of occurrences: 1
most recent occurrence: 08/04/2004

Flow-duration characteristics based on complete water years during period of record (3 complete years)

Percentage of time discharge Discharge, in

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	1.9
50	1.0
55	0.92
60	0.83
65	0.74
70	0.64
75	0.58
80	0.53
85	0.49
90	0.45
95	0.40
۵۵	0.33

Station name: Kahana Str at alt 30 ft nr Kahana, Oahu, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.54043603 Longitude (decimal degrees): -157.88252889 Latitude/Longitude accuracy: 1 second Horizontal datum: nad83 Altitude (feet): 3.0 Altitude accuracy (feet): 20 Basin area (square miles):

Period of record: 1959-2005 Complete water years: 1960-2005

Minimum daily mean discharge during period of record

3.74

discharge, cubic feer per second: number of occurrences: 2 06/06/2000 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 2160 number of occurrences: most recent occurrence: 05/06/2002

Flow-duration characteristics based on complete water years during period of record (46 complete years)

_____ Percentage of time discharge Discharge, in

equaled or exceeded	cubic feet per second
Mean	36
50	23
55	22
60	21
65	20
70	19
75	18
80	17
85	16
90	15
95	14
99	12

Station name: Punaluu Str nr Punaluu, Oahu, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.55599169
Longitude (decimal degrees): -157.89891743
Latitude/Longitude accuracy: 1 second
Horizontal datum: nad83

Horizontal datum: nad8:
Altitude (feet): 212
Altitude accuracy (feet): 20
Basin area (square miles): 2.78

Period of record: 1953-2005 Complete water years: 1954-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second:

number of occurrences:

most recent occurrence:

245

245

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 1010
number of occurrences: 1
most recent occurrence: 04/15/1963

Flow-duration characteristics based on complete water years during period of record (52 complete years)

Percentage of time discharge Discharge in

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	16
50	11
55	10
60	9.1
65	8.2
70	7.2
75	6.1
80	5.0
85	3.8
90	2.4
95	1.1
99	0.05

Station name: COMBINED RECORDS OF STATIONS 16302000,16303000

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.55599169 Longitude (decimal degrees): -157.89891743 Latitude/Longitude accuracy: unknown

Horizontal datum: nad83

Altitude (feet): not available Altitude accuracy (feet): not available Basin area (square miles): 2.78

Period of record: 1953-2005 Complete water years: 1954-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 8.0 number of occurrences: 1 10/05/1968 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 1020 number of occurrences: most recent occurrence: 04/15/1963

Flow-duration characteristics based on complete water years during period of record (52 complete years)

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	25
50	19

Mean	2	5
50	1	9
55	1	9
60	1	8
65	1	7
70	1	6
75	1	6
80	1	5
85	1	4
90	1	3
95	1	2
99	1	1

Station name: KALUANUI STREAM NR PUNALUU, OAHU, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.58585094 Longitude (decimal degrees): -157.90822225 Latitude/Longitude accuracy: 0.5 second Horizontal datum: nad83

Altitude (feet): 110 Altitude accuracy (feet): 20 Basin area (square miles): 1.11

Period of record: 1967-2005 Complete water years: 1968-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 171 06/15/2003 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 230 number of occurrences: 02/01/1969 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (38 complete years)

_____ Percentage of time discharge Discharge, in

reficentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	4.3
50	1.4
55	1.2
60	1.0
65	0.85
70	0.72
75	0.59
80	0.47
85	0.36
90	0.26
95	0.14
0.0	^

Station name: KOLOA GULCH NR LAIE, OAHU, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.62182128 Longitude (decimal degrees): -157.93335985

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 500

Altitude accuracy (feet): not available Basin area (square miles): 0.9

Period of record: 1914-1918 Complete water years: 1915,1917

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 11/20/1917 number of occurrences: most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 255 number of occurrences: number of occurrences: 1 most recent occurrence: 09/25/1914

Flow-duration characteristics based on complete water years during period of record (2 complete years)

_____ Percentage of time discharge Discharge, in

equaled or exceeded	cubic feet per second
Mean	4.0
50	2.0
55	1.7
60	1.5
65	1.4
70	1.2
75	0.93
80	0.93
85	0.46
90	0.31
95	0.23
9.9	0.10

Station name: MALAEKAHANA STREAM NR LAIE, OAHU, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.63293296 Longitude (decimal degrees): -157.96197056

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 450

Basin area (square miles): not available 0.64

Period of record: 1963-1971 Complete water years: 1964-1971

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 87 most recent occurrence: 09/22/1971

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 108 number of occurrences: 11/14/1965 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (8 complete years)

Percentage	of	time	discharge	Discharge, in

reicentage of time discharge	Discharge, III
equaled or exceeded	cubic feet per second
Mean	2.1
50	0.32
55	0.29
60	0.23
65	0.21
70	0.17
75	0.15
80	0.11
85	0.08
90	0.05
95	0.03
99	0

Station name: EAST BRANCH MALAEKAHANA STREAM NR KAHUKU, OAHU, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.63432182 Longitude (decimal degrees): -157.96113720

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 380

Altitude accuracy (feet): not available Basin area (square miles): 1.66

Period of record: 1914-1918 Complete water years: 1915-1916

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 436 12/31/1917 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 128 number of occurrences: number of occurrences: 1 most recent occurrence: 09/25/1914

Flow-duration characteristics based on complete water years during period of record (2 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	1.3
50	0.31
55	0.15
60	0
65	0
70	0
75	0
80	0
85	0
90	0
95	0
20	0

Station name: MIDDLE BR MALAEKAHANA STREAM NR KAHUKU, OAHU, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.63571066 Longitude (decimal degrees): -157.96530381

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 440

Altitude accuracy (feet): not available Basin area (square miles): 0.69

Period of record: 1914-1918 Complete water years: 1915,1917

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 12/31/1917 number of occurrences: most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 54 number of occurrences: most recent occurrence: 04/12/1918

Flow-duration characteristics based on complete water years during period of record (2 complete years)

_____ Percentage of time discharge Discharge in

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	0.31
50	0
55	0
60	0
65	0
70	0
75	0
80	0
85	0
90	0
95	0

Station name: Kamananui Str at Pupukea Mil Rd, Oahu, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.62043425 Longitude (decimal degrees): -158.01502628 Latitude/Longitude accuracy: 1 second Horizontal datum: nad83 Altitude (feet): 590

Altitude (feet): 590 Altitude accuracy (feet): 20 Basin area (square miles): 3.13

Period of record: 1963-2001 Complete water years: 1964-2001

Minimum daily mean discharge during period of record

discharge, cubic feer per second:

number of occurrences:

most recent occurrence:

03/13/1986

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 620
number of occurrences: 1
most recent occurrence: 11/20/1990

Flow-duration characteristics based on complete water years during period of record (38 complete years)

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	9.8
50	3.2
55	2.8
60	2.5
65	2.1
70	1.8
75	1.5
80	1.3
85	1.0
90	0.67
95	0.35
99	0

Station name: KAIWIKOELE STREAM TRIB NR MAUNAWAI, OAHU, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.61043485 Longitude (decimal degrees): -158.02030430

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 730

Altitude accuracy (feet): not available Basin area (square miles): 0.97

Period of record: 1968-1971 Complete water years: 1970-1971

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 1313 12/31/1970 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 223 number of occurrences: 03/16/1968 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (2 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	0.59
50	0
55	0
60	0
65	0
70	0
75	0
80	0
85	0
90	0
95	0
0.0	^

Station name: Kamananui Str at Maunawai, Oahu, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.63571208 Longitude (decimal degrees): -158.05474784 Latitude/Longitude accuracy: 1 second Horizontal datum: nad83 Altitude (feet): 20

Altitude (feet): 20
Altitude accuracy (feet): 20
Basin area (square miles): 12.36

Period of record: 1958-2005 Complete water years: 1959-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second:

number of occurrences:

most recent occurrence:

09/10/2003

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 1940
number of occurrences: 1
most recent occurrence: 01/01/1988

Flow-duration characteristics based on complete water years during period of record (47 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	17
50	3.8
55	3.2
60	2.7
65	2.2
70	1.8
75	1.4
80	1.0
85	0.67
90	0.30
95	0.05
0.0	•

Station name: HELEMANO STREAM AT HALEIWA, OAHU, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.57460432 Longitude (decimal degrees): -158.10058236

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 1.57

Altitude accuracy (feet): not available

Basin area (square miles): 14.2

Period of record: 1968-1982 Complete water years: 1969-1982

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0
number of occurrences: 328
most recent occurrence: 09/19/1981

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 3600
number of occurrences: 1
most recent occurrence: 02/01/1969

Flow-duration characteristics based on complete water years during period of record (14 complete years)

Percentage of time discharge	Discharge, in
omialed ex expended	gubia foot non gogond

equaled or exceeded	cubic feet per second
Maar	12
Mean	
50	0.14
55	0.10
60	0.07
65	0.05
70	0.04
75	0.03
80	0.02
85	0.02
90	0.01
95	0
99	0

Station name: Opaeula Str nr Wahiawa, Oahu, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.56210371
Longitude (decimal degrees): -158.00002805
Latitude/Longitude accuracy: 1 second
Horizontal datum: nad83

Altitude (feet): 1120
Altitude accuracy (feet): 20
Basin area (square miles): 2.98

Period of record: 1959-2005 Complete water years: 1960-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second:

number of occurrences:

most recent occurrence:

03/12/1986

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 845
number of occurrences: 1
most recent occurrence: 05/06/2002

Flow-duration characteristics based on complete water years during period of record (46 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	13
50	4.5
55	3.9
60	3.3
65	2.8
70	2.4
75	2.0
80	1.6
85	1.3
90	0.93
95	0.55
99	0.13

Station name: Halawa Stream near Halawa, Molokai, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.15541357
Longitude (decimal degrees): -156.76191001
Latitude/Longitude accuracy: 1 second
Horizontal datum: nad83
Altitude (feet): 210
Altitude accuracy (feet): 25
Basin area (square miles): 4.62

Period of record: 1917-1932,1938-2005

Complete water years: 1918-1919,1921-1931,1939-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.86 number of occurrences: 1 most recent occurrence: 09/01/1971

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 1240
number of occurrences: 1
most recent occurrence: 02/04/1965

Flow-duration characteristics based on complete water years during period of record (80 complete years)

Percentage	of	time	discharge	D.	ischa	rge,	in
00112100	1 01	r 03701	boboo.	aubi a	foot	202	acaond

equaled or exceeded	cubic feet per second
Mean	30
50	13
55	12
60	11
65	9.3
70	8.4
75	7.5
80	6.6
85	5.7
90	4.8
95	3.7
99	2.4

Station name: PAPALAUA STREAM NEAR PUKOO, MOLOKAI, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.16625367 Longitude (decimal degrees): -156.79857998

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 100

Basin area (square miles):

2

Period of record: 1920-1929 Complete water years: 1921-1928

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 1 05/30/1920 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 593 number of occurrences: 01/14/1923 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (8 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	21
50	10
55	8.7
60	7.6
65	7.0
70	6.0
75	5.4
80	4.6
85	3.9
90	3.4
95	2.8
99	2.3

Station name: PULENA STREAM NEAR WAILAU, MOLOKAI, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.12292373 Longitude (decimal degrees): -156.82774505

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 591

Altitude accuracy (feet): not available Basin area (square miles): 4.38

80

85

90

95

Period of record: 1920-1929,1937-1957 Period of record: 1920-1929,1937-1957 Complete water years: 1921-1928,1938-1956

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 4.9 number of occurrences: 1 01/05/1957 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 3390 number of occurrences: number of occurrences: 1 most recent occurrence: 01/26/1948

Flow-duration characteristics based on complete water years during period of record (27 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	35
50	20
55	18
60	16
65	15
70	14
75	12

6.0

11

10

9.0

7.7

Station name: WAIAKEAKUA STREAM NEAR WAILAU, MOLOKAI, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.12042353 Longitude (decimal degrees): -156.82607839

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 698

Altitude accuracy (feet): not available Basin area (square miles): 1.41

Period of record: 1920-1929,1937-1957 Period of record: 1920-1929,1937-1957 Complete water years: 1921-1928,1938-1956

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 2.0 number of occurrences: 2 10/06/1949 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 422 number of occurrences: number of occurrences: 1 most recent occurrence: 01/26/1948

Flow-duration characteristics based on complete water years during period of record (27 complete years)

_____ Percentage of time discharge Discharge, in

equaled or exceeded	cubic feet per second
Mean	12
50	7.6
55	7.1
60	6.7
65	6.2
70	5.9
75	5.5
80	5.1
85	4.8
90	4.3
95	3.9
99	3 1

Station name: KAPUHI STREAM NR PELEKUNU, MOLOKAI, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.12959251 Longitude (decimal degrees): -156.87940982

