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SUBCHAPTER B—TAKING, POSSESSION, TRANSPORTATION, SALE, PURCHASE, BARTER, EXPORTATION, AND IMPORTATION OF WILDLIFE AND PLANTS (CONTINUED)

PART 17—ENDANGERED AND THREATENED WILDLIFE AND PLANTS (CONTINUED)

Subpart I—Interagency Cooperation (Continued)

Sec.
17.99 Critical habitat; plants on the Hawaiian Islands.

AUTHORITY: 16 U.S.C. 1361–1407; 16 U.S.C. 1531–1544; 16 U.S.C. 4201–4245; Pub. L. 99–625, 100 Stat. 3500; unless otherwise noted.

SOURCE: 40 FR 44415, Sept. 26, 1975, unless otherwise noted.

Subpart I—Interagency Cooperation (Continued)

§ 17.99 Critical habitat; plants on the Hawaiian Islands.

(a) *Maps and critical habitat unit descriptions for the islands of Kauai and Niihau, HI.* The following paragraphs contain the legal descriptions of the critical habitat units designated for the Hawaiian Islands of Kauai and Niihau. Existing manmade features and structures within the boundaries of the mapped areas, such as buildings; roads; aqueducts and other water system features, including but not limited to pumping stations, irrigation ditches, pipelines, siphons, tunnels, water tanks, gaging stations, intakes, reservoirs, diversions, flumes, and wells; existing trails; campgrounds and their immediate surrounding landscaped area; scenic lookouts; remote helicopter landing sites; existing fences; telecommunications equipment towers and associated structures and equipment; electrical power transmission lines and distribution, and communication facilities and regularly maintained associated rights-of-way and access ways; radars, telemetry antennas; missile launch sites; arboreta and gardens; heiau (indigenous places of worship or shrines), and other archaeological sites; airports; other paved areas; and lawns and other rural residential landscaped areas do not contain one or more of the primary constituent elements described for each species in paragraph (b) of this section and therefore are not included in the critical habitat designations.

(1) *Kauai.* Critical habitat units are described below. Coordinates are in UTM Zone 4 with units in meters using North American Datum of 1983 (NAD83). The following map shows the general locations of the critical habitat units designated on the island of Kauai.

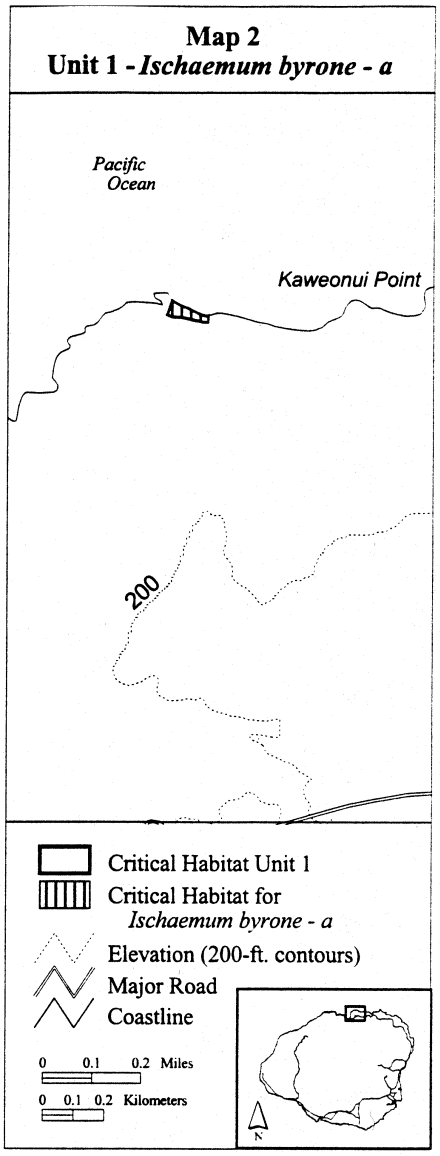
(i) NOTE: Map 1—Index map follows:

Map 1
Kauai and Niihau Critical Habitat–Island Index Map

(ii) Kauai 1—*Ischaemum byrone*—a (1 ha; .4 ac)

(A) [Reserved]

