

next step is to see how many distinct populations of each plant species exists or can be established within those units to meet the species overall habitat needs to support eight to ten populations. Only after this analysis has been made and found to be lacking, would you start looking outside these management units for other lands needed. The commenter believes that this approach not only meets the legal requirements for critical habitat designation, but provides the best approach for recovery of the species.

*Our Response:* We agree that managed areas containing current or historic populations are vitally important to the conservation of the species, and have included managed areas on Kauai with appropriate primary constituent elements in critical habitat. Managed lands are not included only if management is sufficient to demonstrate that special management considerations or protection are not required, pursuant to 16 U.S.C. 1532(5)(A)(i). See "Managed Lands." However, these areas alone or in conjunction with other areas that may be managed in the future do not include all of the habitat essential for the Kauai and Niihau species. Therefore, we have designated these managed areas along with additional areas outside of managed units as critical habitat. In our final analysis, for each species, we ranked areas of the proposed critical habitat by the quality of the primary constituent elements, potential as a recovery area, and current or expected management of known threats. Areas that contain high quality primary constituent elements, are zoned for conservation, and have on-going or expected threat abatement actions were given high ranks. Of these highly-ranked areas, we selected adequate area for 8 to 10 populations distributed among the islands of each species' historical range. Of the proposed critical habitat for a species, areas that were not highly ranked and that may provide habitat for populations above the recovery goal of 8 to 10, were determined not essential for the conservation of the species and were excluded from the final designation (see "Criteria Used to Identify Critical Habitat").

(6) *Comment:* Designate critical habitat for Federal lands only.

*Our Response:* Federal lands on the island of Kauai include the Navy's Pacific Missile Range Facility (PMRF) at Barking Sands and Makaha Ridge and the Service's Kilauea Point National Wildlife Refuge, Hanalei National Wildlife Refuge, and Huleia National Wildlife Refuge. In this final rule, we are designating critical habitat for *Panicum niihauense* at Barking Sands,

as this dune habitat is essential for the conservation of this species. This dune habitat is not essential for the conservation of the other 82 species at issue on Kauai. In this final rule, we are not designating critical habitat for *Wilkesia hobbii* at Makaha Ridge, as this habitat is not essential for the conservation of this species. This habitat is not essential for the conservation of the other 82 species at issue on Kauai. None of the 83 species at issue on Kauai are known currently or historically from the Service's refuges at Kilauea Point, Hanalei, or Huleia, and these Federal lands are not essential for the conservation of the 83 species at issue on Kauai.

(7) *Comment:* The Service cannot lawfully exclude areas from critical habitat based on a finding that they currently are adequately managed or protected. To do so would violate the mandatory duty to designate critical habitat to the maximum extent prudent and determinable. The commenter urges the Service not to exclude any areas from designation on this basis (already managed or protected), since doing so would violate the mandatory duty to designate critical habitat "to the maximum extent prudent and determinable."

*Our Response:* We disagree as "special management considerations or protection" is part of the definition of critical habitat and must be given meaning when designating critical habitat. Specifically, we believe that adequate special management consideration or protection could be provided by a legally operative plan or agreement that addresses the maintenance and improvement of the primary constituent elements important to the species and manages for the long-term conservation of the species. However, for this designation we did not identify essential habitat features that already have adequate management and would not be included on that basis.

(8) *Comment:* Several commenters supported the Hawaii Division of Forestry and Wildlife proposal for designating critical habitat on existing managed areas as these areas are where the limiting factors for species conservation can be addressed. Furthermore, one landowner noted that a large portion of his/her lands are managed by the Hawaii Division of Forestry and Wildlife.

*Our Response:* We agree that the State DOFAW staff have valuable on the ground experience and scientific information that has been essential to our critical habitat decision making process. However, we did not adopt

DOFAW's first proposal (January 11, 2001) as it did not adequately address all of the conservation needs of the species in accordance with the Act. After publication of the January 28, 2002, revised proposed critical habitat rule, we met several times with Kauai DOFAW staff and conducted several site assessment surveys. As a result of the assessment surveys and information provided to us by Kauai DOFAW staff, we were able to better identify areas that did not contain primary constituent elements. In addition, we received important information from Kauai DOFAW staff that enabled us to refine the final critical habitat designations to better meet the conservation needs of the species.

(9) *Comment:* One commenter stated that it is extremely difficult to come up with a biologically sound definition of a population that can be realistically applied to the distribution and abundance of a rare species in the wild. However, the commenter noted that defining separate populations as being more than 1,000 meters apart is both biologically meaningful and operationally useful and serves as the focus of the Army's species stabilization efforts in the Waianae Mountains of Oahu. A commenter noted that the separation distance of 1,000 meters is probably adequate for most small-scale disturbance events, but will be inadequate for large-scale disturbances. The problem of defining populations requires knowledge of gene-flow patterns. The commentator recognizes that the proposed targets for population recovery are initial and not derived from any detailed understanding of genetic architecture. The commentator recommends altering these objectives, but would suggest that the Service state the need for more studies on population genetics. In addition, the targets present a demographic challenge to achieve a population of 100 mature individuals and will require massive plantings to counteract mortality. These practical challenges should be made clear.

*Our Response:* We agree that the operational definition of 1,000 meters between separate populations is adequate in the absence of information on the specific biological requirements of a population for each species. The need for genetic and demographic studies and the understanding of challenges to reintroduction are addressed in the species' recovery plans.

(10) *Comment:* Many commenters stated that a multi-population approach is essential for the conservation of many of the rare Hawaiian plant species, since the purpose of critical habitat and