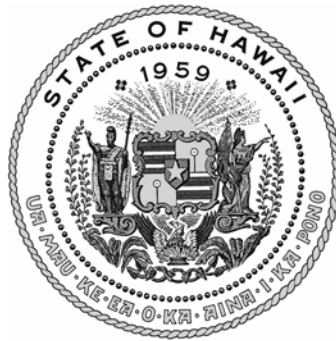


Report to the Twenty-Eighth Legislature
2015 Regular Session

**PROGRESS REPORT ON THE MAKAHA VALLEY FLOOD STUDY
FOR STATE FISCAL YEAR 2014**



Prepared by the
Department of Land and Natural Resources
State of Hawaii

In response to
Act 283, Session Laws of Hawaii 2012

October 2014

PROGRESS REPORT ON THE MAKAHA VALLEY FLOOD STUDY FOR STATE FISCAL YEAR 2014

This progress report is prepared pursuant to Act 283, Session Laws of Hawaii 2012, and covers the period from July 1, 2013 through June 30, 2014.

INTRODUCTION

Makaha Valley is a major watershed on the Waianae Coast, Oahu. The runoff from this watershed flows into two major streams, which in the past have overflowed and resulted in flooding. Although a Waianae Watershed Management Plan was prepared for the Honolulu Board of Water Supply (mainly for the upper Makaha Watershed Area), a study focused specifically on Makaha Valley is vital to identify specific recommendations for the control of storm runoff to reduce recurring flooding to residences and businesses in the area. The Department of Land and Natural Resources' (Department), Engineering Division, has been tasked with the responsibility of conducting a flood study for the Makaha Valley that will address the following:

- (1) Specific recommendations for the control of storm runoff throughout Makaha Valley to reduce repetitive flooding to residences and businesses in the area;
- (2) A cost-benefit analysis of the recommendations proposed;
- (3) Identification and evaluation of the desired, intended, and potential unintended effects of the recommendations;
- (4) A timetable for the implementation of the recommendations; and
- (5) Any other issues deemed necessary or relevant by the Chairperson of the Board of Land and Natural Resources.

Additionally, the Act requires that the Department submit a written report of its findings and recommendations, including proposed legislation, if any, to the Legislature no later than twenty days prior to the convening of the Regular Session of 2013.

INVESTIGATION AND FINDINGS

The Department retained Townscape, Inc. as the primary consultant for the Makaha Valley Flood Study and executed the contract for services on May 1, 2013. A contract scope was developed and divided into three (3) tasks to complete the study. They are as follows:

Task 1 – HISTORIC INFORMATION GATHERING & KEY STAKEHOLDER OUTREACH (Completed)

In this task, a work plan was developed to produce the finished study, including actions, milestones and deliverables. Pertinent data, reports and maps were gathered from various sources during interviews with stakeholders and local residents. Field inspections of Makaha Valley were performed to visually inspect flood structures or lack thereof and to get an accurate sense of existing problems.

Task 2 – FOCUS OUTREACH & DETAILED ENGINEERING ANALYSIS (Ongoing)

Based on the initial findings from the Task 1, proposed flood mitigation measures, projects and actions were identified in detail with preliminary cost estimates and general environmental impact. Hydraulic and hydrology analysis was undertaken to verify existing field conditions and evaluate the effectiveness of the proposed measures. It was determined that a community outreach would best be suited to inform residents and receive comments from the community.

Task 3 – CONCEPTUAL FLOOD MITIGATION RECOMMENDATIONS **(Anticipated Completion – January 2015)**

Recommendations consisting of a prioritized list and sketches of flood mitigation measures, projects and actions will be recommended and presented to Makaha Valley stakeholders and residents via three public outreach meeting. The second of these three meetings was conducted on September 23, 2014 to present the draft final recommendations report. Comments will be received and addressed before issuing the final report of recommendations and presentation to the community.

The Draft Public Review Report can be downloaded from the Engineering Division Website at: <http://dlnreng.hawaii.gov/fcds/?p=493>