



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

**FIELD INVESTIGATION REPORT**  
FI2009111901 (East Maui, USGS)

<b>Date of Field Investigation:</b>	November 19, 2009	<b>Time (24-hour):</b>	0730 - 1630
<b>CWRM Staff:</b>	Ken Kawahara, Dean Uyeno, and Chui Ling Cheng		
<b>Individuals Present:</b>	USGS Staff – Clarence Edward, Steve Gingerich,		
<b>Hydrologic Unit:</b>	East Maui		
<b>Stream Name:</b>	Multiple Streams		
<b>Findings:</b>			
Staff arrived in Maui at 0730 hours.			
The purpose of this field visit was to accompany USGS staff in selecting potential sites for monitoring interim instream flow standards. The following is a list of streams that staff visited and the location of a potential monitoring site.			
<ol style="list-style-type: none"> <li>1. Makapipi Stream – about 15 feet upstream of Hana Highway on the left stream bank.</li> <li>2. Hanawi Stream – directly below Hana Highway on the right stream bank.</li> <li>3. Kopiliula Stream – no potential monitoring site selected due to the location of the EMI major diversion.</li> <li>4. East Wailuaiki Stream – directly below Hana Highway on the right stream bank.</li> <li>5. West Wailuaiki Stream – directly below Hana Highway on the left stream bank.</li> <li>6. Nuaaailua Stream – below Hana Highway on the right stream bank.</li> <li>7. Honomanu Stream – about 200 feet upstream from Hana Highway on the left stream bank.</li> <li>8. Punalau Stream – about 100 feet upstream from Hana Highway on the right stream bank.</li> <li>9. Haipuena Stream – about 100 feet upstream from Hana Highway on the right stream bank.</li> <li>10. Puohokamoa Stream – below Hana Highway on the right stream bank.</li> <li>11. Waikamoi Stream – about 150 feet upstream from Hana Highway on Waikamoi Stream on the left stream bank.</li> </ol>			
Staff also visited Wailuanui Stream and Palauhulu Stream, and took photos of the installed USGS staff gages. Both gages were submerged due to high flow conditions.			
Staff concluded the field visit at 1630 hours.			
<b>Image Listing:</b> (Attach PDF of image contact sheet)			
<b>File Name:</b>	<b>Brief Description:</b>		
20091119001	Wahine Mo Pond on Makapipi Stream.		
20091119002	Wahine Mo Pond on Makapipi Stream.		
20091119003	Makapipi Stream 300 feet upstream from Hana Highway.		
20091119004	Makapipi Stream 300 feet upstream from Hana Highway.		
20091119005	Makapipi Stream at Hana Highway.		
20091119006	USGS staff selecting a potential monitoring location on Makapipi Stream – 15 feet upstream of Hana Highway on the left stream bank.		
20091119007	USGS staff selecting a potential monitoring location on Makapipi Stream – 15 feet upstream of Hana Highway on the left stream bank.		
20091119008	USGS staff selecting a potential monitoring location on Makapipi Stream – 15 feet upstream of Hana Highway on the left stream bank.		
20091119009	USGS staff selecting a potential monitoring location on Makapipi Stream – 15 feet upstream of Hana Highway on the left stream bank.		
20091119010	Makapipi Stream at Hana Highway.		
20091119011	USGS staff selecting a potential monitoring location on Makapipi Stream – 15 feet upstream of Hana Highway on the left stream bank.		
20091119014	Makapipi Stream upstream from Hana Highway.		
20091119015	Makapipi Stream downstream from Hana Highway.		
20091119018	Hanawi Stream upstream from Hana Highway.		
20091119019	Hanawi Stream downstream from Hana Highway.		
20091119021	A deep spot on Hanawi Stream downstream from Hana Highway.		
20091119022	Hanawi Pump.		