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 870

Altitude accuracy (feet): not available Basin area (square miles): 1.2

Period of record: 1968-1970 Complete water years: 1969-1970

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 1 09/20/1968 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 375 number of occurrences: number of occurrences: 1 1/29/1968

Flow-duration characteristics based on complete water years during period of record (2 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	8.1
50	3.8
55	3.5
60	3.2
65	3.1
70	2.9
75	2.8
80	2.7
85	2.6
90	2.5
95	2.2
0.0	1 0

Station name: KAWAINUI STREAM NR PELEKUNU, MOLOKAI, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.12987029 Longitude (decimal degrees): -156.87440997

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 770

Altitude accuracy (feet): not available Basin area (square miles): 1.17

Period of record: 1968-1980,1995-1996 Complete water years: 1969-1979,1995-1996

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.75 number of occurrences: 09/22/1968 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 296 number of occurrences: number of occurrences: 1 1/29/1968

Flow-duration characteristics based on complete water years during period of record (13 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	8.1
50	4.8
55	4.3
60	3.8
65	3.4
70	3.0
75	2.7
80	2.4
85	2.0
90	1.7
95	1.4
99	1.1

Station name: PELEKUNU STREAM NR PELEKUNU, MOLOKAI, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.13320361 Longitude (decimal degrees): -156.87579892

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 552

Altitude accuracy (feet): not available Basin area (square miles): 2.59

Period of record: 1920-1929,1938-1957,1971-1982

Period of record: 1920-1929,1938-1957,1971-1982 Complete water years: 1921-1928,1938-1947,1949-1956,1972-1981

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 2.2 number of occurrences: 10/17/1974 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 774 number of occurrences: number of occurrences: 1 most recent occurrence: 03/27/1951

Flow-duration characteristics based on complete water years during period of record (36 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	17
50	9.1
55	8.4
60	7.7
65	7.1
70	6.5
75	6.0
80	5.6
85	5.1
90	4.6
95	4.0
99	3.0

Station name: PILIPILILAU STREAM NR PELEKUNU, MOLOKAI, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.13237027 Longitude (decimal degrees): -156.88302090

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 1000

Altitude accuracy (feet): not available Basin area (square miles): 0.49

Period of record: 1968-1997 Complete water years: 1969-1996

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.49 number of occurrences: 10/31/1996 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 152 number of occurrences: most recent occurrence: 04/08/1989

Flow-duration characteristics based on complete water years during period of record (28 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	1.6
50	1.0
55 60	0.96 0.93
65	0.84
70	0.80
75	0.76
80	0.72
85	0.68
90 95	0.64 0.59
99	0.55

Station name: LANIPUNI STREAM NEAR PELEKUNU, MOLOKAI, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.14070353 Longitude (decimal degrees): -156.87107707

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 418

Altitude accuracy (feet): not available Basin area (square miles): 1.09

Period of record: 1920-1929,1938-1957 Complete water years: 1920-1929,1938-1957

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 2.3 number of occurrences: 02/09/1944 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 696 number of occurrences: number of occurrences: 1 most recent occurrence: 03/09/1942

Flow-duration characteristics based on complete water years during period of record (27 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	14
50	8.2
55	7.7
60	7.1
65	6.8
70	6.3
75	5.9
80	5.6
85	5.1
90	4.6
95	4.1
99	3.3

Station name: Waikolu Str at alt 900 ft nr Kalaupapa, Molokai, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.14209259 Longitude (decimal degrees): -156.91885344 Latitude/Longitude accuracy: 1 second

Horizontal datum: nad83 Altitude (feet): 900 Altitude accuracy (feet): 25 Basin area (square miles):

Period of record: 1956-2003

Complete water years: 1956-2003 1957-1961,1963-2003

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 1824 11/27/2002 1824 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 847 number of occurrences: 04/08/1989 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (46 complete years)

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	6.1
50	1.3
55	1.2
60	1.1
65	0.92
70	0.80
75	0.70
80	0.50
85	0.25
90	0
95	0
0.0	0

Station name: WAIKOLU STR AT ELEV 650 FT NR KALAUPAPA, MOLOKAI

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.14820381 Longitude (decimal degrees): -156.92357566

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 650

Altitude accuracy (feet): not available Basin area (square miles): 2.99

Period of record: 1920-1923 Complete water years: 1921-1922

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 13 10/10/1920 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 362 number of occurrences: most recent occurrence: 12/12/1921

Flow-duration characteristics based on complete water years during period of record (2 complete years)

_____ Percentage of time discharge Discharge in

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	16
50	9.1
55	8.4
60	7.7
65	7.3
70	6.3
75	5.9
80	5.4
85	5.3
90	5.1
95	4.8
9.9	3 7

Station name: WAIKOLU STR BL PIPE CROSS NR KALAUPAPA, MOLOKAI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.15931512 Longitude (decimal degrees): -156.92885379 Latitude/Longitude accuracy: 1 second Horizontal datum: nad83 Altitude (feet): 252

Altitude accuracy (feet): not available Basin area (square miles): 3.68

Period of record: 1919-1932,1938-1996

Period of record: 1919-1932,1938-1996 Complete water years: 1921-1930,1938-1947,1949-1996

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 1 10/06/1985 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 3810 number of occurrences: number of occurrences: 1 most recent occurrence: 04/08/1989

Flow-duration characteristics based on complete water years during period of record (68 complete years)

_____ Percentage of time discharge Discharge, in

rerectivage or erme discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	18
50	11
55	9.9
60	9.2
65	8.7
70	8.1
75	7.6
80	7.1
85	6.6
90	6.0
95	5.0

Station name: KEOLEWA STREAM NEAR KALAE, MOLOKAI, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.17181554 Longitude (decimal degrees): -156.97635190

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 1950

Altitude accuracy (feet): not available Basin area (square miles): 0.18

Period of record: 1940-1944 Complete water years: 1941-1943

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 11 12/26/1943 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 17 number of occurrences: most recent occurrence: 10/23/1941

Flow-duration characteristics based on complete water years during period of record (3 complete years)

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
M	0.55
Mean	0.55
50	0.08
55	0.08
60	0.06
65	0.06
70	0.05
75	0.05
80	0.05
85	0.05
90	0.03
95	0.03
99	0.02

Station name: Kakaako Gulch near Mauna Loa, Molokai, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.17431788
Longitude (decimal degrees): -157.20579429
Latitude/Longitude accuracy: 1 second
Horizontal datum: nad83
Altitude (feet): 380
Altitude accuracy (feet): 5
Basin area (square miles): 5.34

Period of record: 1963-1972 Complete water years: 1964-1972

Minimum daily mean discharge during period of record

discharge, cubic feer per second:

number of occurrences:

most recent occurrence:

0
3217
12/31/1971

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 134 number of occurrences: 1 most recent occurrence: 04/13/1965

Flow-duration characteristics based on complete water years during period of record (9 complete years)

Descentage of time discharge Discharge in

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	0.59
50	0
55	0
60	0
65	0
70	0
75	0
80	0
85	0
90	0

95

Station name: MOKOMOKO GULCH NR KALAE, MOLOKAI, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.14820527 Longitude (decimal degrees): -156.96107426

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 2200

Basin area (square miles):

0.23

Period of record: 1940-1945 Complete water years: 1941-1944

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 66 10/15/1944 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 15 number of occurrences: 08/25/1940 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (4 complete years)

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second

Station name: KAPUNA STREAM NEAR KALAE, MOLOKAI, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.14820540 Longitude (decimal degrees): -156.98218467

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 1900

Altitude accuracy (feet): not available Basin area (square miles): 0.18

Period of record: 1940-1950 Complete water years: 1941-1949

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 11/11/1949 97 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 5.9 number of occurrences: 03/09/1942 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (9 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	0.05
50	0.03
55	0.02
60	0.02
65	0.02
70	0.02
75	0.02
80	0.02
85	0.02
90	0.02
95	0.02
0.0	0

Station name: Kaunakakai Gulch at Kaunakakai, Molokai, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.10265140 Longitude (decimal degrees): -157.00662988 Latitude/Longitude accuracy: 1 second

Horizontal datum: nad83
Altitude (feet): 240
Altitude accuracy (feet): 25
Basin area (square miles): 6.57

Period of record: 1950-1998 Complete water years: 1951-1998

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0
number of occurrences: 15704
most recent occurrence: 12/30/1997

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 643 number of occurrences: 1 most recent occurrence: 04/08/1989

Flow-duration characteristics based on complete water years during period of record (48 complete years)

Percentage of time discharge Discharge in

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	1.9
50	0
55	0
60	0
65	0
70	0
75	0
80	0
85	0
90	0
95	0

Station name: Kaunakakai Gulch at altitude 75 feet, Molokai, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.09722222 Longitude (decimal degrees): -157.01416667 Latitude/Longitude accuracy: 1 second Horizontal datum: nad83 Altitude (feet): 75 Altitude accuracy (feet): 25

Basin area (square miles): 7.05

Period of record: 2003-2005 Complete water years: 2004-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0 number of occurrences: 767 most recent occurrence: 12/31/2004

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 128
number of occurrences: 1
most recent occurrence: 01/02/2004

Flow-duration characteristics based on complete water years during period of record (2 complete years)

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	1.8
50	0
55	0
60	0
65	0
70	0
75	0
80	0
85	0

0

90 95

Station name: EF KAWELA GULCH NR KAMALO, MOLOKAI, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.10987076 Longitude (decimal degrees): -156.90357539

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Basin area (square miles):

0.45 Altitude (feet): 3624.86

Period of record: 1947-1971 Complete water years: 1947-1971

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 3199 12/16/1970 3199 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 201 number of occurrences: 01/26/1948 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (25 complete years)

Percentage	of	time	discharge	Discharge, in

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	2.4
50	0.39
55	0.20
60	0.08
65	0
70	0
75	0
80	0
85	0
90	0
95	0
0.0	^

Station name: Kawela Gulch near Moku, Molokai, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.06959622 Longitude (decimal degrees): -156.94802144 Latitude/Longitude accuracy: 1 second Horizontal datum: nad83

Horizontal datum: nac Altitude (feet): 40 Altitude accuracy (feet): 25

Basin area (square miles): not available

Period of record: 2005 Complete water years: 2005

Minimum daily mean discharge during period of record

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 108
number of occurrences: 1
most recent occurrence: 01/18/2005

Flow-duration characteristics based on complete water years during period of record (1 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	3.1
50	0
55	0
60	0
65	0
70	0
75	0
80	0
85	0
90	0
95	0

99

Station name: PUNAULA GULCH NR PUKOO, MOLOKAI, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 21.09430959 Longitude (decimal degrees): -156.81052210

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 1200

Altitude accuracy (feet): not available Basin area (square miles): 0.24

Period of record: 1947-1972 Complete water years: 1948-1972

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.02 number of occurrences: 08/15/1971 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 63 number of occurrences: number of occurrences: 1 most recent occurrence: 01/26/1948

Flow-duration characteristics based on complete water years during period of record (25 complete years)

_____ Percentage of time discharge Discharge, in

equaled or exceeded	cubic feet per second
Mean	1.2
50	0.36
55	0.29
60	0.25
65	0.20
70	0.17
75	0.14
80	0.12
85	0.11
90	0.08
95	0.06
99	0.04

Station name: Papio Gulch at Halawa, Molokai, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 21.14540699 Longitude (decimal degrees): -156.73496245 Latitude/Longitude accuracy: 1 second Horizontal datum: nad83

Horizontal datum: nad83
Altitude (feet): 640
Altitude accuracy (feet): 25
Basin area (square miles): 0.94

Period of record: 1963-2005 Complete water years: 1964-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0
number of occurrences: 4889
most recent occurrence: 12/25/2003

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 164 number of occurrences: 1 most recent occurrence: 04/13/1965

Flow-duration characteristics based on complete water years during period of record (42 complete years)

Descentage of time discharge Discharge in

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	0.77
50	0.18
55	0.14
60	0.08
65	0.03
70	0
75	0
80	0
85	0
90	0
95	0
0.0	•

Station name: Kepuni Gulch near Kahikinui House, Maui, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 20.61931402 Longitude (decimal degrees): -156.25163424 Latitude/Longitude accuracy: 1 second Horizontal datum: nad83 Altitude (feet): 750

Altitude accuracy (feet): 20 Basin area (square miles): 1.19

Period of record: 1963-1972 Complete water years: 1964-1972

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 3365 12/31/1971 number of occurrences: most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 91 number of occurrences: 09/17/1963 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (9 complete years)

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	0.23
50	0

rican	0.23
50	0
55	0
60	0
65	0
70	0
75	0
80	0
85	0
90	0
95	0
99	0

Station name: Kukuiula Gulch near Kipahulu, Maui, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 20.65181219

