

1991-01-08-MA-FRA

FINDINGS OF NO SIGNIFICANT IMPACT  
FOR  
\* LAHAINA WATERSHED FLOOD CONTROL PROJECT  
COUNTY OF MAUI, HAWAII \*

'91 FEB 20 P2:20

Introduction

The Lahaina Watershed Project is a federally assisted action authorized for planning under the authority of the Watershed Protection and Flood Prevention Act, Public Law 83-566 as amended (16 U.S.C. 1001-1008) and in accordance with the National Environmental Policy Act of 1969, Public Law 91-190, as amended (42 U.S.C. 4321 et seq.). An environmental assessment was undertaken in conjunction with the development of the watershed plan. This assessment was conducted in consultation with local, State and Federal agencies as well as with interested organizations and individuals. Data developed during the assessment are available for public review at the following location:

U. S. Department of Agriculture  
Soil Conservation Service  
300 Ala Moana Boulevard, Room 4316  
Honolulu, Hawaii 96850

Recommended Action

The purpose of this project is to provide a 50-year level of flood protection to a 100-year floodplain benefitted area, which includes 168 homes, 152 businesses, two schools, two parks and 80 acres of irrigated sugar cane.

Proposed is the construction of a 6,824-foot long flood water diversion channel from Lahainaluna Road to Kauaula Stream. 1,024 feet of the channel would be reinforced concrete and 5,800 feet would be grass-lined. Associated structures include an inlet basin, an energy dissipating basin and three sediment basins. Also proposed are the construction of a debris basin at Kauaula Stream to capture cobble to boulder-sized rocks, and the replacement of the Kauaula Stream cement, rock-masonry outlet channel with a rectangular, reinforced-concrete channel.

Effect of Recommended Action

Environmental impacts include a 1200 ton per year reduction in sediment load transported to the ocean, and a 50-year level of flood protection provided to the agricultural, residential and commercial areas of the lower Lahaina Watershed, which includes the Lahaina Historic District.

The proposed action will improve the quality of the nearshore marine environment. Total sediment discharge to the ocean from the watershed will be reduced and sediment discharge to the fringing reef area will be nearly eliminated. The average-annual, fine sediment discharge at Kauaula Stream will be increased. The Kauaula Stream outlet is a naturally formed stream

mouth and was determined to be the site least impacted by additional sediment discharge.

Approximately 20.4 acres of land will be required for installation of the diversion channel and related structures. Approximately eight acres of prime farmland and 10 acres of other important farmland will be lost due to installation of the diversion channel.

There are no undisturbed natural areas in the lower part of the Lahaina Watershed that will be affected by project installation. The proposed route for the diversion channel alignment is presently used for sugarcane production and associated roads, ditches and vacant land. The benefitted area below the diversion is in agricultural and urban uses.

While the proposed works of improvement will be visible from various locations within the Lahaina Area, significant adverse impact should not exist. The earth diversion and its embankment will be visible from the town area. The grassed embankment will blend into the agricultural landscape, when it is not screened by mature sugarcane. The most visible component will be the debris basin on Kauaula Stream approximately 200 feet above Honoapiilani Highway. The basin embankment will resemble the many rock piles that have been created in the area as a result of sugarcane cultivation operations.

The installation of the diversion channel may require the removal of up to five homes in Waihee Village. The State Historic Preservation Office (SHPO) has determined that Waihee Village meets the criteria for a historic site, but because of their extensive modification and peripheral location the five houses in question have little historic value. Any demolition of these houses will be accompanied by recording and documentation of the structures, as may be required by the SHPO.

There are no endangered or threatened species known to exist in the watershed. Fish and Wildlife in the watershed will not be negatively impacted by installation of the project. Fish habitat is limited to the lower reaches of Kauaula Stream where there is tidal backwater in the existing concrete channel. This same condition is expected to exist after the project is completed. Wildlife habitat is limited to the sugarcane fields and vegetated areas along Kauaula Stream. Primary species in the area are rats and mice. The Hawaiian Owl, Asio flammeus sandwichensis, may frequent the area in search of food as a result.

