

**Alenaio Stream, Island of Hawaii
Harbors and Rivers in Hawaii**

FINAL

*Survey Report and
Environmental Impact Statement*



**US Army Corps
of Engineers**
Honolulu District

JULY 1982

**FINAL
SURVEY REPORT AND
ENVIRONMENTAL IMPACT STATEMENT
ALENAIO STREAM, ISLAND OF HAWAII, HAWAII**

SYLLABUS

The purposes of this study were to identify the problems, needs and the extent to which the Federal government should participate in flood-damage reduction measures. A variety of preliminary plans were evaluated where many were eliminated from further study because of their high costs compared with expected benefits and/or technical inapplicability to the study area. Three (3) alternatives were studied in further detail. They included:

- Plan 1: Modifying the Existing Stream Channel
- Plan 2: A Diversion Channel into the Wailuku River
- Plan 3: Floodproofing Individual Structures, Relocation and Floodplain Management Practices.

A public meeting was held on 12 May 1982 to discuss the draft report and the recommended plan. A public notice was circulated prior to the scheduled meeting notifying the public of the time and place. All comments received on the draft report is documented in the Final Report and Environmental Impact Statement.

Alternative Plan 1 is recommended because the combined beneficial National Economic Development (NED) and Environmental Quality (EQ) qualities exceed the other two (2) alternative plans. Alternative Plan 1 has an estimated project first cost of \$7,983,000 with an expected benefit-to-cost ratio of 2.3 for the Standard Project Flood level of protection. The most significant adverse environmental impact for this plan is the requirement to relocate six (6) residential structures and one (1) public (fire station) administration building. The major features of Plan 1 are:

- (1) A 1640-foot rectangular concrete-lined channel, 35 to 40 feet wide between Kilauea Avenue and Kapiolani Street,
- (2) Floodproofing 11 individual structures, and
- (3) Incorporating floodplain management regulations.

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