Longitude (decimal degrees): -156.07608806

Latitude/Longitude accuracy: 1 second

Horizontal datum: nad83

Altitude (feet): 110

Horizontal datum: nad83
Altitude (feet): 110
Altitude accuracy (feet): 20
Basin area (square miles): 0.76

Period of record: 1963-1968 Complete water years: 1964-1965

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0
number of occurrences: 43
most recent occurrence: 11/06/1967

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 110
number of occurrences: 1
most recent occurrence: 01/19/1966

Flow-duration characteristics based on complete water years during period of record (2 complete years)

Development of time disaboves Disaboves in

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	5.1
50	1.4
55	1.2
60	1.1
65	0.90
70	0.77
75	0.65
80	0.46
85	0.39
90	0.29
95	0.15

Station name: PALIKEA STREAM BL DIV DAM NR KIPAHULU, MAUI, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 20.68097575 Longitude (decimal degrees): -156.06664437

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 1546

Basin area (square miles):

not available
6.29

Period of record: 1927-1929,1932-1983

Complete water years: 1928,1933-1934,1937,1940-1983

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 141 141 03/22/1983 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 3400 number of occurrences: most recent occurrence: 12/20/1955

Flow-duration characteristics based on complete water years during period of record (48 complete years)

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	57
50	5.0
55	2.7
60	1.6
65	1.0
70	0.68
75	0.43
80	0.25
85	0.12
90	0.06
95	0.03
99	0.01

Station name: Oheo Gulch at dam near Kipahulu, Maui, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 20.66819963
Longitude (decimal degrees): -156.05192295
Latitude/Longitude accuracy: 1 second
Horizontal datum: nad83
Altitude (feet): 420
Altitude accuracy (feet): 20
Basin area (square miles): 8.06

Period of record: 1988-1997,2003-2005 Complete water years: 1989-1997,2003-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0
number of occurrences: 40
most recent occurrence: 01/23/2003

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 2220
number of occurrences: 1
most recent occurrence: 11/19/1990

Flow-duration characteristics based on complete water years during period of record (12 complete years)

Percentage of time discharge Discharge, in equaled or exceeded cubic feet per second

equaled or exceeded	cubic feet per second
M	
Mean	53
50	6.3
55	5.1
60	4.2
65	3.4
70	2.7
75	2.2
80	1.8
85	1.4
90	1.0
95	0.61
99	0.01

Station name: HAHALAWE GULCH NEAR KIPAHULU, MAUI, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 20.67875407 Longitude (decimal degrees): -156.04442348

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 885

Altitude accuracy (feet): not available Basin area (square miles): 0.43

Period of record: 1927-1969

Complete water years: 1928-1934,1936,1939-1969

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.28 number of occurrences: 03/02/1941 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 354 number of occurrences: most recent occurrence: 04/16/1968

Flow-duration characteristics based on complete water years during period of record (39 complete years)

_____ Percentage of time discharge Discharge in

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	5.5
50	3.2
55	2.9
60	2.6
65	2.4
70	2.2
75	1.9
80	1.7
85	1.6
90	1.4
95	1.1
99	0.70

Station name: MAKAPIPI STREAM NEAR NAHIKU, MAUI, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 20.80679511 Longitude (decimal degrees): -156.09636362

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 920

Altitude accuracy (feet): not available Basin area (square miles): 1.93

Period of record: 1932-1945 Complete water years: 1933-1944

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 1071 12/22/1944 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 1220 number of occurrences: 04/07/1938 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (12 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	10
50	3.0
55	2.5
60	1.9
65	1.2
70	0.93
75	0.31
80	0
85	0
90	0
	0
95	U
0.0	0

Station name: Hanawi Stream near Nahiku, Maui, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 20.80707297 Longitude (decimal degrees): -156.11386264 Latitude/Longitude accuracy: 1 second Horizontal datum: nad83 Altitude (feet): 1318 Altitude accuracy (feet): Basin area (square miles): 3.49

Period of record: 1914-1916,1922-2005

Period of record: 1914-1916 Complete water years: 1923-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.90 number of occurrences: 10/31/1984 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 1610 number of occurrences: number of occurrences: 1 most recent occurrence: 01/25/1948

Flow-duration characteristics based on complete water years during period of record (83 complete years)

_____ Percentage of time discharge Discharge, in

equaled or exceeded	cubic feet per second
Mean	24
50	7.0
55	6.2
60	5.6
65	5.0
70	4.4
75	4.0
80	3.6
85	3.2
90	2.8
95	2.3
99	1.8

Station name: HANAWI STREAM BL GOVT RD NR NAHIKU, MAUI, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 20.81762706 Longitude (decimal degrees): -156.10358513

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 500

Altitude accuracy (feet): not available Basin area (square miles): 5.03

80

85

90

95

Period of record: 1932-1947,1992-1995 Complete water years: 1933-1946,1993-1995

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 8 02/29/1936 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 2320 number of occurrences: most recent occurrence: 04/07/1938

Flow-duration characteristics based on complete water years during period of record (17 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	40
50	20
55	20
~ ~	- •
60	19
65	19
70	18
75	18

18

17

17

16

Station name: KAPAULA GULCH NEAR NAHIKU, MAUI, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 20.80957265 Longitude (decimal degrees): -156.11525137

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 1346

Basin area (square miles):

not available
0.69

Period of record: 1922-1963 Complete water years: 1923-1962

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.31 number of occurrences: 10/04/1938 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 715 number of occurrences: most recent occurrence: 01/25/1948

Flow-duration characteristics based on complete water years during period of record (40 complete years)

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	17
50	5.2
55	4.5
60	4.0
65	3.6
70	3.1
75	2.8
80	2.4
85	2.0
90	1.7
95	1.4
99	0.77

Station name: KAPAULA GULCH BL GOVT RD NR NAHIKU, MAUI, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 20.81984908 Longitude (decimal degrees): -156.11219568

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 540

Altitude accuracy (feet): not available Basin area (square miles): 0.93

Period of record: 1932-1947 Complete water years: 1933-1946

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 02/11/1935 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 436 number of occurrences: 03/10/1942 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (14 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	12
50	2.6
55	2.5
60	2.3
65	2.3
70	2.2
75	2.2
80	2.2
85	2.0
90	2.0
95	1.9
99	1.9

Station name: WAIAAKA STREAM NEAR NAHIKU, MAUI, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 20.81901588 Longitude (decimal degrees): -156.11469555

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 650 Altitude (feet):

Altitude accuracy (feet): not available Basin area (square miles): 0.1

Period of record: 1932-1947 Complete water years: 1933-1946

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.45 number of occurrences: 06/17/1945 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 40 number of occurrences: 02/25/1935 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (14 complete years)

_____ Percentage of time discharge Discharge in

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	1.2
50	0.90
55	0.83
60	0.82
65	0.77
70	0.76
75	0.71
80	0.68
85	0.65
90	0.60
95	0.54
99	0.52

Station name: PAAKEA GULCH NEAR NAHIKU, MAUI, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 20.81901590 Longitude (decimal degrees): -156.11663989

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 650 Altitude (feet):

Altitude accuracy (feet): not available Basin area (square miles): 0.34

Period of record: 1932-1947 Complete water years: 1933-1946

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 2.7 number of occurrences: 02/13/1945 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 124 number of occurrences: 03/10/1942 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (14 complete years)

_____ Percentage of time discharge Discharge, in equaled or exceeded cubic feet per second _____

Mean	6.5	
50	4.2	
55	4.2	
60	3.9	
65	3.9	
70	3.7	
75	3.6	
80	3.5	
85	3.4	
90	3.2	
95	3.1	
99	2.9	

Station name: WAIOHUE GULCH NEAR NAHIKU, MAUI, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 20.81484993 Longitude (decimal degrees): -156.12636171

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 1316.2

Basin area (square miles): 0.32

Period of record: 1922-1963 Complete water years: 1923-1962

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 02/28/1963 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 325 number of occurrences: most recent occurrence: 01/25/1948

Flow-duration characteristics based on complete water years during period of record (40 complete years)

_____ Percentage of time discharge Discharge, in

referrage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
	1.0
Mean	12
50	6.5
55	6.0
60	5.6
65	5.3
70	4.9
75	4.5
80	4.2
85	3.9
90	3.6
95	3.1
0.0	٥ - ٦

Station name: KOPILIULA STREAM NEAR KEANAE, MAUI, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 20.81485013 Longitude (decimal degrees): -156.13386133

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 1292

Basin area (square miles): not available 4.31

Period of record: 1914-1917,1922-1958

Complete water years: 1915-1916,1922-1934,1937-1957

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 10/09/1953 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 1700 number of occurrences: number of occurrences: 1 most recent occurrence: 01/26/1948

Flow-duration characteristics based on complete water years during period of record (36 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
M	20
Mean	28
50	9.0
55	7.7
60	7.0
65	6.2
70	5.5
75	4.9
80	4.3
85	3.8
90	3.2
95	2.6
99	1.6

Station name: EAST WAILUAIKI STREAM NEAR KEANAE, MAUI, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 20.81429474 Longitude (decimal degrees): -156.13775005

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 1329

Altitude accuracy (feet): not available Basin area (square miles): 3.11

Period of record: 1914-1917,1922-1958 Complete water years: 1914-1917,1922-1958

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 10/10/1953 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 1430 number of occurrences: number of occurrences: 1 most recent occurrence: 01/25/1948

Flow-duration characteristics based on complete water years during period of record (37 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	31
50	10
55	9.0
60	8.0
65	7.1
70	6.5
75	5.7
80	5.1
85	4.5
90	3.8
95	3.1
99	2.2

Station name: West Wailuaiki Stream near Keanae, Maui, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 20.81790553 Longitude (decimal degrees): -156.14080533 Latitude/Longitude accuracy: 1 second Horizontal datum: nad83 Altitude (feet): 1343.1 Altitude accuracy (feet): 0.1 Basin area (square miles):

Period of record: 1914-1917,1922-2005 Period of record: 1914-1917,1922-2005 Complete water years: 1915,1917,1923-2005

Minimum daily mean discharge during period of record

3.66

discharge, cubic feer per second: 0.62 number of occurrences: 07/23/1922 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 2260 number of occurrences: number of occurrences: 1 most recent occurrence: 01/26/1948

Flow-duration characteristics based on complete water years during period of record (85 complete years)

_____ Percentage of time discharge Discharge, in

rerease or erme arbenarge	Dibonarge, in
equaled or exceeded	cubic feet per second
Mean	34
50	10
55	8.9
60	7.9
65	7.0
70	6.2
75	5.4
80	4.6
85	4.0
90	3.3
95	2.5
99	1.6

Station name: WEST WAILUANUI STREAM NEAR KEANAE, MAUI, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 20.82457159 Longitude (decimal degrees): -156.14524934

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 1268

Altitude accuracy (feet): not available Basin area (square miles): 1.93

Period of record: 1914-1917,1922-1958 Period of record: 1914-1917,1922-1958 Complete water years: 1915-1916,1923-1957

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.31 number of occurrences: 08/01/1922 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 973 number of occurrences: number of occurrences: 1 most recent occurrence: 01/26/1948

Flow-duration characteristics based on complete water years during period of record (37 complete years)

_____ Percentage of time discharge Discharge, in

	222011012307 211
equaled or exceeded	cubic feet per second
Mean	14
50	5.1
55	4.5
60	3.9
65	3.4
70	2.9
75	2.6
80	2.2
85	1.9
90	1.5
95	1.2
99	0.77

Station name: EAST WAILUANUI STREAM NEAR KEANAE, MAUI, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 20.82012751 Longitude (decimal degrees): -156.14080526

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 1287

Altitude accuracy (feet): not available

Basin area (square miles): 0.51

Period of record: 1914-1917,1922-1958 Complete water years: 1915-1917,1923-1957

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.31
number of occurrences: 6
most recent occurrence: 03/23/1928

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 326
number of occurrences: 1
most recent occurrence: 11/21/1924

Flow-duration characteristics based on complete water years during period of record (38 complete years)

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second

1	
Mean	8.6
50	3.7
55	3.2
60	2.9
65	2.6
70	2.3
75	2.0
80	1.8
85	1.5
90	1.3
95	1.0
99	0.65

Station name: WAILUANUI STREAM NR KEANAE, MAUI, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 20.83290375 Longitude (decimal degrees): -156.13830502

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 620

Altitude accuracy (feet): not available

Basin area (square miles): 2.51

Period of record: 1932-1936,1939-1947 Complete water years: 1933-1935,1940-1946

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.17
number of occurrences: 1
most recent occurrence: 06/13/1946

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 693 number of occurrences: 1 most recent occurrence: 04/25/1934

Flow-duration characteristics based on complete water years during period of record (10 complete years)