#### Alternatives

Structural and nonstructural solutions to the flooding problem were considered. The planned action was determined to be the most practical means to provide the desired flood protection in the lower part of the Lahaina Watershed.

Four structural flood protection alternatives providing various levels of protection were evaluated for contribution to national economic development (NED). Each configuration proposed a diversion channel from Lahainaluna Road to Kauaula Stream. The alternative providing a fifty year level of

protection was determined to maximize NED benefits and provide the highest ratio of benefits to cost.

Two candidate plans were proposed:

Alternative 1 - No action: This alternative forgoes project implementation and allows the continuation of present conditions.

Alternative 2 - National Economic Development Plan: This alternative provides flood protection from storms not exceeding the 50 year recurrence interval.

Alternative 2, the NED Plan, was selected by the sponsors as the recommended plan.

#### Consultation-Public Participation

After planning authorization was received, letters were sent to the U. S. Fish and Wildlife Service, the State Division of Aquatic Resources (Hawaii Department of Land and Natural Resources, DLNR) and the Division of Forestry and Wildlife (DLNR), requesting assistance to identify impacts to biological resources in the Lahaina Watershed in October of 1985.

A public meeting was held at Kamehameha III School on the evening of December 3, 1985. A preliminary plan to provide flood control was described and the attendees were asked to voice their comments and concerns. It appeared that sediment discharge was a major concern of the attendees. They supported measures to decrease sediment discharge to the reef area. A letter responding to their voiced concerns was prepared and mailed to the attendees.

SCS contracted for a study of the effects of flood water discharge on the coastal environment to consider locations that would have the least effect.

An assessment of potential marine ecological impacts of the Lahaina Watershed Project was conducted in 1982 and 1983, by Dr. Richard W. Grigg, Associate Marine Biologist, University of Hawaii. The study involved assessing the potential ecological impacts of flood water discharge within the fringing reef fronting Lahaina Town and at the mouth of Kauaula Stream. Dr. Grigg concluded that the potential environmental impact to the marine environment at the Kauaula Stream outlet would be considerably less than to the nearshore reef area fronting the Lahaina Town.

Another purpose for conducting the marine study was to establish a baseline that could be used to assess changes to the marine environment caused by installation of the project.

A copy of Dr. Griggs report was made available to the Fish and Wildlife Service, the Division of Aquatic Resources and the Division of Forestry and Wildlife.

The Fish and Wildlife Service concurred with Dr. Griggs findings and recommendations. They also recommended that sediment control measures be utilized in the watershed to minimize sediment discharge into the ocean. The Division of Aquatic Resources responded that although use of the Kauaula Outlet would "probably harm marine life less" than discharge near the boat harbor, sediment and nutrient loading of the deeper water off Makila Point may impact coral and glass bottom boat tour operations. Comment from tour boat operators was recommended.

The Division of Forestry and Wildlife responded that the "Project lies well outside of the forested and wildlife habitat areas of the watershed". They foresaw no negative impacts to forestry or wildlife due to the project.

A second marine ecology assessment was conducted by Dr. Grigg in 1986, regarding near-shore sites to the south of Kauaula Stream in an effort to identify a second outlet site. One of the preliminary alternatives that was considered employed a second outlet to raise the flood prevention level of protection, while retaining the existing bridges and outlet channel for Kauaula Stream. The supplemental assessment concluded that a second outlet, located approximately 3000 feet to the south would be preferable. The preliminary alternative with two outlets was judged to be too costly and was dropped from consideration.

Following the development of alternative plans for flood protection, a public meeting was held at Kamehameha III School on July 2, 1986. Four plans were described that offered varying levels of protection and one alternative having two outlets. The engineering works, constraints and costs were described. Benefit-cost ratios were provided for each alternative. The attendees were polled on the alternatives. The group recommended the 50 year level of protection alternative which offered the highest benefit-cost ratio.

