

Mean Velocity¹ = 6/10ths Depth
Surface Velocity² = 6/10ths Depth x 2
Bottom Velocity³ = 6/10ths Depth / 2

[illegible]DIVISION OF AQUATIC RESOURCES GRH 2/02

SITE PICTURE



FLOW DATA SHEET

Mean Velocity¹ = 6/10ths Depth
Surface Velocity² = 6/10ths Depth x 2
Bottom Velocity³ = 6/10ths Depth / 2



STREAM EDGE

STREAM EDGE

BANK
FULL

BANK
FULL

Stream Edge Width (feet)	23.7	21.0	19	17	15	13	11	9	7	5	3	1.3	0						
Stream Edge Depth (feet)	0	0.9	0.9	1.3	1.9	2.2	2.5	2.6	2.2	2.1	1.9	0							
Flow Rate Width (ft/sec)																			
Flow Rate Depth (ft/sec)																			
Substrate/ % Vegetation																			
% Plant Coverage																			
Mean Velocity ¹ (ft/sec)		0.13	0.18	0.06	0.15	0.46	0.99	1.18	1.45	1.47	0.09	3.00							
Surface Velocity ² (ft/sec)		0.19	0.12	0.01	0.09	0.48	1.12	1.32	1.91	0.97	0.35	0.06							
Bottom Velocity ³ (ft/sec)		0.21	0.14	0.13	0.10	0.06	0.10	0.52	0.04	0.15	0.06	0.00							

DATE	April 19/2006	HYDROLAB	
TIME	2:20 PM	WIDTH (feet)	
OBSERVER	Kanu/hui Manka	TEMPERATURE (°C)	19.86
REACH		DISSOLVED OXYGEN (mg/L)	12.55
TRANSECT#		CONDUCTIVITY (mS/cm)	0070
DAR_CODE		pH	8.0
STREAM	Hillane	TURBIDITY (NTU)	
TRIBUTARY		TOTAL SUSPENDED SOLIDS (mg/L)	

Stream depth (feet)

Transect Line

Stream width (feet)

23.7 21 19 17 15 13 11 9 7 5 3 1.3



FLOW DATA SHEET

Mean Velocity¹ = 6/10ths Depth
Surface Velocity² = 6/10ths Depth x 2
Bottom Velocity³ = 6/10ths Depth / 2



BANK
FULL

STREAM EDGE

STREAM EDGE

BANK
FULL

Stream Edge Width (feet)	2.8ft	5ft	7ft	9ft	11ft	13ft	15ft	17ft	19ft	21ft	23ft	25ft	26ft						
Stream Edge Depth (feet)	0.4ft	0.6ft	0.8ft	1.1ft	0.8ft	2.0ft	2.4ft	2.6ft	2.4ft	2.2ft	2.0ft	1.9ft	0.8ft						
Flow Rate Width (ft/sec)																			
Flow Rate Depth (ft/sec)																			
Substrate/ % Vegetation																			
% Plant Coverage																			
Mean Velocity ¹ (ft/sec)		-0.12	-0.21	-0.13	-0.15	0.08	0.34	1.52	1.36	1.76	0.73	0.69							
Surface Velocity ² (ft/sec)		-0.16	0.21	-0.12	0.30	0.15	0.74	1.68	1.93	1.84	0.74	0.03							
Bottom Velocity ³ (ft/sec)		-0.17	-0.18	-0.08	-0.23	-0.11	-0.08	1.31	0.64	0.36	0.04	-0.21							

DATE	Apr/19/2006	HYDROLAB	
TIME	1:25 PM	WIDTH (feet)	
OBSERVER	Nepilzi	TEMPERATURE (°C)	19.99
REACH		DISSOLVED OXYGEN (mg/L)	11.53
TRANSECT#		CONDUCTIVITY (mS/cm)	0.069
DAR_CODE		pH	8.14
STREAM	Hilave	TURBIDITY (NTU)	—
TRIBUTARY		TOTAL SUSPENDED SOLIDS (mg/L)	