Percentage	of	time	discharge	Discharge, in	
-	-			1.1 6 .	-

equaled or	exceeded	cubic	feet	per	second
Mean				13	
50				1.3	
55				1.2	
60				1.1	
65			C	.93	
70			C	.84	
75			C	.76	
80			C	.65	
85			C	.56	
90			C	.45	
95			C	.36	
99			C	.28	

Station name: HONOMANU STR AT HAIKU-UKA BDRY NR KAILIILI, MAUI

Flow diverted or regulated?: Y
Latitude (decimal degrees): 20.81818454 Longitude (decimal degrees): -156.20108013

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 2900

Altitude accuracy (feet): not available Basin area (square miles): 2.54

Period of record: 1920-1927,1932-1935,1962-1969 Period of record: 1920-1927,1932-1935,1962-1969 Complete water years: 1921-1926,1933-1934,1963-1968

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.11 number of occurrences: 11/19/1962 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 564 number of occurrences: number of occurrences: 1 1/29/1968

Flow-duration characteristics based on complete water years during period of record (14 complete years)

_____ Percentage of time discharge Discharge in

equaled or exceeded	cubic feet per second
Mean	13
50	2.0
55	1.7
60	1.6
65	1.2
70	1.1
75	0.93
80	0.77
85	0.62
90	0.46
95	0.31
99	0.18

Station name: HONOMANU STREAM NEAR KEANAE, MAUI, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 20.83207185 Longitude (decimal degrees): -156.18552494

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 1733

Altitude accuracy (feet): not available Basin area (square miles): 3.17

Period of record: 1914-1964 Complete water years: 1915-1963

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.14 number of occurrences: 11/20/1962 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 1070 number of occurrences: 05/01/1916 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (49 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	23
50	6.2
55	5.3
60	4.6
65	4.0
70	3.6
75	3.1
80	2.6
85	2.2
90	1.7
95	1.1
99	0.62

Station name: HAIPUAENA STREAM AT KULA DIVERSION

Flow diverted or regulated?: N

Latitude (decimal degrees): 20.80374145 Longitude (decimal degrees): -156.22135722 Latitude/Longitude accuracy: unknown

Horizontal datum: unknown nad83

Altitude (feet): not available
Altitude accuracy (feet): not available
Basin area (square miles): not available

Period of record: 1946-1968 Complete water years: 1947-1967

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.02 number of occurrences: 132 most recent occurrence: 10/11/1967

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 62 number of occurrences: 1 most recent occurrence: 02/12/1960

Flow-duration characteristics based on complete water years during period of record (21 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	1.5
50	0.47
55	0.41
60	0.34
65	0.29
70	0.23
75	0.19
80	0.15
85	0.11
90	0.08
95	0.05
99	0.02

Station name: HAIPUAENA STR AT KULA PL INTK NR OLINDA, MAUI, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 20.80346370 Longitude (decimal degrees): -156.22135723

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 4320

Altitude accuracy (feet): not available Basin area (square miles): 0.27

Period of record: 1946-1968 Complete water years: 1947-1967

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 5326 12/30/1967 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 60 number of occurrences: most recent occurrence: 02/12/1960

Flow-duration characteristics based on complete water years during period of record (21 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	0.83
50	0
55	0
60	0
65	0
70	0
75	0
80	0
85	0
90	0
95	0
0.0	•

Station name: HAIPUAENA STR AT HAIKU-UKA BDY NR KAILIILI, MAUI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 20.82040663 Longitude (decimal degrees): -156.20607983

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 2860

Altitude accuracy (feet): not available Basin area (square miles): 0.63

Period of record: 1919-1927,1931-1935 Period of record: 1919-1927,1931-1935 Complete water years: 1920-1923,1925-1926,1932

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.12 number of occurrences: 11/21/1933 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 120 number of occurrences: number of occurrences: 1 most recent occurrence: 07/21/1931

Flow-duration characteristics based on complete water years during period of record (7 complete years)

_____ Percentage of time discharge Discharge in

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	5.6
50	1.7
55	1.5
60	1.2
65	1.1
70	0.93
75	0.77
80	0.77
85	0.62
90	0.62
95	0.46
99	0.15

Station name: HAIPUAENA STR AB SPRECKELS DITCH NR HUELO, MAUI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 20.84818143 Longitude (decimal degrees): -156.18857990

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Basin area (square miles): 1.16 Altitude (feet): 1512.22

Period of record: 1914-1967 Complete water years: 1915-1966

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.15 number of occurrences: 10/10/1953 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 835 number of occurrences: most recent occurrence: 12/20/1946

Flow-duration characteristics based on complete water years during period of record (52 complete years)

Dercentage	οf	time	discharge	Discharge	in

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	15
50	5.3
55	4.6
60	4.0
65	3.4
70	2.9
75	2.5
80	2.0
85	1.6
90	1.1
95	0.54
99	0.28

16542000 E B PUOHOKAMOA STR AT HAIKU-UKA BDRY NR KAILIILI Station name:

Flow diverted or regulated?: N

Latitude (decimal degrees): 20.82318419 Longitude (decimal degrees): -156.20830187

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 2800

Altitude accuracy (feet): not available Basin area (square miles): 0.14

Period of record: 1920-1927,1931-1933 Period of record: 1920-1927,1931. Complete water years: 1921-1926,1932

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0 number of occurrences: 14 06/07/1925 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 40 number of occurrences: number of occurrences: 1 1/21/1924

Flow-duration characteristics based on complete water years during period of record (7 complete years)

_____ Percentage of time discharge Discharge in

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	1.9
50	0.77
55	0.77
60	0.62
65	0.62
70	0.62
75	0.46
80	0.46
85	0.46
90	0.31
95	0.31
99	0 12

Station name: M B PUOHOKAMOA STR AT HAIKU-UKA BDRY NR KAILIILI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 20.82457299 Longitude (decimal degrees): -156.21135725

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 2900

Altitude accuracy (feet): not available Basin area (square miles): 0.48

Period of record: 1919-1927,1932-1934,1962-1969 Period of record: 1919-1927,1932-1934,1962. Complete water years: 1920-1926,1933,1963-1968

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.06 number of occurrences: 6 11/20/1962 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 186 number of occurrences: number of occurrences: 1 most recent occurrence: 04/25/1934

Flow-duration characteristics based on complete water years during period of record (14 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	3.8
50	1.3
55	1.1
60	0.93
65	0.91
70	0.76
75	0.62
80	0.46
85	0.46
90	0.31
95	0.19
99	0.09

Station name: W B PUOHOKAMOA STR AT HAIKU-UKA BDRY NR KAILIILI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 20.82873932 Longitude (decimal degrees): -156.21385704

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 2800

Altitude accuracy (feet): not available Basin area (square miles): 0.45

Period of record: 1919-1928,1932-1935 Complete water years: 1920-1927,1933-1934

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.08 number of occurrences: 10 06/30/1921 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 155 number of occurrences: number of occurrences: 1 most recent occurrence: 04/25/1934

Flow-duration characteristics based on complete water years during period of record (10 complete years)

Percentage of time discharge	Discharge,	in
equaled or exceeded	cubic feet per	second

Mean	5.5
50	1.7
55	1.5
60	1.2
65	1.2
70	1.0
75	0.93
80	0.77
85	0.62
90	0.62
95	0.46
99	0.15

Station name: PUOHOKAMOA STR AB SPRECKELS DITCH NR HUELO, MAUI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 20.85262534 Longitude (decimal degrees): -156.18857979

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 1322.04

Altitude accuracy (feet): not available Basin area (square miles): 2.35

Period of record: 1913-1972 Complete water years: 1914-1971

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.62 number of occurrences: 10/26/1917 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 984 number of occurrences: number of occurrences: 11/29/1968

Flow-duration characteristics based on complete water years during period of record (58 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean 50	33 13
55	11
60	9.9
65	8.7
70	7.5
75	6.5
80	5.6
85	4.6
90	3.7
95	2.8

1.5

Station name: WAIKAMOI STREAM AT PUU LUAU NR OLINDA, MAUI, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 20.78374306 Longitude (decimal degrees): -156.23496797

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 5750

Altitude accuracy (feet): not available

Basin area (square miles): 2.1

Period of record: 1950-1967

Complete water years: 1951-1958,1960-1966

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0
number of occurrences: 5742
most recent occurrence: 11/30/1966

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 404
number of occurrences: 1
most recent occurrence: 12/10/1954

Flow-duration characteristics based on complete water years during period of record (15 complete years)

Percentage of time discharge Discharge in

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	0.55
50	0
55	0
60	0
65	0
70	0
75	0
80	0
85	0
90	0
95	0

Station name: WAIKAMOI STR AB RES AT KULA PL INTAKE NR OLINDA

Flow diverted or regulated?: Y

Latitude (decimal degrees): 20.80457474 Longitude (decimal degrees): -156.23107892

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 4487

Basin area (square miles): not available 2.5

Period of record: 1953-1968 Complete water years: 1954-1968

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 52 11/22/1962 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 473 number of occurrences: most recent occurrence: 12/10/1954

Flow-duration characteristics based on complete water years during period of record (15 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	2.1
50	0.12
55	0.11
60	0.08
65	0.08
70	0.06
75	0.06
80	0.05
85	0.04
90	0.03
95	0.02
99	0.01

Station name: WAIKAMOI STR AT HAIKU-UKA BDRY NR KAILIILI, MAUI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 20.82873940 Longitude (decimal degrees): -156.21996786

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 3000

Altitude accuracy (feet): not available Basin area (square miles): 3.46

Period of record: 1918,1920-1928,1932-1935 Complete water years: 1920-1927,1933-1934

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.15 number of occurrences: 11/24/1933 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 500 number of occurrences: number of occurrences: 1 1/22/1921

Flow-duration characteristics based on complete water years during period of record (10 complete years)

Percentage	of	time	discharge	Discharge in

equaled or exceeded	cubic feet per second
Mean	12
50	2.2
55	1.9
60	1.7
65	1.4
70	1.2
75	1.1
80	0.93
85	0.77
90	0.62
95	0.46
0.0	0.21

Station name: E BR WAIKAMOI STR AT HAIKU-UKA BDRY NR KAILIILI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 20.82790614 Longitude (decimal degrees): -156.21996788

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 3020

Altitude accuracy (feet): not available Basin area (square miles): 0.07

Period of record: 1918-1928,1932-1933

Complete water years: 1918-1928 1919-1927

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.31 number of occurrences: 107 11/23/1932 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 104 number of occurrences: number of occurrences: 1 1/22/1921

Flow-duration characteristics based on complete water years during period of record (9 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	4.2
50	1.4
55	1.2
60	1.1
65	0.93
70	0.93
75	0.77
80	0.62
85	0.62
90	0.46
95	0.46
99	0.31

Station name: WAIKAMOI STR AB WAILOA DITCH NR HUELO, MAUI, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 20.85845835 Longitude (decimal degrees): -156.19691262

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 1293.59

Altitude accuracy (feet): not available Basin area (square miles): 3.93

Period of record: 1922-1958 Complete water years: 1923-1957

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.20 number of occurrences: 10/10/1953 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 2460 number of occurrences: most recent occurrence: 01/26/1948

Flow-duration characteristics based on complete water years during period of record (35 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	25
50	7.9
55	7.0
60	6.0
65	5.3
70	4.5
75	3.8
80	3.1
85	2.5
90	1.9
95	1.3
99	0.57

Station name: WAIKAMOI STREAM NEAR HUELO, MAUI, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 20.86123575 Longitude (decimal degrees): -156.19552373

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 1150

Basin area (square miles):

not available
3.98

Period of record: 1911-1922 Complete water years: 1912-1921

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.31 number of occurrences: 07/14/1920 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 1300 number of occurrences: most recent occurrence: 05/01/1916

Flow-duration characteristics based on complete water years during period of record (10 complete years)

Dercentage	οf	time	discharge	Discharge	in

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	28
50	9.3
55	7.7
60	6.7
65	5.9
70	4.9
75	4.0
80	3.6
85	2.8
90	2.2
95	1.4
۵۵	0.61

Station name: ALO STREAM NEAR HUELO, MAUI, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 20.85956921 Longitude (decimal degrees): -156.19413494

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Basin area (square miles): 0.47 Altitude (feet): 1248.38

Period of record: 1911-1958 Complete water years: 1912-1957

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.11 number of occurrences: 11/04/1911 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 248 number of occurrences: 01/03/1927 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (46 complete years)

_____ Percentage of time discharge Discharge in

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	7.4
50	3.1
55	2.6
60	2.3
65	2.0
70	1.7
75	1.5
80	1.3
85	1.1
90	0.93
95	0.74
99	0.49

Station name: KAAIEA GULCH NEAR HUELO, MAUI, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 20.86401346 Longitude (decimal degrees): -156.20191230

