



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
 Stream Protection and Management Branch

FIELD INVESTIGATION REPORT
FI2008102701 (East Maui, Honopou IIFS Site A)

Date of Field Investigation:	October 27, 2008	Time (24-hour):	0625 - 0915
CWRM Staff:	Ed Sakoda, Dean Uyeno, and Chui Ling Cheng		
Individuals Present:	Garret Hew (EMI Water Resources Manager), Carl Freedman (Consultant at Haiku Design & Analysis) Honopou community - Lynn Scott, Beatrice Kekahuna, Sanford Kekahuna, Boni Kekahuna, and Wanda Vierra		
Hydrologic Unit:	Honopou (6034)		
Stream Name:	Honopou Stream		
Findings:	<p>CWRM staff departed Oahu for Maui at 0625 hours.</p> <p>At approximately 0830 hours, CWRM staff met with Garret Hew, Carl Freedman, and members of the Honopou community at the Haiku Ditch diversion on Honopou Stream. At the community meeting on October 23, Carl Freedman had asked to join CWRM staff for this field visit. Everyone drove to the bridge that crosses Honopou Stream further downstream. CWRM staff prepared IIFS Site A on Honopou Stream for flow measurement. Staff checked the downstream gage pool for debris and there was none. The entire flow measurement was completed in 40 minutes. Gage height readings were taken at the downstream gage pool at the start and finish of flow measurement. In addition to flow measurement, staff crew also recorded wind velocity, air temperature, water temperature and weather conditions. The weather was sunny with cool air temperatures and no rain. As computed back in the Honolulu Office, the flow at IIFS Site A was 0.242 cubic feet per second (0.156 million gallons per day), with a no change in gage height.</p> <p>Garret Hew mentioned that an incident was reported to Henry Robello on the morning of October 23, 2008. Someone had tampered with the bypass sluice gate of Lowrie Ditch on Honopou Stream and that the gate was open. Garret did not have information on who opened the gate or when it was opened. This incident may have an effect on previous flow measurements collected at IIFS Site A and B on Honopou Stream.</p> <p>CWRM staff left Honopou IIFS Site A at approximately 0915 hours, and continued further downstream to conduct flow measurement at IIFS Site B on Honopou Stream. Refer to Field Investigation Report FI2008102702 (East Maui, Honopou IIFS Site B) for more information.</p>		
Image Listing:	(Attach PDF of image contact sheet)		
File Name:	Brief Description:		
20081027001	Staff crew conducting flow measurement on Honopou Stream.		
20081027002	Staff crew conducting flow measurement on Honopou Stream.		
20081027003	Chui Ling Cheng recording flow measurement on Honopou Stream.		
GPS Listing:			
Shapefiles:	(List file names of all shapefiles created and a brief description of each)		
File Name:	Brief Description:		
East_Maui_POI.shp	Points of interest (POI) recorded with the GPS unit during the field visit. The file includes POI recorded from all the East Maui field investigations.		
Waypoints:	(List all waypoints in decimal degrees and provide a brief description of each)		
WP No.	Latitude	Longitude	Brief Description:
6	20.916212	-156.245203	Bridge on Honopou Stream
7	20.916187	-156.245174	IIFS Site A Reference Point on Honopou Stream
8	20.916096	-156.245077	IIFS Site A Flow Measurement on Honopou Stream

Attachments:

Brief Description:

1. Image Contact Sheet
2. Discharge Measurement and Gage Inspection Notes

Recommendations:

IMAGE CONTACT SHEET



20081027001.JPG



20081027002.JPG



20081027003.JPG

0 .10 .20 .30 .40 .50 .60 .70 .75
River at -

ANGLE COEF- FICIENT	DIST. FROM INITIAL POINT	WIDTH	DEPTH	OBSERVA- TION DEPTH	REVO- LUTIONS	TIME IN SEC- ONDS	VELOCITY		ADJUST- ED FOR HOR. ANGLE OR	AREA	DISCHARGE
							AT POINT	MEAN IN VER- TICAL			
	LEW	@	09:11				GHT =	1.00 -	0.16 =	0.84	
											.85
	3.0	.05	0							0	0
	3.1	.1	0.2			40		0.19		.02	.004
	3.2	.1	0.3			40		0.23		.03	.007
	3.3	.1	0.25			40		0.26		.025	.007
	3.4	.1	0.35			40		0.22		.035	.008
	3.5	.1	0.36			40		0.21		.036	.008
	3.6	.1	0.40			40		0.19		.04	.008
	3.7	.1	0.42			40		0.20		.042	.008
	3.8	.1	0.42			40		0.20		.042	.008
	3.9	.1	0.43			40		0.22	.313	.043	.009
	4.0	.1	0.43			40		0.24		.043	.010
	4.1	.1	0.43			40		0.23		.043	.010
0	4.2	.1	0.48			40		0.25		.048	.012
	4.3	.1	0.48			40		0.24		.048	.012
	4.4	.1	0.48			40		0.27		.048	.013
	4.5	.1	0.48			40		0.24		.048	.012
	4.6	.1	0.48			40		0.25		.048	.012
	4.7	.1	0.49			40		0.25		.049	.012
	4.8	.1	0.48			40		0.24	.736	.048	.012
	4.9	.1	0.48			40		0.27		.048	.013
	5.0	.1	0.51			40		0.23		.051	.012
	5.1	.1	0.49			40		0.25		.049	.012
	5.2	.1	0.45			40		0.21		.045	.009
	5.3	.1	0.46			40		0.21		.046	.010
	5.4	.1	0.35			40		0.17		.035	.006
	5.5	.1	0.30			40		0.12		.03	.004
	5.6	.1	0.29			40		0.05		.029	.001
	5.7	.1	0.25			40		0.07		.025	.002
	5.8	.1	0.22			40		0.05		.022	.001
	5.9	.1	0.09			40		0.03		.009	0

.067

.172

.80

.85

.90

.92

.94

.96

.97

.98

.99

1.00

.99

.98

.97

.96

.94

.92

.90

.85

.80

