

become unoccupied; (2) focusing conservation activities; (3) providing educational benefits to State or county governments or private entities; and (4) preventing people from causing inadvertent harm to the species.

In the case of these 71 species, there would be some benefits to critical habitat. The primary regulatory effect of critical habitat is the section 7 requirement that Federal agencies refrain from taking any action that destroys or adversely affects critical habitat. One of these species is reported on or near Federal lands (see Table 2), where actions are subject to section 7 consultation. Although a majority of the species considered in this rule are located exclusively on non-Federal lands with limited Federal activities, there could be Federal actions affecting these lands in the future. While a critical habitat designation for habitat currently occupied by these species would not likely change the section 7 consultation outcome, since an action that destroys or adversely modifies such critical habitat would also be likely to result in jeopardy to the species, there may be instances where section 7 consultation would be triggered only if critical habitat were designated. There would also be some educational or informational benefits to the designation of critical habitat. Benefits of designation would include the notification of land owners, land managers, and the general public of the importance of protecting the habitat of these species and dissemination of information regarding their essential habitat requirements.

Therefore, designation of critical habitat is prudent for these 71 plant species: *Alectryon macrococcus*, *Alsinidendron lychnoides*, *Alsinidendron viscosum*, *Brighamia insignis*, *Chamaesyce halemanui*, *Cyanea asarifolia*, *Cyanea recta*, *Cyanea remyi*, *Cyanea undulata*, *Cyrtandra cyaneoides*, *Cyrtandra limahuliensis*, *Delissea rhytidosperra*, *Delissea rivularis*, *Delissea undulata*, *Diellia pallida*, *Dubautia latifolia*, *Dubautia pauciflora*, *Euphorbia haeleleana*, *Exocarpos luteolus*, *Flueggea neowawraea*, *Gouania meyenii*, *Hedyotis cookiana*, *Hedyotis st.-johnii*, *Hesperomannia lydgatei*, *Hibiscadelphus woodii*, *Hibiscus clayi*, *Hibiscus waimeae* ssp. *hannerae*, *Ischaemum byrone*, *Isodendron laurifolium*, *Isodendron longifolium*, *Kokia kauaiensis*, *Labordia lydgatei*, *Labordia tinifolia* var. *wahiawaensis*, *Lipochaeta fauriei*, *Lipochaeta micrantha*, *Lipochaeta waimeae*, *Lobelia niihauensis*, *Lysimachia filifolia*, *Melicope haupuensis*, *Melicope*

*knudsenii*, *Melicope pallida*, *Munroidendron racemosum*, *Myrsine linearifolia*, *Nothoecstrum peltatum*, *Panicum niihauense*, *Peucedanum sandwicense*, *Phyllostegia knudsenii*, *Phyllostegia waimeae*, *Phyllostegia wawrana*, *Plantago princeps*, *Platanthera holochila*, *Poa mannii*, *Poa sandvicensis*, *Poa siphonoglossa*, *Pteralyxia kauaiensis*, *Remya kauaiensis*, *Remya montgomeryi*, *Schiedea apokremnos*, *Schiedea helleri*, *Schiedea kauaiensis*, *Schiedea membranacea*, *Schiedea nuttallii*, *Schiedea spergulina* var. *leiopoda*, *Schiedea spergulina* var. *spergulina*, *Schiedea stellarioides*, *Solanum sandwicense*, *Stenogyne campanulata*, *Viola helenae*, *Viola kauaiensis* var. *wahiawaensis*, *Wilkesia hobdyi*, and *Xylosma crenatum*.