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 1310

Basin area (square miles): not available 0.58

Period of record: 1922-1962 Complete water years: 1923-1961

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 05/31/1945 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 209 number of occurrences: 04/02/1961 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (39 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	6.8
50	2.9
55	2.5
60	2.2
65	1.9
70	1.7
75	1.5
80	1.3
85	1.1
90	0.93
95	0.77
99	0.56

Station name: OOPUOLA STREAM NEAR HUELO, MAUI, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 20.86817981 Longitude (decimal degrees): -156.20524541

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 1205

Altitude accuracy (feet): not available Basin area (square miles): 0.2

Period of record: 1930-1958 Complete water years: 1931-1957

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.06 number of occurrences: 10/29/1943 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 127 number of occurrences: number of occurrences: 1 1/22/1957

Flow-duration characteristics based on complete water years during period of record (27 complete years)

_____ Percentage of time discharge Discharge, in

equaled or exceeded	cubic feet per second
Mean	2.7
50	1.1
55	0.99
60	0.85
65	0.74
70	0.62
75	0.56
80	0.46
85	0.39
90	0.32
95	0.28
99	0.18

Station name: OOPUOLA STR AB SPRECKELS DITCH CRSNG NR HUELO, MA

Flow diverted or regulated?: Y

Latitude (decimal degrees): 20.87456781 Longitude (decimal degrees): -156.20135653

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 960

Altitude accuracy (feet): not available Basin area (square miles): 0.58

Period of record: 1911-1915 Complete water years: 1912-1914

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.31 number of occurrences: 04/08/1915 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 207 number of occurrences: 04/27/1915 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (3 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	9.1
50	2.4
55	1.9
60	1.4
65	1.2
70	1.1
75	0.90
80	0.80
85	0.80
90	0.70
95	0.70
99	0.54

Station name: NAILIIHAELE STREAM NR HUELO, MAUI, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 20.87123544 Longitude (decimal degrees): -156.21552273

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 1205 Altitude (feet):

Basin area (square miles):

not available
3.49

Period of record: 1911-1912,1914-1975

Complete water years: 1915-1917,1921-1923,1926-1974

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: most recent occurrence: 07/14/1920

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 1180 number of occurrences: 05/01/1916 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (55 complete years)

Percentage	of	time	discharge	Discharge, in

equaled or exceeded	cubic feet per second
Mean	37
50	17
55	15
60	13
65	12
70	11
75	9.4
80	8.2
85	7.0
90 95	5.8 4.5
99	3.1
	3 · ±

Station name: KAILUA STR AT HAIKU-UKA BDRY NR KAILIILI, MAUI, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 20.83290582 Longitude (decimal degrees): -156.23746698

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 3080

Altitude accuracy (feet): not available

Basin area (square miles): 0.8

Period of record: 1918-1928,1932-1935 Complete water years: 1920-1927,1933-1934

Minimum daily mean discharge during period of record

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 224 number of occurrences: 1 most recent occurrence: 04/25/1934

Flow-duration characteristics based on complete water years during period of record (10 complete years)

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Maan	6.2

Mean 50 55 60 65 70 75 80 85 90	6.3 0.54 0.31 0.29 0.20 0.15 0.12 0.09 0.08
99	0.01

Station name: KAILUA STREAM NR KAILIILI, MAUI, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 20.83790540 Longitude (decimal degrees): -156.23718912

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 2840

Basin area (square miles):

not available

1.1

Period of record: 1963-1971 Complete water years: 1964-1971

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.04 number of occurrences: 6 10/10/1967 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 408 number of occurrences: most recent occurrence: 11/29/1968

Flow-duration characteristics based on complete water years during period of record (8 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	6.9
50	1.1
55	0.87
60	0.71
65	0.58
70	0.48
75	0.39
80	0.28
85	0.23
90	0.16
95	0.10
99	0.05

Station name: KAILUA STREAM NEAR HUELO, MAUI, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 20.87317991 Longitude (decimal degrees): -156.22080027

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 1252.99

Basin area (square miles):

2.32.39

not available

2.41

Period of record: 1913-1958

Complete water years: 1915,1917,1920-1957

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.15 number of occurrences: 06/27/1921 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 1780 number of occurrences: 01/25/1948 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (40 complete years)

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	29
50	9.3
55	8.0
60	7.1
65	6.2
70	5.4
75	4.6
80	3.9
85	3.4
90	2.6
95	1.7
99	0.31

Station name: HOOLAWANUI STREAM NR HUELO, MAUI, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 20.88401260 Longitude (decimal degrees): -156.24496575

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 1219.42

Altitude accuracy (feet): not available Basin area (square miles): 1.34

Period of record: 1911-1972 Complete water years: 1912-1971

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.23 number of occurrences: 10/26/1917 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 936 number of occurrences: number of occurrences: 1 most recent occurrence: 02/25/1956

Flow-duration characteristics based on complete water years during period of record (60 complete years)

_____ Percentage of time discharge Discharge, in

equaled or exceeded	cubic feet per second
Mean	12
50	5.6
55	4.9
60	4.3
65	3.8
70	3.3
75	2.9
80	2.5
85	2.1
90	1.7
95	1.2
99	0.74

Station name: HOOLAWALIILII STREAM NEAR HUELO, MAUI, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 20.88484579 Longitude (decimal degrees): -156.24024370

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 1245

Altitude accuracy (feet): not available

Basin area (square miles): 0.55

Period of record: 1912-1958 Complete water years: 1913-1957

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.77
number of occurrences: 8
most recent occurrence: 11/24/1933

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 441
number of occurrences: 1
most recent occurrence: 04/03/1918

Flow-duration characteristics based on complete water years during period of record (45 complete years)

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second

equated of	checeaea	Cabic	1000	PCL	become
Mean				7.5	
50				4.4	
55				4.0	
60				3.7	
65				3.4	
70				3.2	
75				3.0	
80				2.8	
85				2.5	
90				2.2	
95				1.8	
99				1.2	

Station name: Honopou Stream near Huelo, Maui, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 20.88567925 Longitude (decimal degrees): -156.25274314 Latitude/Longitude accuracy: 1 second

Horizontal datum: nad83
Altitude (feet): 1208
Altitude accuracy (feet): 1
Basin area (square miles): 0.64

Period of record: 1911-2005 Complete water years: 1912-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.11
number of occurrences: 9
most recent occurrence: 11/18/1984

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 305
number of occurrences: 1
most recent occurrence: 04/07/1989

Flow-duration characteristics based on complete water years during period of record (94 complete years)

Percentage	of	time	discharge	Discharge, in

refrentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	4.8
50	2.4
55	2.1
60	1.9
65	1.6
70	1.4
75	1.2
80	1.1
85	0.87
90	0.72
95	0.54
99	0.31

Station name: HONOPOU STR AT LOWRIE DITCH SIPHON NR HUELO, MAUI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 20.91067649 Longitude (decimal degrees): -156.24996506

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 556.95

Altitude accuracy (feet): not available

Basin area (square miles): 2

Period of record: 1932-1947 Complete water years: 1933-1946

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.05 number of occurrences: 1 most recent occurrence: 12/07/1940

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 339 number of occurrences: 1 most recent occurrence: 12/21/1946

Flow-duration characteristics based on complete water years during period of record (14 complete years)

Percentage of time discharge Discharge in

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mana	
Mean	2.0
50	0.22
55	0.22
60	0.20
65	0.19
70	0.19
75	0.17
80	0.15
85	0.15
90	0.14
95	0.11
9.0	0 09

Station name: HONOPOU STR AB HAIKU DITCH NR HUELO, MAUI, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 20.91289836 Longitude (decimal degrees): -156.24746514

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 440.76

Altitude accuracy (feet): not available

Basin area (square miles): 2.2

Period of record: 1932-1947 Complete water years: 1933-1946

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.14 number of occurrences: 1 most recent occurrence: 01/09/1934

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 181 number of occurrences: 1 most recent occurrence: 10/23/1941

Flow-duration characteristics based on complete water years during period of record (14 complete years)

Percentage of time discharge Discharge in

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	2.4
50	0.68
55	0.62
60	0.57
65	0.56
70	0.50
75	0.46
80	0.45
85	0.40
90	0.36
95	0.26
99	0 17

Station name: HONOPOU STR BELOW HAIKU DITCH NR HUELO, MAUI, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 20.91567570 Longitude (decimal degrees): -156.24552074

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 383.41

Altitude accuracy (feet): not available

Basin area (square miles): 2.3

Period of record: 1907,1932-1947 Complete water years: 1933-1946

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.03 number of occurrences: 3 most recent occurrence: 08/10/1945

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 524
number of occurrences: 1
most recent occurrence: 12/21/1946

Flow-duration characteristics based on complete water years during period of record (14 complete years)

Percentage of time discharge Discharge. in

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	7.8
50	1.2
55	1.1
60	1.0
65	0.96
70	0.87
75	0.87
80	0.71
85	0.63
90	0.51
95	0.45
99	0.12

Station name: HALEHAKU GULCH NR KAILIILI, MAUI, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 20.84484936 Longitude (decimal degrees): -156.25079952

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 2610

Altitude accuracy (feet): not available

Basin area (square miles): 0.13

Period of record: 1965-1971 Complete water years: 1966-1971

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.04
number of occurrences: 7
most recent occurrence: 09/02/1971

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 18 number of occurrences: 1 most recent occurrence: 02/02/1969

Flow-duration characteristics based on complete water years during period of record (6 complete years)

Percentage	of	time	discharge	Discharge, in

equaled or exceeded	cubic feet per second
Mean	1.00
50	0.51
55	0.42
60	0.37
65	0.32
70	0.26
75	0.23
80	0.20
85	0.14
90	0.12
95	0.08
99	0.05

Station name: AWALAU GULCH AT KAILIILI, MAUI, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 20.84984917 Longitude (decimal degrees): -156.27079855

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 2260

Basin area (square miles): not available 0.23

Period of record: 1965-1971 Complete water years: 1966-1971

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.07 number of occurrences: 9 11/25/1968 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 92 number of occurrences: 04/05/1965 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (6 complete years)

Percentage	of	time	discharge	Discharge, in

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	3.8
50	2.7
55	2.1
60	1.8
65	1.3
70	1.0
75	0.65
80	0.45
85	0.29
90	0.18
95	0.11
99	0.08

Station name: Iao Stream at Kepaniwai Park nr Wailuku, Maui, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 20.88234810
Longitude (decimal degrees): -156.53939915
Latitude/Longitude accuracy: 1 second
Horizontal datum: nad83
Altitude (feet): 780
Altitude accuracy (feet): 20
Basin area (square miles): 5.98

Period of record: 1983-2005 Complete water years: 1984-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 11
number of occurrences: 29
most recent occurrence: 09/29/2004

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 1700
number of occurrences: 1
most recent occurrence: 03/22/2004

Flow-duration characteristics based on complete water years during period of record (22 complete years)

Percentage of time discharge Discharge, in equaled or exceeded cubic feet per second

Mean 65
50 40

Mean	65
50	40
55	36
60	33
65	30
70	28
75	25
80	24
85	22
90	20
95	17
99	13

Station name: WAIHEE RIVER NR WAIHEE, MAUI, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 20.93567724 Longitude (decimal degrees): -156.54662059

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 620

Altitude accuracy (feet): not available Basin area (square miles): 3.9

Period of record: 1913-1917

Complete water years: 1914

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 1 most recent occurrence: 03/21/1917

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 859 number of occurrences: 01/09/1916 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (1 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	114
50	85
55	65
60	56
65	51
70	46
75	46
80	45
85	43
90	42
95	40
۵۵	2.0

Station name: Waihee River at Dam near Waihee, Maui, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 20.93595500 Longitude (decimal degrees): -156.54689835 Latitude/Longitude accuracy: 1 second Horizontal datum: nad83

Altitude (feet): 605
Altitude accuracy (feet): 20
Basin area (square miles): 4.2

Period of record: 1984-2005 Complete water years: 1985-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 22
number of occurrences: 6
most recent occurrence: 01/25/1985

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 1160 number of occurrences: 1 most recent occurrence: 01/28/1988

Flow-duration characteristics based on complete water years during period of record (21 complete years)

Percentage of time discharge Discharge, in

equaled or	exceeded	cubic	feet	per	second
Mean				76	
50				54	
55				52	
60				49	
65				47	
70				45	
75				44	
80				42	
85				40	
90				38	
95				35	
99				27	

Station name: LEFT BR MAKAMAKAOLE STREAM NR WAIHEE, MAUI, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 20.95650889 Longitude (decimal degrees): -156.54689814

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 1500

Basin area (square miles):

not available

0.4

Period of record: 1939-1952 Complete water years: 1940-1951

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.66 number of occurrences: 01/10/1946 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 88 number of occurrences: most recent occurrence: 03/09/1942