Stream depth (feet)

Transect Line

Stream width (feet)

SITE PICTURE



FLOW DATA SHEET

Mean Velocity¹ = 6/10ths Depth
Surface Velocity² = 6/10ths Depth x 2
Bottom Velocity³ = 6/10ths Depth / 2



BANK
FULL

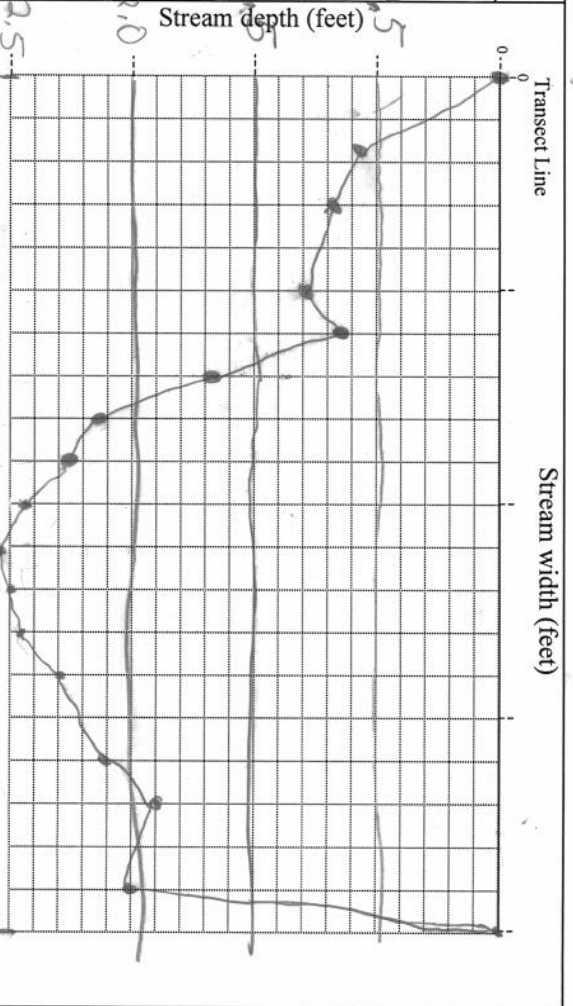
STREAM EDGE

STREAM EDGE

BANK
FULL

Stream Edge Width (feet)	24.3	22	20	18	16	15	14	13	12	11	10	9	8	7	6	5	4	3	1.4
Stream Edge Depth (feet)	0	0.7	0.9	1.1	0.8	1.9	2.2	2.4	2.4	2.5	2.3	2.6	2.5	2.4	2.3	2.1	1.9	2.0	0
Flow Rate Width (ft/sec)																			
Flow Rate Depth (ft/sec)																			
Substrate/ % Vegetation																			
% Plant Coverage																			
Mean Velocity ¹ (ft/sec)		-0.18	-0.15	-0.25	-0.08	-0.13	0.05	0.46	0.54	1.04	1.47	1.75	1.94	1.09	1.01	1.10	0.64	0.13	0
Surface Velocity ² (ft/sec)		-0.15	-0.29	-0.11	-0.08	0.12	0.61	0.73	0.90	1.01	1.39	1.68	2.27	1.96	1.84	1.71	1.41	0.47	0
Bottom Velocity ³ (ft/sec)		-0.21	-0.09	-0.12	-0.25	-0.10	-0.13	0.23	0.26	-0.17	0.86	0.33	0.25	0.73	0.35	0.15	0.16	0.20	0

DATE	april 19/2006	HYDROLAB	
TIME	11:12	WIDTH (feet)	
OBSERVER	Kayla Haimaka	TEMPERATURE (°C)	20.01
REACH		DISSOLVED OXYGEN (mg/L)	9.65
TRANSECT#		CONDUCTIVITY (mS/cm)	0.067
DAR_CODE		pH	8.19
STREAM	Hill Lane	TURBIDITY (NTU)	1.5
TRIBUTARY		TOTAL SUSPENDED SOLIDS (mg/L)	



