

Executive Summary

Lehua Island is a 284-acre island located three-fourths of a mile off the northern shore of Niihau (a privately owned 46,080-acre island). Lehua is a state-designated seabird sanctuary managed by the Hawaii Department of Land and Natural Resources (DLNR) and federally owned by the U.S. Coast Guard (USCG). Lehua is one of Hawaii's most important seabird colonies because of its size and height above sea level. It also offers a unique opportunity for restoring an island ecosystem.

DLNR Division of Forestry and Wildlife (DOFAW), in conjunction with federal sponsor United States Fish and Wildlife Service (USFWS), technical partner Island Conservation (IC), and the cooperating members of the Lehua Island Restoration Steering Committee (LIRSC) are proposing to complete the eradication of rats from Lehua Island so further restoration efforts can move forward in the future.

The LIRSC is a multidisciplinary stakeholder body including representatives from: DOFAW, USFWS, the U.S. Department of Agriculture, Animal and Plant Health Inspection Service, Wildlife Services (WS), U.S. Coast Guard (USCG), National Tropical Botanical Gardens (NTBG), the Owners of Niihau, and IC.

In 2005, DOFAW and the USFWS embarked on a plan to restore Lehua Island. As part of the compliance for the actions proposed in the plan, both Federal and State Environmental Assessments (EA) were submitted, commented on by the public, and resulted in a Finding of No Significant Impact (FONSI) for both the 2005 Lehua EAs and the supplemental EAs in 2009. The alternatives approved in the EAs were followed and the actions resulted in the complete eradication of rabbits from Lehua in 2006 and an incomplete eradication of rats in 2009. (See *Summary of Final EA 2005, Supplemental EA 2009, and Purpose of this EA* for further details)

The purpose of the proposed actions in this document is to restore Lehua Island's ecosystem through completing the eradication of rats, and to ensure restoration success by keeping Lehua rat free. The proposed action could improve seabird nesting habitat and could aid in the recovery of rare endemic seabirds such as Band-rumped Storm Petrels, Hawaiian Petrels, and Newell's Shearwaters, and native coastal plants and insects. The proposed project is not anticipated to have any significant negative environmental effects.

The proposed preferred alternative involves the aerial and hand broadcast of bait pellets containing the rodenticide diphacinone (followed by the rodenticide brodifacoum if necessary) into all rat territories on Lehua Island. Rat eradication would occur in the summer dry season to minimize risk of rain washing rodenticide pellets into the ocean and to maximize the efficacy of eradication by targeting the rats at the low point in their population cycle.

DOFAW, USFWS, and IC have conducted extensive scoping since 2005 of the proposed actions, and additional scoping following on the 2009 incomplete eradication attempt. As a result of comments from interested public, Federal and State agencies, and conservation groups,

DOFAW identified a number of environmental issues. These issues are: 1) Restoration efficacy; 2) Impacts on non-target species; 3) Increase in weed abundance caused by rat eradication; 4) Impacts on cultural resources; 5) Impacts on human health and safety; and 6) Introduction of non-native species caused by project activities. Following the 2009 rat eradication attempt, there was a coincidental fish mortality event reported on Niihau and a dead whale calf also was found around the same time. Several tests of the affected fish and whale were done and showed no rodenticide in tissues. Nonetheless, further analysis and research has been included in this document to address impacts to marine species.

To address these environmental issues, DOFAW prepared three alternatives, including the proposed action. Each alternative was developed to respond to the environmental issues identified. USFWS and DOFAW also considered many other alternatives and methods to eradicate rats on Lehua Island but rejected the methods that failed to meet the purpose and need of the project.

Within this Draft EA, DOFAW describes the affected environment for the project. This section describes what is currently known about the status and trend of affected island resources, including the physical features of the island, and its terrestrial and marine resources. There is also an analysis of the environmental consequences that could occur should any of the alternatives presented be chosen for implementation, and a description of proposed mitigation measures.

The DOFAW Administrator is responsible for the final decision on the proposed action, in addition to plan implementation and monitoring.