Flow-duration characteristics based on complete water years during period of record (12 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	2.9
50	1.6
55	1.5
60	1.4
65	1.3
70	1.2
75	1.1
80	1.1
85	0.97
90	0.90
95	0.83
99	0.74

Station name: Kahakuloa Stream near Honokohau, Maui, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 20.97845168
Longitude (decimal degrees): -156.55439765
Latitude/Longitude accuracy: 1 second
Horizontal datum: nad83
Altitude (feet): 330

Altitude (feet): 330
Altitude accuracy (feet): 20
Basin area (square miles): 3.47

Period of record: 1939-1943,1948-1971,1975-2005 Complete water years: 1940-1942,1948-1970,1976-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 2.7
number of occurrences: 4
most recent occurrence: 02/12/1985

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 823 number of occurrences: 1 most recent occurrence: 03/22/2004

Flow-duration characteristics based on complete water years during period of record (56 complete years)

Percentage	of	time	discharge	Discharge, in

equaled or	exceeded	cubic feet	per second
			10
Mean			18
50			8.8
55			8.2
60			7.6
65			7.2
70			6.8
75			6.3
80			6.0
85			5.6
90			5.2
95			4.5
99			3.6

Station name: Honokohau Stream near Honokohau, Maui, HI

Flow diverted or regulated?: N

Basin area (square miles):

95

Latitude (decimal degrees): 20.95928688
Longitude (decimal degrees): -156.58661899
Latitude/Longitude accuracy: 1 second
Horizontal datum: nad83
Altitude (feet): 870
Altitude accuracy (feet): 20

Period of record: 1913-1920,1922-1989,1991-2005 Complete water years: 1914-1919,1923-1988,1991-2005

4.11

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 8.0 number of occurrences: 1 most recent occurrence: 08/10/1920

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 800 number of occurrences: 1 most recent occurrence: 03/22/2004

Flow-duration characteristics based on complete water years during period of record (87 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	39
50	24
55	22
60	20
65	19
70	18
75	17
80	16
85	15
90	13

12

Station name: HONOLUA STREAM NR HONOKOHAU, MAUI, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 20.98067432 Longitude (decimal degrees): -156.61800658

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 840

Altitude accuracy (feet): not available Basin area (square miles): 2.9

Period of record: 1913-1917 Complete water years: 1914-1916

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 02/03/1916 1 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 248 number of occurrences: most recent occurrence: 01/09/1916

Flow-duration characteristics based on complete water years during period of record (3 complete years)

_____ Percentage of time discharge Discharge, in

rerectioned or erme arbeitarge	Dibonarge, in
equaled or exceeded	cubic feet per second
Mean	11
50	4.6
55	4.6
60	3.6
65	3.1
70	2.8
75	2.2
80	2.2
85	1.5
90	1.1
95	0.62

0.39

Station name: HONOKOWAI STREAM NR LAHAINA, MAUI, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 20.93290029 Longitude (decimal degrees): -156.62328495

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 1440

Altitude accuracy (feet): not available

Basin area (square miles): 1.1

Period of record: 1911-1917 Complete water years: 1915-1916

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0
number of occurrences: 63
most recent occurrence: 09/30/1913

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 173
number of occurrences: 1
most recent occurrence: 01/07/1916

Flow-duration characteristics based on complete water years during period of record (2 complete years)

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Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	7.6
50	1.1
55	1.1
60	0.93
65	0.62
70	0.46
75	0.46
80	0.31
85	0.31
90	0.31
95	0.31
99	0.31

Station name: KAHOMA STREAM NR LAHAINA, MAUI, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 20.90123600 Longitude (decimal degrees): -156.62328544

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 1940

Altitude accuracy (feet): not available Basin area (square miles): 1.19

Period of record: 1912-1917 Complete water years: 1914-1916

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 339 11/26/1914 339 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 1020 number of occurrences: most recent occurrence: 01/18/1916

Flow-duration characteristics based on complete water years during period of record (3 complete years)

_____ Percentage of time discharge Discharge, in

equaled or exceeded	cubic feet per second
Mean	15
50	5.7
55	5.4
60	4.2
65	3.9
70	3.9
75	1.5
80	0.31
85	0
90	0
95	0
0.0	0

Station name: KANAHA STREAM AB PL INTAKE NR LAHAINA, MAUI, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 20.89262570 Longitude (decimal degrees): -156.64161844

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 1057

Altitude accuracy (feet): not available Basin area (square miles): 1.51

Period of record: 1916-1932

Complete water years: 1917-1924,1927-1931

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 3 05/05/1931 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 221 number of occurrences: 04/14/1918 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (13 complete years)

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	7.7
50	4.9
55	4.8
60	4.5
65	4.3
70	4.3
75	4.0
80	3.7
85	3.6
90	3.4
95	3.1
99	2.8

Station name: KANAHA STREAM NR LAHAINA, MAUI, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 20.89234829 Longitude (decimal degrees): -156.65689591

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 540

Altitude accuracy (feet): not available Basin area (square miles): 1.83

Period of record: 1911-1916 Complete water years: 1912-1915

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.31 number of occurrences: 09/06/1915 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 142 number of occurrences: number of occurrences: 1 1/28/1914

Flow-duration characteristics based on complete water years during period of record (4 complete years)

_____ Percentage of time discharge Discharge, in

rerectived or erme arbeitarge	Dibenarge, in
equaled or exceeded	cubic feet per second
Mean	5.3
50	1.6
55	1.5
60	1.4
65	1.3
70	1.2
75	1.2
80	1.0
85	0.93
90	0.77
95	0.62
99	0.50

Station name: Kahoma Stream at Lahaina, Maui, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 20.88346096 Longitude (decimal degrees): -156.67384033 Latitude/Longitude accuracy: 1 second Horizontal datum: nad83

Horizontal datum: nad8:
Altitude (feet): 100
Altitude accuracy (feet): 20
Basin area (square miles): 5.22

Period of record: 1963-1990 Complete water years: 1964-1989

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0
number of occurrences: 7553
most recent occurrence: 12/31/1989

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 403
number of occurrences: 1
most recent occurrence: 11/21/1987

Flow-duration characteristics based on complete water years during period of record (26 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	3.5
50	0
55	0
60	0
65	0
70	0
75	0
80	0
85	0
90	0
95	0
	_

Station name: KAUAULA STREAM NR LAHAINA, MAUI, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 20.87762623 Longitude (decimal degrees): -156.62217439

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 1550

Altitude accuracy (feet): not available Basin area (square miles): 1.84

Period of record: 1914-1917 Complete water years: 1915

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 42 05/07/1914 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 1140 number of occurrences: most recent occurrence: 01/09/1916

Flow-duration characteristics based on complete water years during period of record (1 complete years)

_____ Percentage of time discharge Discharge, in

equaled or exceeded	cubic feet per second
Mean	14
50	9.6
55	9.6
60	9.6
65	9.6
70	9.6
75	9.6
80	9.6
85	9.6
90	8.0
95	8.0
99	8 0

Station name: LAUNIUPOKO STREAM NR LAHAINA, MAUI, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 20.85457245 Longitude (decimal degrees): -156.61578586

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 1280

Basin area (square miles):

1.13

Period of record: 1911-1917 Complete water years: 1912,1914-1915

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 305 3U5 12/31/1913 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 31 number of occurrences: 03/01/1914 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (3 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	2.0
50	1.5
55	1.4
60	1.4
65	1.3
70	1.3
75	1.0
80	0.77
85	0.77
90	0.77
95	0.77
99	0.77

Station name: Olowalu Stream at Olowalu, Maui, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 20.81985336 Longitude (decimal degrees): -156.61800856 Latitude/Longitude accuracy: 1 second Horizontal datum: nad83

Horizontal datum: nad83
Altitude (feet): 130
Altitude accuracy (feet): 20
Basin area (square miles): 4.08

Period of record: 1963-1973 Complete water years: 1964-1973

Minimum daily mean discharge during period of record

discharge, cubic feer per second:

number of occurrences:

most recent occurrence:

2882

12/30/1972

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 278
number of occurrences: 1
most recent occurrence: 03/04/1972

Flow-duration characteristics based on complete water years during period of record (10 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	3.7
50	0
55	0
60	0
65	0
70	0
75	0
80	0
85	0
90	0
95	0

Station name: UKUMEHAME GULCH NR OLOWALU, MAUI, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 20.81957545 Longitude (decimal degrees): -156.58356513

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 410

Altitude accuracy (feet): not available Basin area (square miles): 3.75

Period of record: 1911-1920 Complete water years: 1914-1915,1919

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 1 12/09/1919 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 156 number of occurrences: 08/04/1914 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (3 complete years)

_____ Percentage of time discharge Discharge in

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	14
50	8.0
55	7.7
60	7.4
65	6.7
70	6.3
75	5.9
80	5.6
85	5.4
90	5.0
95	4.5
۵۵	4 5

Station name: Kulanihakoi Gulch near Kihei, Maui, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 20.76513500 Longitude (decimal degrees): -156.44801462 Latitude/Longitude accuracy: 1 second

Horizontal datum: nad83
Altitude (feet): 35
Altitude accuracy (feet): 10
Basin area (square miles): 14.4

Period of record: 1963-1970 Complete water years: 1964-1970

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0
number of occurrences: 2849
most recent occurrence: 12/31/1969

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 408 number of occurrences: 1 most recent occurrence: 03/24/1967

Flow-duration characteristics based on complete water years during period of record (7 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	0.32
50	0
55	0
60	0
65	0
70	0
75	0
80	0
85	0
90	0
95	0
• •	•

Station name: Waiakea Stream at Hoaka Road, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 19.66111111
Longitude (decimal degrees): -155.12222222
Latitude/Longitude accuracy: 1 second
Horizontal datum: nad83
Altitude (feet): 860
Altitude accuracy (feet): 10

Basin area (square miles): not available

Period of record: 2004-2005 Complete water years: 2004-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second:

number of occurrences:

most recent occurrence:

12/26/2004

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 440 number of occurrences: 1 most recent occurrence: 04/12/2004

Flow-duration characteristics based on complete water years during period of record (2 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	15
50	0.36
55	0.08
60	0
65	0
70	0
75	0
80	0
85	0
90	0
95	0
99	0

Station name: LYMAN SPRINGS NO. 2 NEAR PIIHONUA, HAWAII, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 19.69751692 Longitude (decimal degrees): -155.17389635

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 1700

Altitude accuracy (feet): not available Basin area (square miles): not available

Period of record: 1981-1995 Complete water years: 1982-1995

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.03 number of occurrences: 3 most recent occurrence: 03/31/1983

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 52 number of occurrences: 7 most recent occurrence: 12/28/1992

Flow-duration characteristics based on complete water years during period of record (14 complete years)

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Moan	1 Q

Mean 50 55 60 65 70 75 80 85 90	4.8 4.4 4.3 4.1 3.9 3.7 3.4 3.0 2.4 1.4	
99	0.16	

Station name: WAIAKEA STREAM NEAR HILO, HAWAII, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 19.69196232 Longitude (decimal degrees): -155.09473060

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 369

Altitude accuracy (feet): not available Basin area (square miles): 33.6

Period of record: 1957-1967 Complete water years: 1958-1966

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 3067 12/25/1966 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 608 number of occurrences: number of occurrences: 1 most recent occurrence: 05/25/1964

Flow-duration characteristics based on complete water years during period of record (9 complete years)

_____ Percentage of time discharge Discharge, in

rerectived or erme arbeitarge	Dibonarge, in
equaled or exceeded	cubic feet per second
Mean	5.3
50	0
55	0
60	0
65	0
70	0
75	0
80	0
85	0
90	0
95	0

Station name: Waiakea Stream at Hilo, HI

Flow diverted or regulated?: Y

Longitude (decimal degrees): -155.08111970
Latitude/Longitude accuracy: 1 second
Horizontal datum: nad83
Altitude (feet): 80
Altitude accuracy (feet): 10

Latitude (decimal degrees): 19.70751710

Altitude (feet): 80
Altitude accuracy (feet): 10
Basin area (square miles): 35.8

Period of record: 2004-2005 Complete water years: 2004-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0 number of occurrences: 657 most recent occurrence: 12/31/2004

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 359
number of occurrences: 1
most recent occurrence: 04/12/2004

Flow-duration characteristics based on complete water years during period of record (2 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
equated of exceeded	cubic feet per second
Mean	4.3
50	0
55	0
60	0
65	0
70	0
75	0
80	0
85	0
90	0
95	0
99	0

Station name: Alenaio Stream at Hilo, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 19.71668316 Longitude (decimal degrees): -155.08806424 Latitude/Longitude accuracy: 1 second Horizontal datum: nad83

Horizontal datum: nad8:
Altitude (feet): 80
Altitude accuracy (feet): 10
Basin area (square miles): 8.62

