



28 August 2014

INFORMATION PAPER

SUBJECT: West Maui Watershed Plan, Island of Maui, Hawaii

1. Purpose: To provide information on the subject project.
2. Points of Major Interest and Facts.

a. The West Maui Watershed Plan is being developed under Section 729 of the Water Resources Development Act of 1986. The local sponsor is the State of Hawaii, Department of Land and Natural Resources (DLNR). A cost-sharing agreement was executed between the U.S. Army Corps of Engineers (Corps) and the DLNR on 9 August 2012. The goal of the study is to identify measures that would restore and enhance the health and resiliency of the West Maui coral reefs and nearshore waters through the reduction of land-based pollution threats from the summit of Puu Kukui, to the outer reef. The study is scheduled to be completed in 2016, at a cost of \$3M and will specifically evaluate the Wahikuli, Honokowai, Kahana, Honokahua, and Honolua drainages. This study supports the West Maui Ridge to Reef Initiative – an interagency priority partnership designated by the U.S. Coral Reef Task Force, and identified as a national action item for the National Ocean Council in 2011. Other partners include the Hawaii Department of Health, National Oceanic and Atmospheric Administration (NOAA), Environmental Protection Agency (EPA), Natural Resources Conservation Service (NRCS), U.S. Geological Survey (USGS) and National Fish and Wildlife Foundation (NFWF). The plan will result in the development of an integrated strategy to address land based pollution that identifies actions to be taken at the community, county, state, and federal level – across missions and organizations.

b. The West Maui watershed includes 24,000 acres from Honolua to Kaanapali (see Figure 1). The study area supports habitat for 62 terrestrial and marine species listed under the Endangered Species Act, with 6,000 acres of native forests and wetlands, several state Marine Managed Areas, and the Hawaiian Islands Humpback Whale National Marine Sanctuary. The Hawaii Coral Reef Initiative Research Program estimated that coral reefs contribute up to \$800M per year in gross annual revenue for the State of Hawaii, with more than \$20M per year lost in Maui from coral reef decline. Over the last 12 years, up to 30% of the coral reef cover has been lost in the study area, largely due to impacts from land based pollution. Sedimentation has increased due to the loss of forest lands, historical plantation agriculture, stream channelization and rapid development. Invasive marine species have increased in the nearshore as a result of excessive nutrients levels from surface and groundwater discharge. Previous restoration efforts, while successful, have been limited. By reducing land-based pollution in a more comprehensive manner, coastal water quality and coral reef ecosystem functions and health should improve in a way not possible with isolated actions.

c. Several partnership activities were initiated in FY12, including completion of the Waihikuli-Honokowai Watershed Assessment (NOAA funded), hiring of a watershed coordinator and development of risk informed decision framework for the plan that also incorporates climate change risk (Corps funded). In December 2012, a public scoping meeting was held to kick-off the study. In FY13, the study initiated watershed assessments in the remaining three watersheds of Kahana, Honokahua, and Honolua. In 2014, a draft plan short-term watershed management plan is being developed for the remaining three watersheds, with input from the public. Also underway in FY14 is a regional sediment management study of the West Maui coastal area, which is focusing on the coastal erosion effects and will be used to inform the overall planning process.

d. A mini planning charette was held on 21 June 2014 to obtain input from key West Maui stakeholders and key partners on the development of a initial conceptual array of alternatives. Over the course of the next year, POH will be working with the Institute for Water Resources (IWR) to initiate a shared vision planning framework to further refine these alternatives and selected a recommended strategy.