Mean Velocity¹ = 6/10ths Depth

23.1

1.6

STREAM EDGE

BANK
FULL

←

Stream depth (feet)

Kamehameha Schools

FLOW DATA SHEET

Mean Velocity¹ = 6/10ths Depth
 Surface Velocity² = 6/10ths Depth x 2
 Bottom Velocity³ = 6/10ths Depth / 2

BANK FULL

BANK FULL

Stream Edge Width (feet)	2.9ft	4ft	6ft	8ft	10ft	12ft	14ft	16ft	17ft	18ft	20ft	21ft	22ft	23ft	24ft		
Stream Edge Depth (feet)	0.5ft	0.5ft	0.7ft	1.1ft	1.3ft	2ft	2.3ft	2.5ft	2.6ft	2.4ft	2.2ft	2ft	1.9ft	2ft	0ft		
Flow Rate Width (ft/sec)																	
Flow Rate Depth (ft/sec)																	
Substrate/ % Vegetation																	
% Plant Coverage																	
Mean Velocity ¹ (ft/sec)		-0.15	-0.17	-0.03	-0.09	0.49	0.74	0.85	1.02	1.10	1.49	0.61	0.42	-0.15			
Surface Velocity ² (ft/sec)		-0.23	-0.15	-0.21	0.08	0.43	0.39	0.77	1.17	1.61	1.66	1.35	1.05	-0.01			
Bottom Velocity ³ (ft/sec)		-0.12	-0.17	-0.11	-0.07	0.14	0.54	0.11	0.46	0.65	0.44	0.45	-0.26	-0.27			

DATE 24 April 2000

TIME 12:05 PM

OBSERVER

REACH

TRANSECT#

DAR_CODE

STREAM H111111

TRIBUTARY

HYDROLAB

WIDTH (feet) Pool 15ft

TEMPERATURE (°C) 21.3°C 21.02°C

DISSOLVED OXYGEN (mg/L) 8.92 9.31

CONDUCTIVITY (mS/cm) 0.008 0.071

pH 8.0 7.88

TURBIDITY (NTU) 34.4 183

TOTAL SUSPENDED SOLIDS (mg/L)

Stream depth (feet)

Stream width (feet)

Transect Line

2.9 4 6 8 10 12 14 16 18 20 21 22 23 24.7

SITE PICTURE

1503

Mean Velocity¹ = 6/10ths Depth
Surface Velocity² = 6/10ths Depth x 2
Bottom Velocity³ = 6/10ths Depth / 2

5.2

STREAM EDGE

STREAM EDGE
BANK FULL

Stream Edge Width (feet)	25.3	23	21	19	17	15	13	11	9	8	7	5.2
Stream Edge Depth (feet)	0	0.64	1.14	1.54	1.94	2.54	2.7	2.5	2.3	2.2	1.8	0
Flow Rate Width (ft/sec)												
Flow Rate Depth (ft/sec)												
Substrate/ % Vegetation												
% Plant Coverage												
Mean Velocity ¹ (ft/sec)	-0.13	-0.25	-0.16	-0.05	0.23	0.57	1.43	1.41	0.65	0.65		
Surface Velocity ² (ft/sec)	-0.11	-0.16	-0.03	-0.02	0.35	0.46	1.72	1.51	1.46	1.10		
Bottom Velocity ³ (ft/sec)	-0.06	-0.11	-0.07	-0.18	-0.24	0.44	0.58	0.34	0.42	0.06		

DATE		HYDROLAB	
TIME	1:55 PM	WIDTH (feet)	16.01
OBSERVER	The local	TEMPERATURE (°C)	20.54
REACH		DISSOLVED OXYGEN (mg/L)	9.18
TRANSECT#		CONDUCTIVITY (mS/cm)	0.075
DAR_CODE		pH	7.73
STREAM	Hillcove	TURBIDITY (NTU)	17.1
TRIBUTARY		TOTAL SUSPENDED SOLIDS (mg/L)	306