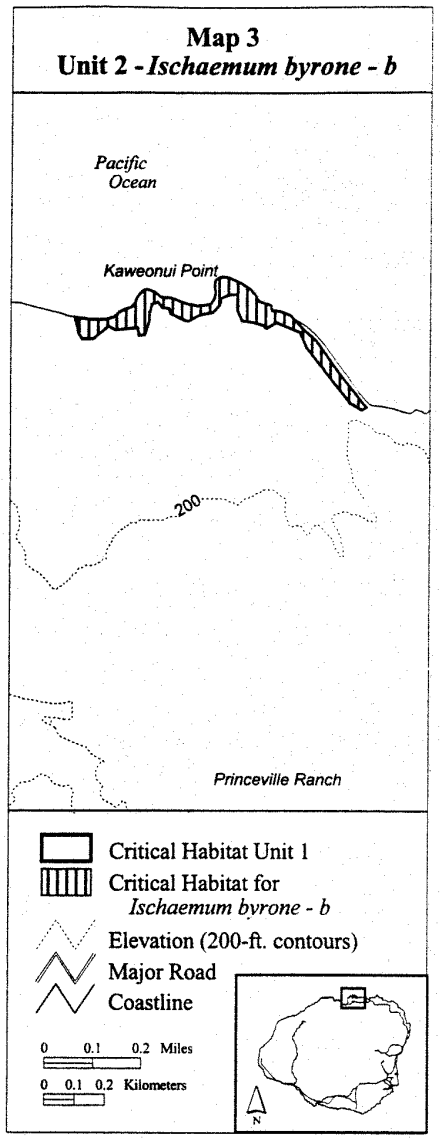
(B) Map 2 follows:



(iii) Kauai 2—*Ischaemum byrone*—b (6 ha; 14 ac)

(A) [Reserved]

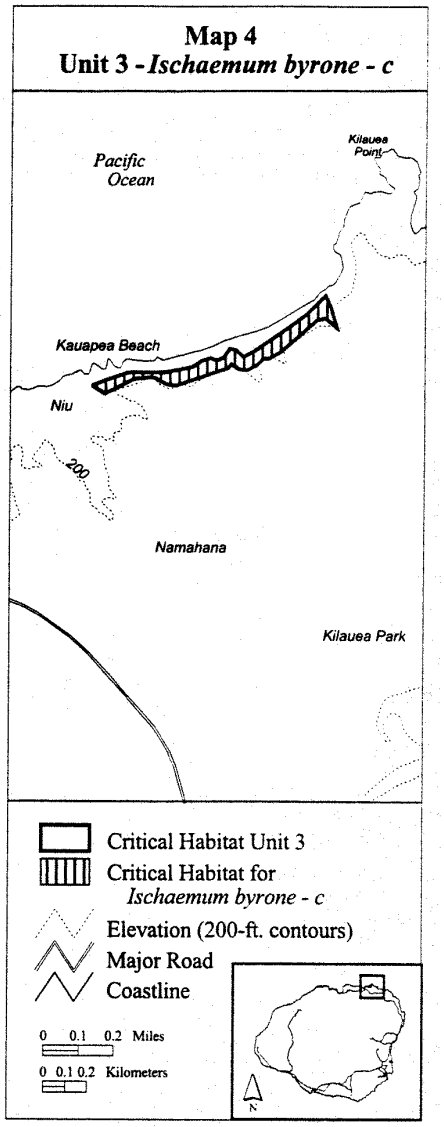
(B) Map 3 follows:



(iv) Kauai 3—*Ischaemum byrone*—c (7 ha; 17 ac)

(A) [Reserved]

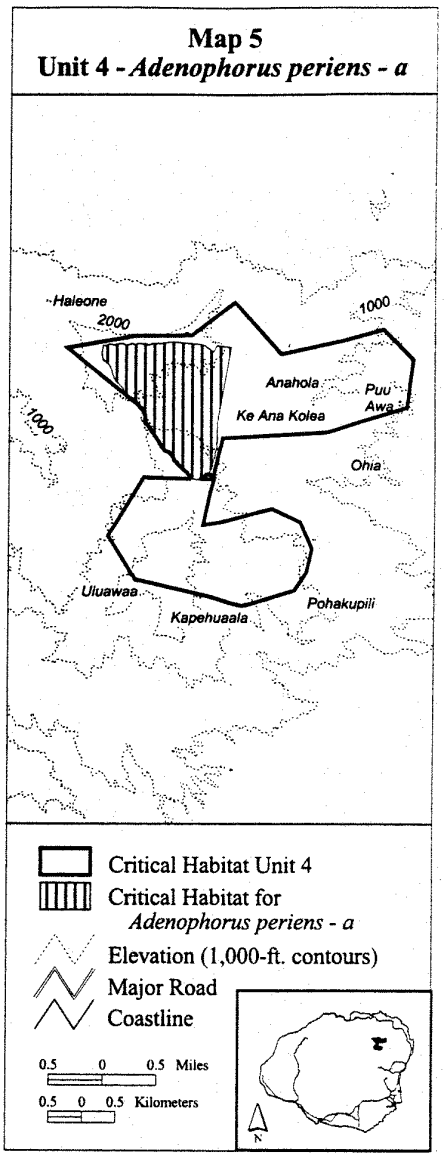
(B) Map 4 follows:



(v) Kauai 4—*Adenophorus periens*—a (237 ha; 585 ac)

(A) [Reserved]

(B) Map 5 follows:



(vi) Kauai 4–*Chamaesyce remyi* var. *kauaiensis*–a

(A) This is a unit of the Wet Cliff ecosystem and consists of 38 ac (15.4 ha). This unit is also critical habitat for Kauai 4–*Chamaesyce remyi* var. *remyi*–a, Kauai 4–*Cyanea dolichopoda*–a, Kauai 4–*Cyrtandra oenobarba*–a, Kauai 4–*Cyrtandra paliku*–a, Kauai 4–*Dubautia plantaginea* ssp. *magnifolia*–a, Kauai 4–

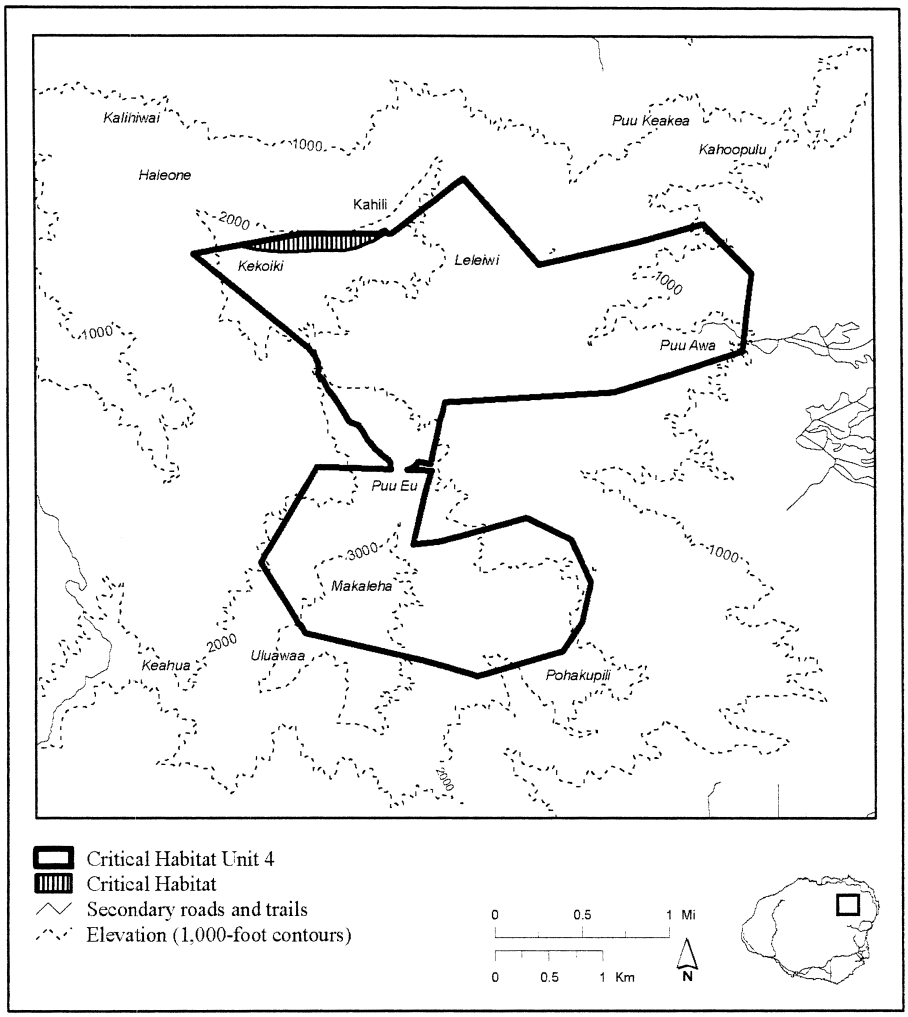
Lysimachia iniki–a, Kauai 4–*Lysimachia pendens*–a, Kauai 4– *Lysimachia venosa*–a, and Kauai 4–*Platydesma rostrata*–a (see paragraphs (a)(1)(vii), (a)(1)(ix), (a)(1)(xvi), (a)(1)(xvii), (a)(1)(xviii), (a)(1)(xxv), (a)(1)(xxvi), (a)(1)(xxvii), and (a)(1)(xxix), respectively, of this section).

