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RS: DO 69

Mr. Kisuk Cheung
Chief, Engineering Division
U.S. Army Engineer Division, Pacific Ocean
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Bldg 230
Fort Shafter, Hawaii 96858

Dear Mr. Cheung

Aquatic Plant Control Program

The above stated program relates to the U.S. Corps of Engineers responsibility under Section 104 of the Rivers and Harbors Act of 1958 to investigate, control and remove aquatic plant infestations which may impede navigation, flood control and other functions of Federal interest. This review was prepared with the assistance of Albert Martinez, Plant Pathology; Roy Nishimoto, Horticulture and Walington Yee, Environmental Center.

The reconnaissance report provides an adequate assessment of some of Hawaii's aquatic weed problems. It does not, however, provide information on items 4, 5, 6 and 7 of Appendix B and items 1f, 1g, 2a, 3b, 3c, and 4a of Appendix C. In addition, there may be insufficient information for other items described in Appendix A and B.

The reconnaissance report sites the use of Roundup or Dalapon for control of California grass. Although Roundup can be more effective than Dalapon, Roundup is not registered for use in aquatic situations. Another herbicide, Rodeo, has the same active ingredient (glyphosate) as Roundup but lacks a wetting agent. It has the advantage of being registered for use in and around aquatic sites, therefore it should be used instead of Roundup, in or near aquatic sites, to control California grass.

The eradication of specific weeds, such as California grass, should include the subsequent establishment of a desired species. It is our understanding that Dr. J. Frank of the University Horticulture department has suggested that a variety of plant species (centipede grass, Australian carpet grass), can be selected for low growth tolerance to salt water (seashore paspalum) or heavy traffic (common bermudagrass). Certainly the replanting would provide not only a significant deterrent to the regrowth of California grass, but would also act to reduce soil erosion.

Although not specifically stated in the reconnaissance report, Rodeo would provide control of water hyacinth and as described it can be effective for use on water lettuce. In controlling most aquatic plants, one should avoid widespread destruction of any species. The decaying vegetation results in oxygen depletion and may result in fish kills. When large infestations of aquatic weeds must be treated, herbicide application in strips may avoid a severe oxygen depletion due to decaying vegetation.

Little information on American mangrove control is available but Dr. Philip Motooka, Department of Agronomy and Soil Science at the University of Hawaii, has initiated some studies on chemical control of this species. We are enclosing a copy of a recent report on this topic for your information. Please note in particular pages 11 and 12 of the attached HITAHR Brief 052. The report indicates that both Weeder 64 and Banvel 720 provide some control of American mangrove but it is not clear if the ocean marsh environment is classified for their use.

Based on the information provided in the reconnaissance report it would appear that the aquatic weed problem lacks an organized and systematic control effort which could cause serious flooding problems in certain areas.

We appreciate the opportunity to comment on this document.

Yours truly,



Jacquelin N. Miller
Acting Associate Director

cc: Patrick Takahashi
OEQC
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