#### B. Methods

As required by the Act and regulations (section 4(b)(2) and 50 CFR 424.12), we used the best scientific information available to determine areas that contain the physical and biological features that are essential for the conservation of *Adenophorus periens*, *Alectryon macrococcus*, *Alsinidendron lychnoides*, *Alsinidendron viscosum*, *Bonamia menziesii*, *Brighamia insignis*, *Centaurium sebaeoides*, *Chamaesyce halemanui*, *Ctenitis squamigera*, *Cyanea asarifolia*, *Cyanea recta*, *Cyanea remyi*, *Cyanea undulata*, *Cyperus trachysanthos*, *Cyrtandra cyaneoides*, *Cyrtandra limahuliensis*, *Delissea rhytidosperra*, *Delissea rivularis*, *Delissea undulata*, *Diellia erecta*, *Diellia pallida*, *Diplazium molokaiense*, *Dubautia latifolia*, *Dubautia pauciflora*, *Euphorbia haeleleana*, *Exocarpos luteolus*, *Flueggea neowawraea*, *Gouania meyenii*, *Hedyotis cookiana*, *Hedyotis st.-johnii*, *Hesperomannia lydgatei*, *Hibiscadelphus woodii*, *Hibiscus clayi*, *Hibiscus waimeae* ssp. *hannerae*, *Ischaemum byrone*, *Isodendron laurifolium*, *Isodendron longifolium*, *Kokia kauaiensis*, *Labordia lydgatei*, *Labordia tinifolia* var. *wahiawaensis*, *Lipochaeta fauriei*, *Lipochaeta micrantha*, *Lipochaeta waimeae*, *Lobelia niihauensis*, *Lysimachia filifolia*, *Mariscus pennatifolius*, *Melicope haupuensis*, *Melicope knudsenii*, *Melicope pallida*, *Munroidendron racemosum*, *Myrsine linearifolia*, *Nothoecstrum peltatum*, *Panicum niihauense*, *Peucedanum sandwicense*, *Phlegmariurus nutans*, *Phyllostegia knudsenii*, *Phyllostegia waimeae*, *Phyllostegia wawrana*, *Plantago princeps*, *Platanthera holochila*, *Poa mannii*, *Poa sandvicensis*, *Poa siphonoglossa*,

*Pteralyxia kauaiensis*, *Remya kauaiensis*, *Remya montgomeryi*, *Schiedea apokremnos*, *Schiedea helleri*, *Schiedea kauaiensis*, *Schiedea membranacea*, *Schiedea nuttallii*, *Schiedea spergulina* var. *leiopoda*, *Schiedea spergulina* var. *spergulina*, *Schiedea stellarioides*, *Sesbania tomentosa*, *Solanum sandwicense*, *Spermolepis hawaiiensis*, *Stenogyne campanulata*, *Viola helenae*, *Viola kauaiensis* var. *wahiawaensis*, *Wilkesia hobdyi*, *Xylosma crenatum*, and *Zanthoxylum hawaiiense*. This information included the known locations, site-specific species information from the HINHP database and our own rare plant database; species information from the Center for Plant Conservation's (CPC's) rare plant monitoring database housed at the University of Hawaii's Lyon Arboretum; island-wide Geographic Information System (GIS) coverages (e.g., vegetation, soils, annual rainfall, elevation contours, landownership); the final listing rules for these 83 species; the November 7, 2000, proposal; the January 28, 2002, revised proposal; information received during the public comment periods and the public hearings; recent biological surveys and reports; our recovery plans for these species; information received in response to outreach materials and requests for species and management information that we sent to all landowners, land managers, and interested parties on the islands of Kauai and Niihau; discussions with botanical experts; and recommendations from the Hawaii and Pacific Plant Recovery Coordinating Committee (HPPRCC) (see also the discussion below) (GDSI 2000; HINHP Database 2000; HPPRCC 1998; Service 1994, 1995, 1996, 1997, 1998a, 1998b, 1998c, 1999; 65 FR 66808; 67 FR 3940; CPC in litt. 1999).

In 1994, the HPPRCC initiated an effort to identify and map habitat it believed to be important for the recovery of 282 endangered and threatened Hawaiian plant species. The HPPRCC identified these areas on most of the islands in the Hawaiian chain, and in 1999, we published them in our *Recovery Plan for the Multi-Island Plants* (Service 1999). The HPPRCC expects that there will be subsequent efforts to further refine the locations of important habitat areas and that new survey information or research may also lead to additional refinement of identifying and mapping of habitat important for the recovery of these species.

The HPPRCC identified essential habitat areas for all listed, proposed, and candidate plants and evaluated