UNITED STATES MARINE CORPS
HEADQUARTERS, MARINE CORPS BASES, PACIFIC
CAMP H. M. SMITH, HI 96861-5001

IN REPLY REFER TO:
11010
15B/1109B
July 26, 1991

Office of Environmental Quality Control
220 South King Street, 4th Floor
Central Pacific Plaza
Honolulu, HI 96813

Gentlemen:

The enclosures are forwarded for publication in the OEQC Bulletin per 40 CFR 1506.6. Refer any questions to the Commanding General, Marine Corps Bases, Pacific, Attention: Commander K. T. Gross, Facilities Officer, at 477-0254.

H. G. RUDGE
Colonel, U.S. Marine Corps
Force Engineer
By direction of
the Commanding General

Encl:
(1) Finding of no significant impact for grading, dredging, and drainage control, project KB970MS at Marine Corps Air Station, Kaneohe Bay.
(2) Grading, dredging, and drainage control at Marine Corps Air Station, Kaneohe Bay (finding of no significant impact).

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1991-08-08-OA-FEA

COMMANDER, MARINE CORPS BASES, PACIFIC

FINDING OF NO SIGNIFICANT IMPACT FOR GRADING, DREDGING AND DRAINAGE CONTROL, PROJECT KB970MS AT MARINE CORPS AIR STATION, KANEOHE BAY

Pursuant to Council on Environmental Quality Regulations (Title 40, Combined Federal Regulations, Sections 1500 through 1508) implementing procedural provisions of the National Environmental Policy Act (NEPA), the Commander, Marine Corps Bases, Pacific gives notice that an environmental assessment (EA) was prepared in accordance with administrative requirements of MCO P11000.8B and in compliance with SECTION 102(c) of the National Environmental Policy Act. The necessity for an environmental assessment was determined because a major portion of the project is in a protected wetland environment, an endangered species habitat, and on property deemed eligible for listing in the National Register of Historic Places.

The U.S. Marine Corps proposes to dredge an existing major storm drainage channel and a smaller drainage ditch located at Marine Corps Air Station, Kaneohe Bay. The purpose of the project is to improve the hydraulic capacity of the channels to collect, store, and convey storm runoff off-station.

The major storm drainage channel is about one and one-quarter miles in length from its outlet into Kaneohe Bay near the H-3 Gate to its upper reaches along the southern edge of the Klipper Golf Course. The lower portion of the channel (from Third Street to the H-3 Gate) runs through a section of the Nu'upia Ponds Wildlife Management Area (WMA)--a protected wetland, endangered species habitat, and property eligible for listing in the National Register of Historic Places. It also cuts through a portion of the former sanitary landfill near the H-3 Gate. Between Third Street and Cushman Avenue, the channel passes through an archaeologically sensitive area. The channel will be dredged to a depth of 2 feet along its length. The bottom width varies between 25-30 feet in the Nu'upia Ponds and 10-20 feet near Cushman Avenue. Channel banks will be stabilized or graded to a 2:1 slope. Approximately 17,200 cubic yards of material will be dredged or grubbed. Following completion of dredging, approximately 51 restricted area warning signs will be installed along the west bank of the channel between the Third Street Bridge and the H-3 culvert to mitigate the likelihood of unauthorized human trespass into the Nu'upia Ponds WMA.

The shorter (340 lineal feet) existing earthen storm drainage ditch is located southwest of the Lawrence Road and Third Street intersection near the Station's wastewater treatment plant. The ditch will be deepened by approximately 2 feet, the bottom widened to 20 feet, and its banks graded to a 2:1 slope.

Vegetation will be cleared and grubbed on both sides of the ditch to a distance varying between 5 and 15 feet. Mangrove roots will be removed to a depth of at least 18 inches. This drainage ditch is not located in the Nu'upia Ponds WMA.

The alternatives considered included the proposed action:

1. No Action

   If the proposed project is not approved, present conditions will prevail whereby the potential for flooding occurs during heavy rains. The existing accumulated sediment, thick vegetation growth, lack of perceptible channel slope, and narrow channel sections contribute to the inability of the channel to carry runoff from a 50-year storm, verified by computer modeling.

2. Alternatives to an Earth Lined Channel

   Selective lining of the channel above Mokapu Road to the golf course coupled with replacing inadequate culverts under Cushman Avenue and Lawrence Road are economically infeasible at this time. Lining the entire channel was not studied in the Station's Drainage Master Plan.

3. Recommended Action

   The proposed dredging plan is the least costly alternative, achieves the flood protection objective of the project, and minimizes the extent of physical change and environmental alteration to the channel. This alternative has the added benefit of creating new habitat areas in the Nu'upia Ponds WMA.

The anticipated negative environmental impacts of dredging the major channel are expected to be construction related, temporary, localized, and non-significant. Temporary erosion protection measures (temporary vegetation, mulching, or netting) will be provided along the graded channel slopes. Dredging in the Nu'upia Ponds Wildlife Management Area will not be permitted during the nesting season of the endangered Hawaiian Stilt, roughly from 1 March through 30 September. The project will not affect known cultural resources and potential adverse impacts in the identified archaeological areas will be negated by having a qualified archaeologist monitor dredging activities in selected areas with an approved Data Recovery Plan. Amphibious Assault Vehicles (AAV) passing the drainage channel near Halekou Pond transiting to Kaneohe Bay for training may be temporarily inconvenienced by dredging activities. This impact can be minimized by coordinated scheduling of dredging activities and trail use schedules.

