



University of Hawaii at Manoa

Environmental Center
A Unit of Water Resources Research Center
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October 10, 1991
RP:0143

Mr. Richard Voss
Kauai Refuge Complex
U.S. Fish and Wildlife Service
P.O. Box 87
Kilauea, Hawaii 96754

Dear Mr. Voss:

Water Quality Certification (WQC) Application
Hanalei National Wildlife Refuge Wetland Enhancement Project
Hanalei Valley, Kauai

The above referenced project includes construction of 25 nesting islands of 3 foot diameter; a 126,000 square foot impoundment consisting of a dike and moat; and creation of approximately 18 acres of wetland.

The Environmental Center has reviewed this WQC application with the assistance of James Parrish, Hawaii Cooperative Fishery Research Unit; and Elizabeth Muller, Environmental Center.

Total Surface Area

The summary of project effects with regard to surface area does not include an estimated 18 acres of land which will be flooded as a result of wetland formation.

Predator Barrier

The project includes construction of a dike and moat system which partially surrounds the proposed nesting sites and which will serve as a barrier to predators. If a predator barrier is not already present on the unprotected southwest side of the nesting area then the vulnerability of the nesting area should be considered.

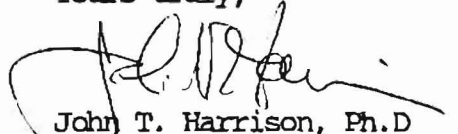
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Water Level Management

The WQC application states that a two stop log structure will regulate the pond's water level and will hold and release water upon demand. There is no mention of a control of the water flow at the downstream end of the project. Neither is it clearly stated how the two stop log structures will work and whether or not there is a backup system in case this first system fails. The area of this project often experiences heavy rains. Consideration should be given to the possibility of floods washing out the stop log structures and the vulnerability of the dikes to erosion in such a situation.

Thank you for the opportunity to comment on this document.

Yours truly,



John T. Harrison, Ph.D
Environmental Coordinator

cc: Roger Fujioka
James Parrish
Elizabeth Muller