

critical habitat. A proposed critical habitat unit, Lanai D, located on the central-eastern side of the island, was excluded from designation because we believed that doing so would further the goal of encouraging private landowners to undertake voluntary conservation activities, which will be necessary to achieve species recovery. The proposed 5,861 ha (14,482 ac) unit is on private lands owned by Castle and Cooke Resorts, LLC. Castle and Cooke Resorts, LLC—which owns 99 percent of the island—is currently undertaking voluntary conservation activities within and adjacent to this unit, and has recently entered into an agreement with the Service for future activities (MOA, 2002), as well.

The proposed unit Lanai D is occupied habitat for 17 species: *Abutilon eremitopetalum*, *Bonamia menziesii*, *Centaurium sebaeoides*, *Clermontia oblongifolia* ssp. *mauiensis*, *Ctenitis squamigera*, *Cyanea grimesiana* ssp. *grimesiana*, *Cyanea macrostegia* ssp. *gibsonii*, *Cyrtandra munroi*, *Gahnia lanaiensis*, *Hedyotis mannii*, *Hedyotis schlechtendahlia* var. *remyi*, *Hibiscus brackenridgei*, *Labordia tinifolia* var. *lanaiensis*, *Melicope munroi*, *Spermolepis hawaiiense*, *Tetramolopium remyi*, and *Viola lanaiensis*. It is unoccupied habitat for 11 species: *Adenophorus periens*, *Brighamia rockii*, *Cenchrus agrimonoides*, *Cyanea lobata*, *Diellia erecta*, *Diplazium molokaiensis*, *Hesperomannia arborescens*, *Isodendron pyrifolium*, *Neraudia sericea*, *Solanum incompletum*, and *Vigna o-wahuensis*.

According to our published recovery plans, recovery of these species will require reproducing, self-sustaining populations located in a geographic array across the landscape, with population numbers and population locations of sufficient robustness to withstand periodic threats due to natural disaster or biological threats (Service 1995, 1996a, 1996b, 1997, 1998a, 1998b, 1999, 2001). The highest priority recovery tasks include active management such as plant propagation and reintroduction, fire control, alien species removal, and ungulate fencing. Failure to implement these active management measures, all of which require voluntary landowner support and participation, virtually assures the extinction of these species. Many of these types of conservation actions in this area of Lanai are carried out as part of the Lanai Forest and Watershed Partnership and by actions taken on the landowner's initiative in areas outside the watershed partnership area. These activities, which are described in more

detail below, require substantial voluntary cooperation by Castle and Cooke Resorts, LLC.

The following analysis describes the likely conservation benefits of a critical habitat designation compared to the negative impacts of a critical habitat designation. The Service paid particular attention to the following issues: Whether critical habitat designation would confer regulatory conservation benefits on these species; whether the designation would educate members of the public such that conservation efforts would be enhanced; and whether a critical habitat designation would have a positive, neutral, or negative impact on voluntary conservation efforts on this privately-owned island.

If excluding an area from a critical habitat designation will provide substantial conservation benefits, and at the same time including the area fails to confer a counter-balancing positive regulatory or educational benefit to the species, then the benefits of excluding the area from critical habitat outweigh the benefits of including it. The results of this type of evaluation will vary significantly depending on the landowners, geographic areas, and species involved.

(1) Benefits of Inclusion

Critical habitat in Lanai D was proposed for the following species: *Abutilon eremitopetalum*, *Adenophorus periens*, *Bonamia menziesii*, *Brighamia rockii*, *Centaurium sebaeoides*, *Cenchrus agrimonoides*, *Clermontia oblongifolia* ssp. *mauiensis*, *Ctenitis squamigera*, *Cyanea grimesiana* ssp. *grimesiana*, *Cyanea lobata*, *Cyanea macrostegia* ssp. *gibsonii*, *Cyrtandra munroi*, *Diellia erecta*, *Diplazium molokaiensis*, *Gahnia lanaiensis*, *Hedyotis mannii*, *Hedyotis schlechtendahlia* var. *remyi*, *Hesperomannia arborescens*, *Hibiscus brackenridgei*, *Isodendron pyrifolium*, *Labordia tinifolia* var. *lanaiensis*, *Melicope munroi*, *Neraudia sericea*, *Solanum incompletum*, *Spermolepis hawaiiense*, *Tetramolopium remyi*, *Vigna o-wahuensis*, and *Viola lanaiensis*. The primary direct benefit of inclusion of the proposed unit Lanai D as final critical habitat would result from the requirement under section 7 of the Act that Federal agencies consult with us to ensure that any proposed Federal actions do not destroy or adversely modify critical habitat.

Historically, we have conducted only seven informal consultations under section 7 on Lanai, and only one consultation involved any of the 28 species associated with proposed unit D. We do not expect further

consultations in unit Lanai D for several reasons. Unit Lanai D is privately owned and does not contain any wetlands (the major reason for Federal permits). The landowner does not plan on applying for Federal funds (other than for habitat restoration) and does not foresee any reason to obtain federal permits that may create a federal nexus. Any funds received by the landowner for habitat restoration will require internal consultations, but will not likely adversely affect listed plant species or involve other Federal agencies. The majority of the land in proposed unit Lanai D is zoned as Conservation¹ (71 percent). Any lands zoned as Agriculture² (27 percent) in this area are not currently used for agricultural purposes and are currently fallow. Likely future use by the landowner of this area is as watershed protection (MOA, 2002). As stated in the economic analysis, future development in this area is not expected over the long term. Past uses of this area include marginal agriculture (primarily grazing). For these specific reasons, we do not expect future consultations in proposed unit Lanai D.

Although we believe the likelihood of a consultation is small, in the unlikely event that the landowner began using Federal funds or permits for projects, consultation requirements under section 7 of the Act would be triggered as a result of the funding or permitting processes administered by the Federal agency involved. The benefit of critical habitat designation would ensure that any actions funded by or permits given by a Federal agency would not likely destroy or adversely modify any critical habitat. Without critical habitat, some site-specific projects might not trigger consultation requirements under the Act in areas where species are not currently present; in contrast, Federal project areas with listed species present would still be covered under section 7. Given the overall low likelihood of Federal

¹ Conservation-zoned land is designated to conserve, protect and preserve the State's important natural resources through appropriate management in order to promote the long-term sustainability of these natural resources, and to promote public health, safety and welfare. Only limited development and commercial activity are allowed in the Conservation District.

² Agricultural-zoned land is a catch-all category that includes all lands not otherwise categorized, regardless of the agricultural quality of the land. Crops, livestock, and grazing are permitted in the zone, as are accessory structures and farmhouses. Although land in this zoning is not meant to be urbanized, it is, in practice, sometimes used for large-lot subdivisions. Listed species are found in some parts of this zoning, particularly in gulches, on hillsides, and on some of the land that is used for low-intensity grazing. In many cases, the fact that the land is Agricultural District indirectly protects listed species by limiting urban sprawl.