Period of record: 2005 Complete water years: 2005

 ${\tt Minimum\ daily\ mean\ discharge\ during\ period\ of\ record}$

discharge, cubic feer per second: 0
number of occurrences: 323
most recent occurrence: 12/31/2004

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 449
number of occurrences: 1
most recent occurrence: 09/15/2005

Flow-duration characteristics based on complete water years during period of record (1 complete years)

Percentage of time discharge Discharge, in

equaled or	exceeded	cubic	feet	per	second
Mean				1.6	
50				0	
55				0	
60				0	
65				0	
70				0	
75				0	
80				0	
85				0	

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90 95

Station name: WAILUKU RIVER NEAR PUA AKALA, HAWAII, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 19.77028969 Longitude (decimal degrees): -155.36417078

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 6840 Altitude (feet):

Altitude accuracy (feet): not available Basin area (square miles): 10.2

Period of record: 1964-1966

Complete water years: 1965

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 625 10/31/1965 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 46 number of occurrences: 03/08/1964 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (1 complete years)

_____ Percentage of time discharge Discharge in

Discharge, in
cubic feet per second
0.13
0
0
0
0
0
0
0
0
0
0

Station name: WAILUKU RIVER NR HUMUULA, HAWAII, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 19.71223758 Longitude (decimal degrees): -155.30722728

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 4250

Altitude accuracy (feet): not available

Basin area (square miles): 34.8

Period of record: 1965-1982 Complete water years: 1966-1982

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0
number of occurrences: 770
most recent occurrence: 12/31/1980

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 803
number of occurrences: 1
most recent occurrence: 11/17/1979

Flow-duration characteristics based on complete water years during period of record (17 complete years)

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second

- 1	
Mean	3.2
50	0.20
55	0.15
60	0.12
65	0.09
70	0.06
75	0.04
80	0.03
85	0.01
90	0
95	0
99	0

Station name: WAILUKU RIVER NR KAUMANA, HAWAII, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 19.71779323 Longitude (decimal degrees): -155.26611699

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 3520

Basin area (square miles):

0320

not available
43.4

Period of record: 1967-1982 Complete water years: 1967-1982

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 08/01/1981 93 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 5380 number of occurrences: 01/08/1975 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (16 complete years)

_____ Percentage of time discharge Discharge in

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	30
50	2.8
55	2.2
60	1.7
65	1.4
70	1.1
75	0.94
80	0.77
85	0.58
90	0.37
95	0.19
99	0

Station name: WAILIKU RIVER AT PUKAMAUI NR HILO, HAWAII, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 19.70946085 Longitude (decimal degrees): -155.15695233

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 1280

Basin area (square miles): not available 97.2

Period of record: 1923-1940

Complete water years: 1925,1927,1930-1936,1939

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 03/29/1940 187 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 8970 number of occurrences: 08/10/1930 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (10 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
equated of exceeded	
Mean	101
50	26
55	22
60	18
65	15
70	13
75	11
80	8.0
85	5.9
90	2.9
95	0.62
99	0

Station name: Wailuku River at Piihonoua, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 19.71251628
Longitude (decimal degrees): -155.15056360
Latitude/Longitude accuracy: 1 second
Horizontal datum: nad83
Altitude (feet): 1090
Altitude accuracy (feet): 10
Basin area (square miles): 230

Period of record: 1928-2005

Complete water years: 1929-1939,1942-1947,1949-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.22
number of occurrences: 4
most recent occurrence: 03/23/1983

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 22200
number of occurrences: 1
most recent occurrence: 01/08/1975

Flow-duration characteristics based on complete water years during period of record (74 complete years)

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second

 	 	 PCI	5000110
Mean	 	 274	
50		78	
55		66	
60		56	
65		46	
70		39	
75		32	
80		25	
85		19	
90		13	
95		6.8	
99		1.3	

Station name: KAPEHU STREAM AT PIIHONUA, NEAR HILO, HAWAII, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 19.71779384 Longitude (decimal degrees): -155.13889718

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 950

Altitude accuracy (feet): not available Basin area (square miles): 4.84

Period of record: 1929-1937 Complete water years: 1930-1936

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 2.2 number of occurrences: 18 02/28/1936 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 1280 number of occurrences: number of occurrences: 12/23/1936

Flow-duration characteristics based on complete water years during period of record (7 complete years)

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	53
50	28
55	24
60	22
65	19

70 17 75 15 12 80 85 9.9 90 7.6 95 5.6

Station name: HONOLII STREAM NEAR HILO, HAWAII, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 19.76640247 Longitude (decimal degrees): -155.18556284

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 2350

Altitude accuracy (feet): not available

Basin area (square miles): 8

Period of record: 1924-1932 Complete water years: 1926,1928-1931

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.30 number of occurrences: 3 most recent occurrence: 03/03/1925

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 2120
number of occurrences: 1
most recent occurrence: 11/21/1924

Flow-duration characteristics based on complete water years during period of record (5 complete years)

Percentage of time discharge	Discharge,	in
equaled or exceeded	cubic feet per	second

 	 	5000110
Mean	48	
50	12	
55	11	
60	8.4	
65	6.8	
70	5.4	
75	4.3	
80	3.4	
85	2.8	
90	2.0	
95	1.2	
99	0.93	

Station name: Honolii Stream nr Papaikou, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 19.76362500 Longitude (decimal degrees): -155.15167481 Latitude/Longitude accuracy: 1 second Horizontal datum: nad83 Altitude (feet): 1540 Altitude accuracy (feet): 10 Basin area (square miles): 11.6

Period of record: 1911-1913,1967-2005

Complete water years: 1911-1913,1967-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.80 number of occurrences: 01/31/1912 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 6410 number of occurrences: most recent occurrence: 12/10/1999

Flow-duration characteristics based on complete water years during period of record (39 complete years)

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	128
50	40
55	35
60	31
65	27
70	23
75	19
80	16
85	13
90	11
95	7.7
99	4.7

Station name: Alia Stream near Hilo, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 19.84084356
Longitude (decimal degrees): -155.10306550
Latitude/Longitude accuracy: 1 second
Horizontal datum: nad83

Altitude (feet): 489
Altitude accuracy (feet): 1
Basin area (square miles): 0.58

Period of record: 1962-1972 Complete water years: 1963-1971

 $\label{eq:minimum} \mbox{Minimum daily mean discharge during period of record}$

discharge, cubic feer per second: 0.85 number of occurrences: 1 1/13/1968

 ${\tt Maximum\ daily\ mean\ discharge\ during\ period\ of\ record}$

discharge, cubic feer per second: 111
number of occurrences: 1
most recent occurrence: 02/15/1969

Flow-duration characteristics based on complete water years during period of record (9 complete years)

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second

Mean		13	
50		11	
55		11	
60		10	
65		9.4	
70		8.7	
75		8.1	
80		7.4	
85		6.6	
90		5.6	
95		3.9	
99		2.0	

Station name: POHAKUPUKA STREAM NEAR PAPAALOA, HAWAII, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 19.95249795 Longitude (decimal degrees): -155.18611665

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 250

Altitude accuracy (feet): not available Basin area (square miles): 2.76

Period of record: 1962-1980 Complete water years: 1963-1979

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.32 number of occurrences: 11/14/1962 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 1250 number of occurrences: number of occurrences: 1 1/12/1973

Flow-duration characteristics based on complete water years during period of record (17 complete years)

Dercentage	οf	time	discharge	Discharge	in

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	27
50	7.5
55	6.7
60	5.9
65	5.2
70	4.5
75	3.8
80	3.2
85	2.7
90	2.0
95	1.3
99	0.67

Station name: MANOWAIOPAE STREAM NEAR LAUPAHOEHOE, HAWAII, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 19.97333052 Longitude (decimal degrees): -155.24306011

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 900

Altitude accuracy (feet): not available Basin area (square miles): 1.04

Period of record: 1965-1972 Complete water years: 1966-1971

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.12 number of occurrences: 10/25/1965 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 377 number of occurrences: number of occurrences: 1 most recent occurrence: 08/25/1970

Flow-duration characteristics based on complete water years during period of record (6 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	8.3
50	3.4
55	2.9
60	2.5
65	2.3
70	2.0
75	1.7
80	1.5
85	1.2
90	0.87
95	0.41
99	0.19

Station name: Kawainui Stream nr Kamuela, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 20.08527034

Longitude (decimal degrees): -155.67999693

Latitude/Longitude accuracy: 1 second

Horizontal datum: nad83

Horizontal datum: nad83
Altitude (feet): 4060
Altitude accuracy (feet): 20
Basin area (square miles): 1.58

Period of record: 1964-2005 Complete water years: 1965-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.01
number of occurrences: 14
most recent occurrence: 12/19/1979

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 612
number of occurrences: 1
most recent occurrence: 11/18/1979

Flow-duration characteristics based on complete water years during period of record (41 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	15
50	4.5
55	3.4
60	2.7
65	2.1
70	1.7
75	1.3
80	0.99
85	0.73
90	0.49
95	0.28
9.0	0.10

Station name: KAWAIKI STREAM NEAR KAMUELA, HAWAII, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 20.08388153 Longitude (decimal degrees): -155.68027472

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 4090

Altitude accuracy (feet): not available Basin area (square miles): 0.45

Period of record: 1968-1999 Complete water years: 1968-1999

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 11/02/1984 number of occurrences: most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 297 number of occurrences: number of occurrences: 1 1/18/1979

Flow-duration characteristics based on complete water years during period of record (31 complete years)

_____ Percentage of time discharge Discharge, in

second	cubic feet per	exceeded	equaled or
	3.8		Mean
	1.3		50
	0.98		55
	0.77		60
	0.60		65
	0.48		70
	0.38		75
	0.29		80
	0.23		85
	0.16		90
	0.10		95
	0.02		99

Station name: Alakahi Stream near Kamuela, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 20.07110443 Longitude (decimal degrees): -155.67083070 Latitude/Longitude accuracy: 1 second Horizontal datum: nad83 Altitude (feet): 3900

Altitude (feet): 3900 Altitude accuracy (feet): 20 Basin area (square miles): 0.87

Period of record: 1964-2005 Complete water years: 1965-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.03 number of occurrences: 13 most recent occurrence: 10/06/1965

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 338
number of occurrences: 1
most recent occurrence: 11/18/1979

Flow-duration characteristics based on complete water years during period of record (41 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	7.8
50	3.0
55	2.6
60	2.2
65	1.8
70	1.5
75	1.2
80	1.0
85	0.79
90	0.58
95	0.37
99	0.16

Station name: Wailoa Stream near Waipio, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 20.08804838 Longitude (decimal degrees): -155.61416453 Latitude/Longitude accuracy: 1 second Horizontal datum: nad83 Altitude (feet): 150 Altitude accuracy (feet): 20

Basin area (square miles): 14.3

Period of record: 1964-1969 Complete water years: 1965-1969

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 38
number of occurrences: 13
most recent occurrence: 10/15/1968

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 890
number of occurrences: 1
most recent occurrence: 01/11/1967

Flow-duration characteristics based on complete water years during period of record (5 complete years)

Percentage of time discharge	Discharge,	in
equaled or exceeded	cubic feet per	second

 Mean		74	
50		50	
55		48	
60		47	
65		46	
70		46	
75		45	
80		43	
85		43	
90		42	
95		40	
99		39	

Station name: WAIILIKAHI STREAM NEAR WAIMANU, HAWAII, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 20.12637889 Longitude (decimal degrees): -155.66138551

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 2740

Altitude accuracy (feet): not available Basin area (square miles): 0.76

Period of record: 1939-1960 Complete water years: 1940-1959

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.26 number of occurrences: 03/17/1944 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 326 number of occurrences: most recent occurrence: 03/10/1942

Flow-duration characteristics based on complete water years during period of record (20 complete years)

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	10
50	4.2
55	3.6
60	3.1
65	2.6
70	2.3
75	2.0
80	1.7
85	1.4
90	1.1
95	0.80
99	0.43

Station name: KAIMU STREAM NEAR WAIMANU, HAWAII, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 20.13860003 Longitude (decimal degrees): -155.66055197

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 1980

Altitude accuracy (feet): not available Basin area (square miles): 0.9

Period of record: 1939-1947,1950-1952 Complete water years: 1940-1946,1951

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.23 number of occurrences: 02/01/1943 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 1030 number of occurrences: number of occurrences: 1 most recent occurrence: 03/10/1942

Flow-duration characteristics based on complete water years during period of record (8 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	8.6
50	3.1
55	2.6
60	2.2
65	1.9
70	1.6
75	1.3
80	1.1
85	0.93
90	0.74
95	0.57
99	0.35

Station name: PUNALULU STREAM NEAR WAIMANU, HAWAII, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 20.14415510 Longitude (decimal degrees): -155.65999633