Testing for hazardous waste will be performed prior to excavation and dredging activities in the former landfill area. Samples will be collected along the channel alignment and tested by a qualified testing laboratory. Tests to be conducted include a priority pollutant scan to determine whether toxic substances are present in the soil and a Toxic Characteristic Leaching Procedure (TCLP) test will be conducted to determine whether

excavated materials comprise hazardous waste according to the Resource Conservation and Recovery Act (RCRA). Test results will be submitted to the Contracting Officer prior to commencement of dredging. Dredged spoil will be temporarily stockpiled along the channel at locations predesignated by the Station project coordinator. When properly dewatered, dredged material will be disposed at the Station sanitary landfill. Cleared and grubbed materials will be disposed off Station in an appropriate manner dictated by the results of laboratory tests for hazardous waste.

Stockpile sites will be restored to pre-dredging condition by the Contractor. With improved capacity and efficiency, the channel will convey and discharge a larger volume of stormwater in a shorter time (than is now the case) into Kaneohe Bay. Discharged stormwater will create a freshwater layer which will be dissipated by waves and currents. The absence of coral beds near the discharge outlet into Kaneohe Bay and the general mobility of marine life in the vicinity of the outlet preclude adverse effects on these resources.

Drainage improvements will lessen the potential for flooding, particularly in the residential areas along the upper reaches of the channel. Clearing of vegetation (primarily mangrove) in the Nu'upia Ponds section will open new habitat areas for birds and stream fauna. The widened channel may function secondarily as a water barrier (or moat) to protect nesting grounds and endangered Hawaiian Stilt feeding areas from mammalian predators. Existing breaks in the low coral fill mound separating the drainage channel from the northwestern edge of Halekou Pond in the Nu'upia Ponds WMA will remain to allow periodic, beneficial influx of freshwater into this wildlife habitat.

Dredging the shorter drainage ditch and grubbing the banks and channelway of mangrove will improve hydraulic capacity and efficiency of collect, store, and convey runoff. This will have the beneficial impact of negating flooding of low lying areas adjacent to the channel. Temporary short-term effects such as noise, dust, and turbidity can be expected. The project area is outside the Nu'upia Ponds WMA and generally isolated from noise sensitive locations hence construction activities will neither disturb endangered waterfowl nor interfere with noise sensitive activities. Ground disturbing activities will be monitored by a qualified archaeologist with an approved data recovery plan.

The most significant environmental documents consulted during preparation of this EA include: (1) Fish and Wildlife Management Plan for the Marine Corps Air Station Kane'ohe Bay, Oahu, Hawaii, Volumes 1 and 2 (1984) prepared by the U.S. Fish and Wildlife Service, (2) Historic Property Inventory, Marine Corps Air Station, Kaneohe Bay, Historic Survey and Site Decrepitations Ibid, Management and Recommendation (1986) by David H. Tuggle and Robert J. Hommon of Pacific Division, Naval Facilities Engineering Command, (3) Initial Assessment Study of Marine Corps Air Station Kaneohe Bay, Hawaii (1984) by NEESA, and (4) Draft

Report Verification Phase Confirmation Study Site 7 - MCAS Kaneohe, H-3 Sanitary Landfill Kaneohe Bay, Oahu Hawaii (1987) prepared by Aqua Terra Technologies. During the preparation of this EA, consultations were held with the U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers, the State Historic Preservation Officer, the Office of Coastal Zone Management State of Hawaii, the Office of Hawaiian Affairs, and the President's Advisory Council on Historic Preservation. None of these consultations indicates that any aspect of the project conflicts with existing plans or policies.

Based upon the preceding information, the Commander, Marine Corps Bases, Pacific, for the Department of the Navy, declares that the proposed action will not create significant adverse environmental impacts nor is it likely to generate public controversy.

The Environmental Assessment (EA) is on file and may be reviewed by interested parties at the place of origin: Commanding Officer, Marine Corps Air Station, Kaneohe Bay, Oahu, Hawaii, Attn: Lieutenant Commander P. F. Mathews, Civil Engineer Corps, United States Navy, Public Works Officer (telephone 257-2171 or 257-7900).

23 Jul 91
Date

Lieutenant General R. E. Milligan
United States Marine Corps,
Commander, Marine Corps Bases, Pacific

GRADING, DREDGING AND DRAINAGE CONTROL AT MARINE CORPS AIR STATION, KANEOHE BAY (FINDING OF NO SIGNIFICANT IMPACT)

The proposed action is to dredge a major storm drainage channel and a smaller drainage ditch located at Marine Corps Air Station, Kaneohe Bay. The purpose of the project is to improve the hydraulic capacity of the two existing drainage channels to collect, store, and convey storm runoff off-station, discharging into Kaneohe Bay. An environmental assessment was determined necessary since a major portion of the project will occur in a protected wetland environment and an endangered species habitat [the Nu'upia Ponds Wildlife Management Area (WMA)], and on property deemed eligible for listing in the National Register of Historic Places. It also transects a portion of the former sanitary landfill near the H-3 Gate. Temporary erosion protection measures (temporary vegetation, mulching, or netting) will be provided along the graded channel slopes. Dredging in the Nu'upia Ponds Wildlife Management Area will not be permitted during the nesting season of the endangered Hawaiian Stilt, roughly from 1 March through 30 September. The project will not affect known cultural resources and a qualified archaeologist will monitor dredging activities in selected areas to minimize adverse cultural impact. An archaeolgical Data Recovery Plan was prepared to emphasize the protection of potential cultural resources encountered. Alternatives included construction of a concrete lined channel on the present site of the existing earth lined drainage channels, and replacing inadequate culverts. This solution was uneconomical and potentially created more significant environmental impact due to construction activity and subsequent unrestrained flow of fresh water runoff. Failure to remove accumulated sediment and thick vegetation growth and improvement of channel hydraulic capacity would result in recurrence of flooding during heavy rains.