

removal, and ungulate and rat management. Failure to implement these management measures, all of which require active intervention and participation, virtually assures the extinction of these species. The Army is carrying out many of these actions on their lands, in some cases to a degree that surpasses that of other Federal, State, and private landowners in Hawaii. We are, therefore, not designating critical habitat on these lands. Should the status of these commitments change, the Service will reconsider whether these lands meet the definition of critical habitat. If the definition is met, we have the authority to propose to amend critical habitat to include identified areas at that time (16 U.S.C. 1533(a)(3)(B); 50 CFR 424.14(g)). Although these areas are removed from the final critical habitat designation, the number of populations for which habitat on PTA provides is applied toward the overall conservation goal of 8 to 10 populations for each species because these lands will be managed under the INRMP consistent with recovery goals.

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 and commercial 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 such exclusions outweigh the benefits of specifying such areas as critical habitat. We cannot exclude such areas from critical habitat when such exclusion will result in the extinction of the species concerned.

Economic Impacts

Following the publication of the proposed critical habitat designation on May 28, 2002, a draft economic analysis was prepared to estimate the potential direct and indirect economic impacts associated with the designation, in accordance with the recent decision in *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 December 18, 2002 (67 FR 77464). We accepted comments on the draft analysis until the comment period closed on January 17, 2003.

Our draft economic analysis evaluated the potential direct and indirect economic impacts associated with the proposed critical habitat designation for the 41 plant species from the island of Hawaii over the next 10 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 not directly related to operation of the Act. Examples of indirect impacts include potential effects to property values, 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 effects on property values and potential indirect costs resulting from the loss of hunting opportunities and the interaction of State and local laws; and (4) potential offsetting beneficial costs 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).

Following the close of the comment period on the draft economic analysis, an addendum was completed that incorporated public comments on the draft analysis and made other changes as necessary. These changes were primarily the result of modifications made to the proposed critical habitat designation based on biological information received during the comment periods.

The draft economic analysis and addendum addressed the impact of the proposed critical habitat designation that may be attributable coextensively to the listing of the species. Because of the uncertainty about the benefits and economic costs resulting solely from critical habitat designations, the Service believes that it is reasonable to estimate the economic impacts of a designation utilizing this single baseline. It is important to note that the inclusion of impacts attributable coextensively to the listing does not convert the economic analysis into a tool to be used in deciding whether or not a species should be added to the Federal list of threatened and endangered species.

Together, the draft economic analysis and the addendum constitute our final economic analysis. The final economic analysis estimates that, over the next 10

years, the designation (co-extensive with the listing) may result in potential direct economic effects from implementation of section 7 ranging from approximately \$46.6 million to \$62.7 million in quantifiable costs. This decrease of approximately \$6.6 million to \$9.1 million from the draft economic analysis's estimated potential direct economic effects from implementation of section 7 results primarily from the exclusion of proposed units Hawaii C, D5, M1, M2, M3, M4, N1, N2, P, V, and BB from final designation and the significant reduction in size of the remaining proposed units because they lacked the primary constituent elements or were not essential to the conservation of the species. Overall, the largest portion of this estimate includes impacts on Army land that was proposed as critical habitat but has been removed from the final designation. Therefore, the direct cost of designating critical habitat for these 41 plant species will be far less than this estimate.

While our final economic analysis includes an evaluation of potential indirect costs associated with the designation of critical habitat for 41 plant species on the island of Hawaii, some types of costs are unquantifiable. The costs that are provided are speculative in the sense that there is no certainty as to their being incurred, but we believe the numbers represent a reasonable range of costs for the specific actions in question, should they occur in whole or in part. The final economic analysis concludes that efforts to redistrict land as a result of this designation are likely to occur, but that there is no way of determining in advance the outcome of this process with respect to specific parcels, or of possible related litigation. However, such landowners may have economic costs associated with voluntary agreements to restrict development, and contesting redistricting. For land not planned for development, the analysis concluded that it is reasonably foreseeable that some landowners would see lower property values, restrictions on agricultural activity and costs to contest redistricting. In total, the costs associated with redistricting or the threat of redistricting could range from \$22 to 28 million. The final economic analysis also concludes there is an undetermined probability of costs ranging from \$48.9 to \$96.5 million associated with obtaining State and county development approvals, and includes costs associated with a loss or delay of these approvals. Some of these costs, however, may overlap with a portion of the redistricting costs (*i.e.*,