On July 20, 1989, after plan selection and near the completion of the draft Plan/EA, a public meeting was held in Lahaina to describe the forthcoming report. Comments and questions from the audience indicated support for the project.

Consultations were held with the U.S. Fish and Wildlife Service and the Hawaii State Department of Land and Natural Resources, who concurred in a no adverse impact finding for the project..

Consultation with the State Historic Preservation Office (SHPO) was begun in 1985 with a request for assistance to determine possible impacts to historic or cultural sites resulting from installation of the project. A review by the Division of State Parks Archaeologists indicated that the Lahaina Watershed Project does not occur on historic properties that are listed on the Hawaii Register or the National Register of Historic Places, or that have been determined eligible for inclusion on either register. Project improvements will be as close as one-half mile from the Lahaina Historic District (Site No. 3001) and Hale Pa'i (Site No. 1596), listed on the National Register of Historic Places.

A field inspection of the proposed flood water diversion route, as well as the sediment basins, debris basin and outlet channel sites was made by

Wendell Kam, Staff Archaeologist, of the State Historic Sites Section in March of 1986. The field inspection resulted in the determination that the project will have no adverse effect on the Lahaina Historic District. The Lahaina Historic Sites will receive a 50-year level of flood protection. A physical inspection of the proposed floodwater diversion alignment, also conducted by Wendell Kam in March, 1986, resulted in a negative finding of any evidence of significant cultural resources along the proposed route which has been extensively disturbed and modified by sugarcane production since the 1860's. In the event that any previously unidentified sites or remains are uncovered, work will be stopped in the immediate area and SHPO will be notified, so that potential impacts may be assessed and any warranted mitigative recommendations made.

SHPO was also consulted regarding the historic significance of five homes in Waihee Village that might be demolished for project installation. After a site examination by SHPO and SCS, SHPO determined that although Waihee Village meets the criteria for listing in the National Register of Historic Sites, the five dwellings, due to their peripheral location and alterations have negligible historic value.

The sponsors and SCS developed and carried out an extensive public participation program to provide interested and affected groups the opportunity to provide input and assist in the planning of the project.

The Technical Review Plan-EA was distributed to 44 agencies, organizations and individuals for review and their comments were incorporated into the draft plan-EA, which was also sent to them for comment.

Agency consultation and public consultation to date have shown no unresolved conflicts with the implementation of the selected plan.

#### Conclusion

The environmental assessment summarized above indicates that this federal action will not cause significant local, regional or national impacts on the environment. Therefore, based on the above findings, I have determined that an environmental impact statement for the Lahaina Watershed Project is not required.



WARREN M. LEE

State Conservationist

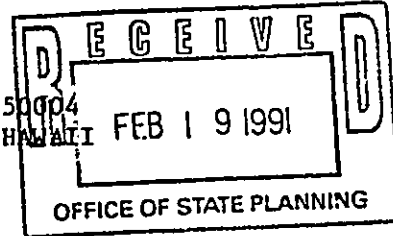
1/2/91

Date

UNITED STATES  
DEPARTMENT OF  
AGRICULTURE

SOIL  
CONSERVATION  
SERVICE

P. O. BOX 50004  
HONOLULU, HAWAII  
96850



February 13, 1991

Dear Sir/Madam:

Enclosed for your information is a copy of the Findings of No Significant Impact (FONSI) for the Lahaina Watershed Flood Control Project. A Notice for the FONSI was published in the Federal Register on January 31, 1991, in Volume 56, No. 21, pages 3818 and 3819.

If you have any questions or comments, please forward them to John Bedish, Planning Staff Leader. He can be contacted at 541-2684.

Sincerely,

A handwritten signature in cursive script that reads "Warren M. Lee".

WARREN M. LEE  
State Conservationist

Enclosure - 1

OFFICE OF ENVIRONMENTAL  
QUALITY CONTROL

'91 FEB 25 P12:04

RECEIVED

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State Conservationist

1/2/91

Date