20091119024	USGS staff selecting a potential monitoring location on Hanawi Stream – directly below Hana Highway on the right stream bank.
20091119028	Kopiliula Stream and EMI major diversion at Hana Highway.
20091119029	Kopiliula Stream upstream of Hana Highway.
20091119032	Kopiliula Stream downstream of Hana Highway.
20091119033	Kopiliula Stream downstream of Hana Highway.
20091119035	Kopiliula Stream upstream of Hana Highway.
20091119036	EMI major diversion on Kopiliula Stream.
20091119038	East Wailuaiki Stream upstream of Hana Highway.
20091119040	East Wailuaiki Stream downstream of Hana Highway.
20091119041	USGS staff selecting a potential monitoring location on East Wailuaiki Stream – directly below Hana Highway on the right stream bank.
20091119042	East Wailuaiki Stream at Hana Highway.
20091119044	East Wailuaiki Stream at Hana Highway.
20091119045	Left bank of East Wailuaiki Stream at Hana Highway.
20091119046	Right bank of East Wailuaiki Stream at Hana Highway.
20091119050	West Wailuaiki Stream upstream Hana Highway.
20091119051	West Wailuaiki Stream downstream Hana Highway.
20091119052	West Wailuaiki Stream downstream Hana Highway.
20091119053	West Wailuaiki Stream at Hana Highway.
20091119056	USGS staff selecting a potential monitoring location on West Wailuaiki Stream – directly below Hana Highway on the left stream bank.
20091119061	Wailuanui Stream upstream from Hana Highway.
20091119062	USGS staff gage on the right bank of Wailuanui Stream at Hana Highway.
20091119063	Wailuanui Stream downstream from Hana Highway.
20091119066	Wailua Valley.
20091119068	USGS staff gage on the right bank of Palauhulu Stream upstream of Hana Highway.
20091119070	Palauhulu Stream upstream of Hana Highway.
20091119071	Palauhulu Stream downstream of Hana Highway.
20091119074	Nuaailua Stream upstream of Hana Highway.
20091119075	Nuaailua Stream downstream of Hana Highway.
20091119076	Nuaailua Stream at Hana Highway.
20091119077	Potential monitoring location on Nuaailua Stream –below Hana Highway on the right stream bank.
20091119079	Hana Highway bridge at Nuaailua Stream.
20091119081	Potential monitoring location on Nuaailua Stream – below Hana Highway on the right stream bank.
20091119082	Potential monitoring location on Nuaailua Stream – below Hana Highway on the right stream bank.
20091119086	Honomanu Stream upstream from Hana Highway.
20091119087	Honomanu Stream downstream from Hana Highway.
20091119088	Old stilling well on Honomanu Stream 200 feet upstream from Hana Highway.
20091119089	Honomanu Stream 200 feet upstream from Hana Highway.
20091119090	Honomanu Stream 200 feet upstream from Hana Highway, looking at the highway.
20091119091	Potential monitoring location on Honomanu Stream – 200 feet upstream from Hana Highway on the left stream bank.
20091119093	Hana Highway bridge at Honomanu Stream.
20091119099	Punalau Stream 100 feet upstream from Hana Highway.
20091119100	Punalau Stream 100 feet upstream from Hana Highway, looking at the highway.
20091119103	USGS staff selecting a potential monitoring location on Punalau Stream – 100 feet upstream from Hana Highway on the right stream bank.
20091119114	Haipuaena Stream upstream from Hana Highway.
20091119115	Haipuaena Stream downstream from Hana Highway.
20091119116	USGS staff selecting a potential monitoring location on Haipuaena Stream – 100 feet upstream from Hana Highway on the right stream bank.
20091119118	Haipuaena Stream 100 feet upstream from Hana Highway, looking at the highway.
20091119120	USGS staff selecting a potential monitoring location on Haipuaena Stream – 100 feet upstream from Hana Highway on the right stream bank.
20091119139	Puohokamoa Stream upstream from Hana Highway.
20091119141	Puohokamoa Stream downstream from Hana Highway.
20091119142	Culvert on Hana Highway at Puohokamoa Stream.
20091119143	USGS staff selecting a potential monitoring location on Puohokamoa Stream – below Hana Highway on the right stream bank.
20091119144	USGS staff selecting a potential monitoring location on Puohokamoa Stream – below Hana Highway on the right stream bank.
20091119148	Large pond on Waikamoi Stream about 150 feet upstream from Hana Highway.
20091119149	Outlet of the large pond on Waikamoi Stream about 150 feet upstream from Hana Highway.
20091119150	Waikamoi Stream 150 feet upstream from Hana Highway, looking at the highway.
20091119151	Large pond on Waikamoi Stream about 150 feet upstream from Hana Highway.

