

their Long Range Management Plan with an emphasis on reducing nonnative species that immediately threaten the management area (Maui Pineapple Company 1999).

The primary management goals within Puu Kukui WMA are to (1) eliminate ungulate activity in all Puu Kukui management units; (2) reduce the range of habitat-modifying weeds and prevent introduction of nonnative plants; (3) reduce the negative impacts of non-native invertebrates and small animals; (4) monitor and track biological and physical resources in the watershed in order to improve management understanding of the watershed's resources; and (5) prevent the extinction of rare species within the watershed.

Specific management actions to address feral ungulates include the construction of fences surrounding 10 management units and removal of ungulates within the Puu Kukui WMA.

The nonnative plant control program within Puu Kukui WMA focuses on habitat modifying weeds, prioritizing them according to the degree of threat to native ecosystems, and preventing the introduction of new weeds. The weed control program includes mapping and monitoring along established transects and manual/mechanical control. Biological control of *Clidemia hirta* was tried by releasing *Antiblemma acclinalis* moth larvae.

Natural resource monitoring and research address the need to track biological and physical resources of the Puu Kukui WMA and evaluate changes to these resources in order to guide management programs. Vegetation is monitored through permanent photo points, nonnative species are monitored along permanent transects, and rare, endemic, and indigenous species are monitored. Additionally, logistical and other support for approved research projects, interagency cooperative agreements, and remote survey trips within the watershed is provided.

For these reasons, Puu Kukui WMA meets the three criteria for determining that an area is not in need of special management as discussed above. Therefore, we have determined that the private land within Puu Kukui WMA does not meet the definition of critical habitat in the Act, and we are not designating this land as critical habitat. Should the status of this reserve change, for example by non-renewal of a partnership agreement or termination of NAP funding, we will reconsider whether it then meets the definition of critical habitat. If so, we have the authority to propose to amend critical habitat to include such area at that time (50 CFR 424.12(g)).

In summary, we believe that the habitat within Waikamoi and Kapunakea Preserves, Puu Kukui WMA, and the upper area (above 1,525 m (5,000 ft)) of Hanawi NAR, are being adequately managed for the conservation of the listed species that occur within these areas and are not in need of special management considerations or protection. Therefore, we have determined that these lands do not meet the definition of critical habitat in the Act, and we are not designating these lands as critical habitat.

Analysis of Impacts Under Section 4(b)(2)

Section 4(b)(2) of the Act requires us to designate critical habitat on the basis of the best scientific information available, and to consider the economic and other relevant impacts of designating a particular area as critical habitat. We may exclude areas from critical habitat upon a determination that the benefits of exclusion outweigh the benefits of specifying such areas as critical habitat. We cannot exclude such areas from critical habitat when exclusion will result in the extinction of the species concerned.

Economic Impacts

Following the publication of the revised proposed critical habitat designation on April 5, 2002, a draft economic analysis (DEA) was prepared to estimate the potential economic impact of the proposed designation in accordance with the Court's decision in the *N.M. Cattlegrowers Ass'n v. U.S. Fish and Wildlife Serv.*, 248 F.3d 1277 (10th Cir. 2001). The draft analysis was made available for review on October 2, 2002 (67 FR 61845). We accepted comments on the draft analysis until November 2, 2002.

Our draft economic analysis evaluated the potential direct and indirect economic impacts of section 7 associated with the proposed critical habitat designation for the 61 plant species from the islands of Maui and Kahoolawe over the next ten years. Direct impacts are those related to consultations under section 7 of the Act. They include the cost of completing the section 7 consultation process and potential project modifications resulting from the consultation. Indirect impacts are secondary costs and benefits that could occur coextensively with critical habitat designation, but are not necessarily directly related to the Act. Examples of indirect impacts include potential effects to property values, potential effects of redistricting of land from agricultural or urban to

conservation, and social welfare benefits of ecological improvements.

The categories of potential direct and indirect costs considered in the analysis included the costs associated with: (1) Conducting section 7 consultations including incremental consultations and technical assistance; (2) Modifications to projects, activities, or land uses resulting from the section 7 consultations; (3) Uncertainty and public perceptions resulting from the designation of critical habitat including potential indirect costs resulting from the loss of hunting opportunities and the interaction of State and local laws; and (4) Potential offsetting beneficial impacts associated with critical habitat, including educational benefits. The most likely economic effects of critical habitat designation are on activities funded, authorized, or carried out by a Federal agency (*i.e.*, direct costs).

The analysis in the DEA incorporates two baselines: one which addresses the impact of critical habitat designation that may be "attributable co-extensively" to the listing of the species and one which addresses the incremental impact of the critical habitat designation itself.

This Addendum utilizes one baseline and analyzes the impacts of critical habitat designation that may be attributable co-extensively to the listing of the species. Because of the potential uncertainty about the benefits and economic costs resulting solely from critical habitat designations, the Service believes that it is reasonable to estimate the effects of the designation utilizing this approach to avoid understating potential economic impacts. It is important to note that the inclusion of impacts attributable co-extensively to the listing does not convert the economic analysis into a tool to be considered in the context of a listing decision.

The addendum incorporates public comments on the draft analysis and makes other changes in the draft. These changes were primarily the result of modifications made to the proposed critical habitat designation based on biological information received during the comment periods. In addition, we have completed an amendment to the addendum in which we have examined the potential economic impacts of a critical habitat designation in areas that were not included in the original proposal because we believed they were areas essential to the conservation of the species but did not require special management considerations or protection and thus could be excluded from designation under section 3(5)(a) of the Act.