

QUARTERLY UPDATE:

Implementation of Interim Instream Flow Standard (IIFS) for 8 Streams in the Hydrologic Units of Honopou (6034), Hanehoi (6037), Piinaau (6053), Waiokamilo (6055), and Wailuanui (6056)

Field Work

Trip 5: February 9-11, 2009

Purpose: Get a better understanding of the taro patches in Wailua Valley, with main focus on water flow from the sources and through the taro patches before water returns to the stream.

- Taro patches in Wailua Valley and Keanae Arboretum: Collected data on 1) flow from the different ditches to the patches; 2) flow through the patches in the valley; 3) auwai system and location in relation to the patches; 4) locations of return flow from the auwai to the stream; and 5) operator of the general area where taro was cultivated at the time of the field visit.
- Waiokamilo terminal waterfall: Geologist from CWRM's Survey Branch documented the geological occurrence of the terminal waterfall as well as the multiple seepages observed during the field visit.
- Waiokamilo Stream: Verified where Kualani Stream joins with Waiokamilo Stream upstream from Hana Highway. Familiarized Ronnie Torres, Geologist of CWRM's Survey Branch, with the conditions of Waiokamilo Stream near Dam 3.
- Streamflow measurement: Honopou Stream, Puoloa (Huelo) Stream, and Palauhulu Stream. Highest flow recorded by staff; although none of the recorded flows reached the adopted IIFS.
- Interim action at Haiku Ditch: Adjusted bypass sluice gates at Haiku Ditch on Hanehoi Stream and Puoloa (Huelo) Stream. Both interim actions were videotaped and fully documented in the field investigation reports.
- Remaining 19 petitioned East Maui streams: Determined field conditions of the streams east of Wailuanui Stream. These streams are part of the remaining 19 petitioned east Maui streams.

Trip 6: April 2009 (Tentative)

The focus of this trip will be to get a better understanding of the noninstream uses of surface water that are located in Upcountry Maui and supported by east Maui streams. Staff plans to visit the following locations:

- Maui County Department of Water Supply (DWS) water systems in upcountry Maui: Makawao, Upper Kula, Lower Kula. Only the Makawao water system is served by the EMI system. Maui DWS themselves divert the streams for the Upper and Lower Kula pipelines.
- Kamole Weir Water Treatment Facility (WTF): Maui's largest water treatment facility. It receives water from Wailoa Ditch (part of EMI ditch system) and is capable of providing water to the entire Upcountry region.
- Kula Agricultural Park: The Park consists of 31 farm lots ranging in size from seven acres to 29 acres for a total of 445.45 acres. These farm lots are rented out to promote the development of diversified agriculture.

Planning

EMI Low-Flow Bypass Channel

Following the adoption of IIFS on September 25, 2008, the East Maui Irrigation Company (EMI) has been formulating ways to modify the existing diversion structures on the 8 petitioned streams to allow low flow to bypass and meet the recommended IIFS. EMI proposed that a low-flow bypass channel be installed on some of the diversion structures. The purpose of the bypass channel is to allow low flows to bypass the diversion structure instead of being diverted into the ditch. EMI has fabricated a bypass channel based on the conceptual design provided to the Commission staff in November 2008, and plans to install it at the Haiku Ditch on Honopou Stream. Installation is scheduled for the last week of March, subject to weather conditions, and it will take 4-5 days. Commission staff will join EMI staff for one of the days during installation to document the process.

Meeting with Maui stakeholders

On January 20, 2009, Commission staff met with representatives from the Department of Agriculture, Maui County Mayor's Office, Maui DWS, Maui Office of Economic Development, Hawaii Farm Bureau Federation, Maui County Farm Bureau, and Maui County Council member Joseph Pontanilla. The purpose of the meeting was to discuss various types of data that agricultural agencies or community could provide that would help the Commission staff in the development of IIFS. The meeting started with a condensed version of the 3-hour presentation given at the September Commission meeting. Staff gave a detailed explanation of the hydrological concepts and rationale in determining the two IIFS for Honopou Stream. Finally, staff presented to the agencies a list of general and specific data needs that would help with IIFS determination. The Data Needs handout is attached.

Website

Staff continues to maintain the Commission webpage on the Implementation of Interim Instream Flow Standards for Five Hydrologic Units in East Maui. Updates through the first quarter of 2009 include the following:

- Presentation to the Board of Land and Natural Resources, December 12, 2008
- Presentation to the Commission on Water Resource Management, December 17, 2008
- Trip 5 Report, February 9-11, 2009
- Field Investigation Reports for Honopou, Hanehoi, Piinaau, Waiokamilo, and Wailuanui units, February 9-11, 2009
- Videos of Interim Action for Hanehoi and Puolua (Huelo) Streams, February 11, 2009

For the latest updates, please visit the Commission website at:

http://hawaii.gov/dlnr/cwrn/currentissues_Implement5EastMaui.htm