20091119154	USGS staff selecting a potential monitoring location on Waikamoi Stream –150 feet upstream from Hana Highway on Waikamoi Stream on the left stream bank.
20091119155	USGS staff selecting a potential monitoring location on Waikamoi Stream –150 feet upstream from Hana Highway on Waikamoi Stream on the left stream bank.
20091119156	USGS staff selecting a potential monitoring location on Waikamoi Stream –150 feet upstream from Hana Highway on Waikamoi Stream on the left stream bank.
20091119157	USGS staff selecting a potential monitoring location on Waikamoi Stream –150 feet upstream from Hana Highway on Waikamoi Stream on the left stream bank.

**GPS Listing:**

**Shapefiles:** (List file names of all shapefiles created and a brief description of each)

<b><u>File Name:</u></b>	<b><u>Brief Description:</u></b>
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**Waypoints:** (List all waypoints in decimal degrees and provide a brief description of each)

<b><u>WP No.</u></b>	<b><u>Latitude</u></b>	<b><u>Longitude</u></b>	<b><u>Brief Description:</u></b>
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**Attachments:**

**Brief Description:**

1. Image Contact Sheet

**Recommendations:**

# IMAGE CONTACT SHEET



**20091119001.jpg**



**20091119002.jpg**



**20091119003.jpg**



**20091119004.jpg**



**20091119005.jpg**



**20091119006.jpg**



**20091119007.jpg**



**20091119008.jpg**



**20091119009.jpg**



**20091119010.jpg**

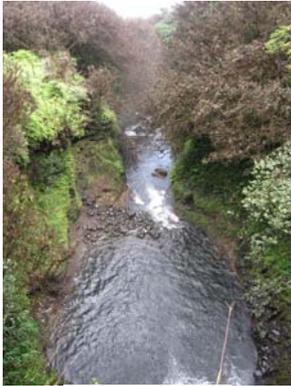


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**20091119014.jpg**

# IMAGE CONTACT SHEET



**20091119015.jpg**



**20091119018.jpg**



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# IMAGE CONTACT SHEET



**20091119038.jpg**



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# IMAGE CONTACT SHEET



**20091119061.jpg**



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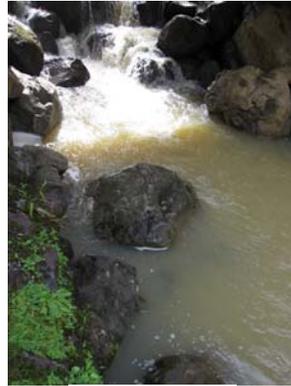


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**20091119099.jpg**



**20091119100.jpg**



**20091119103.jpg**

# IMAGE CONTACT SHEET



**20091119114.jpg**



**20091119115.jpg**



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**20091119118.jpg**



**20091119120.jpg**



**20091119139.jpg**



**20091119141.jpg**



**20091119142.jpg**



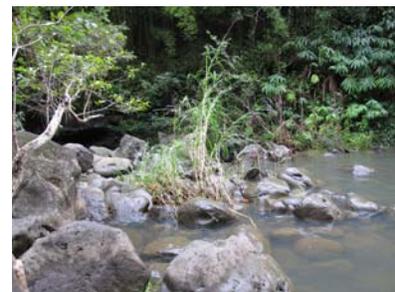
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**20091119148.jpg**



**20091119149.jpg**

# IMAGE CONTACT SHEET



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**20091119151.jpg**



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