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 1870

Altitude accuracy (feet): not available Basin area (square miles): 0.66

Period of record: 1939-1952 Complete water years: 1940-1951

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.11 number of occurrences: 10/25/1945 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 311 number of occurrences: 03/10/1942 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (12 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	6.4
50	2.3
55	2.0
60	1.7
65	1.4
70	1.2
75	0.97
80	0.80
85	0.63
90	0.45
95	0.29
99	0.17

Station name: WAIAALALA STREAM NEAR WAIMANU, HAWAII, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 20.14832134 Longitude (decimal degrees): -155.66332954

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 1880

Altitude accuracy (feet): not available Basin area (square miles): 0.12

Period of record: 1939-1952 Complete water years: 1940-1951

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.15 number of occurrences: 03/15/1944 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 77 number of occurrences: most recent occurrence: 03/10/1942

Flow-duration characteristics based on complete water years during period of record (12 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	1.1
50	0.57
55	0.54
60	0.48
65	0.45
70	0.42
75	0.37
80	0.35
85	0.32
90	0.29
95	0.23
99	0.18

Station name: PAOPAO STREAM NEAR WAIMANU, HAWAII, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 20.14832133 Longitude (decimal degrees): -155.66638504

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 1910

Basin area (square miles): not available 0.32

Period of record: 1939-1952 Complete water years: 1940-1952

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 07/28/1945 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 139 number of occurrences: 03/10/1942 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (13 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	3.4
50	1.1
55	0.91
60	0.79
65	0.68
70	0.62
75	0.52
80	0.48
85	0.42
90	0.34
95	0.28
99	0.22

Station name: KUKUI STREAM NEAR WAIMANU, HAWAII, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 20.15109879 Longitude (decimal degrees): -155.66805163

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 1940

Altitude accuracy (feet): not available

Basin area (square miles): 0.22

Period of record: 1939-1952,1960-1966 Complete water years: 1940-1951,1960-1966

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.15 number of occurrences: 10 most recent occurrence: 10/03/1965

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 65
number of occurrences: 1
most recent occurrence: 04/03/1961

Flow-duration characteristics based on complete water years during period of record (19 complete years)

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	2.0
50	0.90
55	0.82
60	0.74
65	0.70
70	0.62

75 0.56 80 0.51 85 0.46 90 0.39 95 0.32 99 0.23

Station name: E BR HONOKANE NUI STREAM NEAR NUILII, HAWAII, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 20.13526689 Longitude (decimal degrees): -155.73055058

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 1080

Basin area (square miles): not available 4.96

Period of record: 1963-1969 Complete water years: 1964-1969

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 15 number of occurrences: 198 12/31/1968 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 150 number of occurrences: 01/11/1967 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (6 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	28

Mean	28	3
50	20)
55	20)
60	20)
65	19)
70	19)
75	19)
80	17	7
85	17	7
90	16	5
95	15	5
99	15	5

Station name: KOHAKOHAU STREAM NEAR KAMUELA, HAWAII, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 20.04749469 Longitude (decimal degrees): -155.67999748 Latitude/Longitude accuracy: 1 second

Horizontal datum: nad83
Altitude (feet): 3500
Altitude accuracy (feet): 20
Basin area (square miles): 2.34

Period of record: 1956-1967 Complete water years: 1957-1966

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.02 number of occurrences: 1 most recent occurrence: 10/06/1965

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 721 number of occurrences: 1 most recent occurrence: 01/18/1959

Flow-duration characteristics based on complete water years during period of record (10 complete years)

Percentage	of	time	discharge	Discharge, in

rerective or erme discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	8.9
50	2.0
55	1.6
60	1.3
65	1.1
70	0.90
75	0.77
80	0.63
85	0.54
90	0.46
95	0.31
99	0.12

Station name: Kohakohau Stream above DWS Intake, nr Kamuela, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 20.04638365 Longitude (decimal degrees): -155.68083080 Latitude/Longitude accuracy: 1 second

Horizontal datum: nad83
Altitude (feet): 3470
Altitude accuracy (feet): 20
Basin area (square miles): 2.4

Period of record: 1998-2005 Complete water years: 1999-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.15 number of occurrences: 5 most recent occurrence: 02/12/2005

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 524
number of occurrences: 1
most recent occurrence: 02/26/2002

Flow-duration characteristics based on complete water years during period of record (7 complete years)

Percentage of time discharge Discharge in

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	12
50	2.2
55	1.8
60	1.5
65	1.2
70	0.95
75	0.76
80	0.61
85	0.48
90	0.36
95	0.27

0.19

Station name: Keanuiomano Stream near Kamuela, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 20.02694059 Longitude (decimal degrees): -155.69860847 Latitude/Longitude accuracy: 1 second

Horizontal datum: nad83
Altitude (feet): 2410
Altitude accuracy (feet): 20
Basin area (square miles): 4.3

Period of record: 1964-1972 Complete water years: 1965-1972

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0
number of occurrences: 245
most recent occurrence: 11/07/1971

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 786
number of occurrences: 1
most recent occurrence: 01/11/1967

Flow-duration characteristics based on complete water years during period of record (8 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	9.8
50	1.2
55	0.94
60	0.73
65	0.58
70	0.45
75	0.31
80	0.20
85	0.10
90	0.02
95	0.02
95	0

Station name: WAIKOLOA STREAM NR KAMUELA, HAWAII, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 20.05166092 Longitude (decimal degrees): -155.66416439

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 3570

Basin area (square miles): not available 0.78

Period of record: 1947-1971 Complete water years: 1948-1971

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: most recent occurrence: 10/06/1965

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 282 number of occurrences: 08/07/1958 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (24 complete years)

Percentage	of	time	discharge	Discharge, in

reidentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	7.1
50	4.0
55	3.6
60	3.3
65	3.0
70	2.8
75	2.6
80	2.3
85	2.1
90	1.9
95	1.6
99	1.2

Station name: Waikoloa Str at Marine Dam nr Kamuela, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 20.04360578

Longitude (decimal degrees): -155.66333112

Latitude/Longitude accuracy: 1 second

Horizontal datum: nad83

Altitude (feet): 3460

Altitude (feet): 3460
Altitude accuracy (feet): 20
Basin area (square miles): 1.18

Period of record: 1947-2005 Complete water years: 1948-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0.37 number of occurrences: 1 most recent occurrence: 06/03/1992

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 641
number of occurrences: 1
most recent occurrence: 11/18/1979

Flow-duration characteristics based on complete water years during period of record (58 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	9.3
50	4.3
55	3.8
60	3.4
65	3.1
70	2.8
75	2.5
80	2.3
85	2.0
90	1.8
95	1.5
٩٩	1 0

Station name: Hauani Gulch near Kamuela, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 20.03805027 Longitude (decimal degrees): -155.64860909 Latitude/Longitude accuracy: 1 second

Horizontal datum: nad83
Altitude (feet): 3117.42
Altitude accuracy (feet): 0.01
Basin area (square miles): 0.47

Period of record: 1956-2004 Complete water years: 1957-2004

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0
number of occurrences: 410
most recent occurrence: 11/08/1984

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 128
number of occurrences: 1
most recent occurrence: 03/14/2004

Flow-duration characteristics based on complete water years during period of record (48 complete years)

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	1.7
50	0.53
55	0.45
60	0.38
65	0.32
70	0.28
75	0.23
80	0.19
85	0.14
90	0.09
95	0.05
99	Λ

Station name: R BR WAIAHA STREAM NEAR HOLUALOA, HAWAII, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 19.64169184 Longitude (decimal degrees): -155.91249346

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 3280

Altitude accuracy (feet): not available Basin area (square miles): 1.89

Period of record: 1960-1982 Complete water years: 1961-1982

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 2457 12/31/1981 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 127 number of occurrences: 02/11/1982 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (22 complete years)

_____ Percentage of time discharge Discharge in

Percentage of time discharge equaled or exceeded	Discharge, in cubic feet per second
Mean	0.33
50	0.02
55	0.02
60	0.02
65	0.01
70	0
75	0
80	0
85	0
90	0
95	0
99	0

Station name: Waiaha Stream at Luawai nr Holualoa, HI

8.74

Flow diverted or regulated?: Y

Latitude (decimal degrees): 19.63363684 Longitude (decimal degrees): -155.92638161 Latitude/Longitude accuracy: 1 second Horizontal datum: nad83 Altitude (feet): 2580 Altitude accuracy (feet): 20 Basin area (square miles):

Period of record: 1960-1971 Complete water years: 1961-1971

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 1674 12/31/1970 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 224 number of occurrences: 10/03/1968 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (11 complete years)

Percentage of time discharge equaled or exceeded	Discharge, cubic feet per	
Mean	0.95	
50	0.02	
55	0.01	
60	0	
65	0	
70	0	
75	0	
80	0	
85	0	
90	0	
95	0	
99	0	

Station name: WAIAHA STREAM NEAR HOLUALOA, HAWAII, HI

Flow diverted or regulated?: Y

Latitude (decimal degrees): 19.63363674 Longitude (decimal degrees): -155.94165887

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 1910

Altitude accuracy (feet): not available Basin area (square miles): 9.35

Period of record: 1958-1968 Complete water years: 1959-1968

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 2052 12/31/1967 number of occurrences: most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 585 number of occurrences: 01/18/1959 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (10 complete years)

_____ Percentage of time discharge Discharge, in

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	1.2
50	0
55	0
60	0
65	0
70	0
75	0
80	0
85	0
90	0
95	0

Station name: KIILAE STREAM NEAR HONAUNAU, HAWAII, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 19.41142799 Longitude (decimal degrees): -155.84610103

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 2898

Altitude accuracy (feet): not available Basin area (square miles): 0.67

Period of record: 1958-1982 Complete water years: 1959-1982

Minimum daily mean discharge during period of record

discharge, cubic feer per second: 0 number of occurrences: 3425 12/31/1981 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 8.4 number of occurrences: number of occurrences: 1 most recent occurrence: 01/18/1959

Flow-duration characteristics based on complete water years during period of record (24 complete years)

_____ Percentage of time discharge Discharge, in

rerectived or erme dibendinge	Dibenarge, in
equaled or exceeded	cubic feet per second
Mean	0.21
50	0.03
55	0.02
60	0.01
65	0
70	0
75	0
80	0
85	0
90	0
95	0
99	0

Station name: HILEA GULCH TRIBUTARY NEAR HONUAPO, HAWAII, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 19.17115496 Longitude (decimal degrees): -155.59666147

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 2940

Altitude accuracy (feet): not available Basin area (square miles): 9.17

Period of record: 1966-1991 Complete water years: 1967-1991

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 1499 07/29/1991 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 705 number of occurrences: most recent occurrence: 12/25/1981

Flow-duration characteristics based on complete water years during period of record (25 complete years)

_____ Percentage of time discharge Discharge in

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	7.0
50	0.57
55	0.41
60	0.31
65	0.21
70	0.14
75	0.08
80	0.03
85	0
90	0
95	0
99	0

Station name: NINOLE GULCH NEAR PUNALUU, HAWAII, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 19.17587669 Longitude (decimal degrees): -155.55999564

Latitude/Longitude accuracy: unknown Horizontal datum: nad83 Altitude (feet): 2080

Altitude accuracy (feet): not available Basin area (square miles): 15.5

Period of record: 1966-1983 Complete water years: 1967-1982

Minimum daily mean discharge during period of record

discharge, cubic feer per second: number of occurrences: 4170 10/14/1982 4170 most recent occurrence:

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 854 number of occurrences: 02/20/1979 most recent occurrence:

Flow-duration characteristics based on complete water years during period of record (16 complete years)

Percentage of time discharge	Discharge, in
equaled or exceeded	cubic feet per second
Mean	3.6
50	0
55	0
60	0
65	0
70	0
75	0
80	0
85	0
90	0
95	0
99	0

Station name: Paauau Gulch at Pahala, HI

Flow diverted or regulated?: N

Latitude (decimal degrees): 19.20781980
Longitude (decimal degrees): -155.47721777
Latitude/Longitude accuracy: 1 second
Horizontal datum: nad83
Altitude (feet): 972
Altitude accuracy (feet): 10
Basin area (square miles): 1.74

Period of record: 1962-1979,2002-2005 Complete water years: 1963-1978,2002-2005

Minimum daily mean discharge during period of record

discharge, cubic feer per second:

number of occurrences:

most recent occurrence:

0
6816
12/31/2004

Maximum daily mean discharge during period of record

discharge, cubic feer per second: 720
number of occurrences: 1
most recent occurrence: 01/08/1975

Flow-duration characteristics based on complete water years during period of record (20 complete years)

Percentage of time discharge equaled or exceeded	Discharge, cubic feet per	
Mean	0.69	
50	0	
55	0	
60	0	
65	0	
70	0	
75	0	
80	0	
85	0	
90	0	
95	0	
٩٩	0	