(B) Map 5a follows:

Map 5a

Kauai 4–*Chamaesyce remyi* var. *kauaiensis*–a, Kauai 4–*Chamaesyce remyi* var. *remyi*–a, Kauai 4–*Cyanea dolichopoda*–a, Kauai 4–*Cyrtandra oenobarba*–a, Kauai 4–*Cyrtandra paliku*–a, Kauai 4–*Dubautia plantaginea* ssp. *magnifolia*–a, Kauai 4–*Lysimachia iniki*–a, Kauai 4–*Lysimachia pendens*–a, Kauai 4–*Lysimachia venosa*–a,Kauai 4–*Platydesma rostrata*–a

Wet Cliff



(vii) Kauai 4–*Chamaesyce remyi* var. *remyi*–a

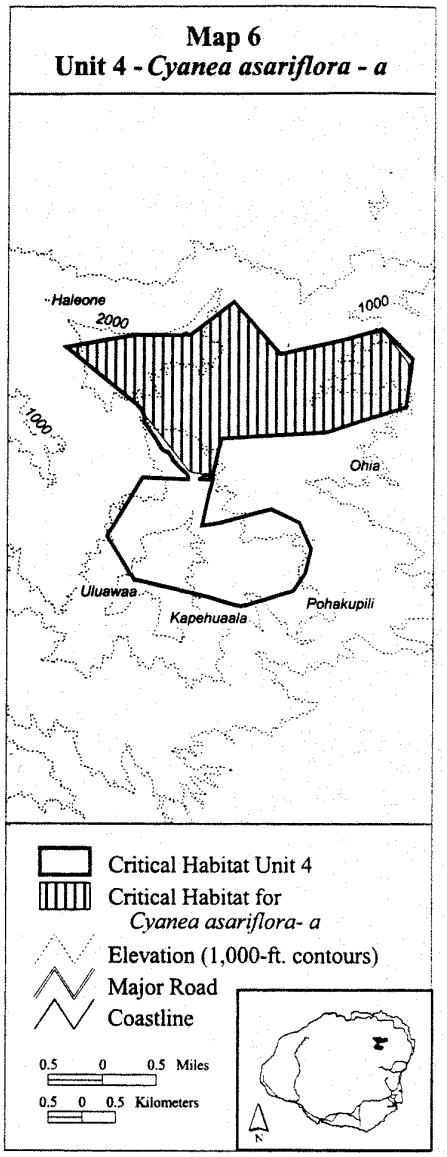
(A) [Reserved]

(B) See paragraph (a)(1)(vi)(B) of this section for the map of this unit.

(viii) Kauai 4—*Cyanea asarifolia*—a (654 ha; 1,616 ac)

(A) [Reserved]

(B) Map 6 follows:



(ix) Kauai 4–*Cyanea dolichopoda*–a

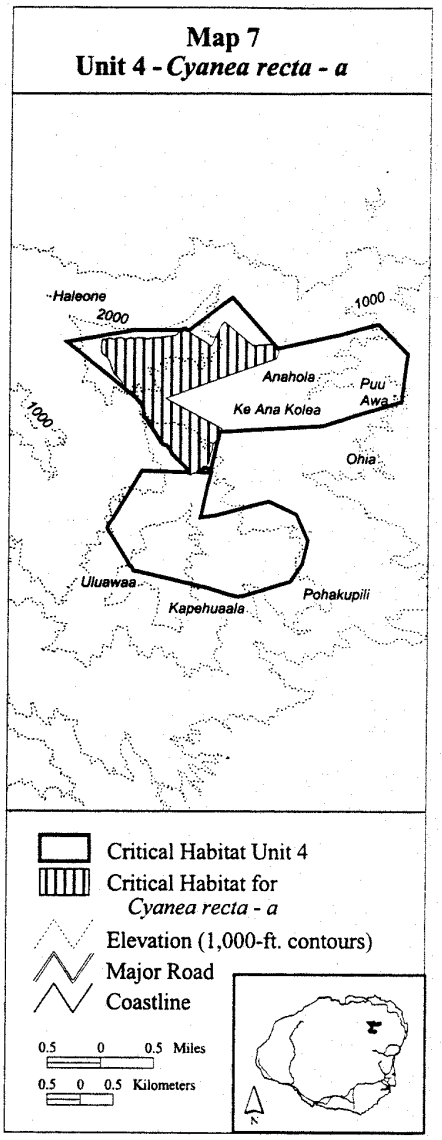
(A) [Reserved]

(B) See paragraph (a)(1)(vi)(B) of this section for the map of this unit.

(x) Kauai 4—*Cyanea recta*—a (252 ha; 622 ac)

(A) [Reserved]

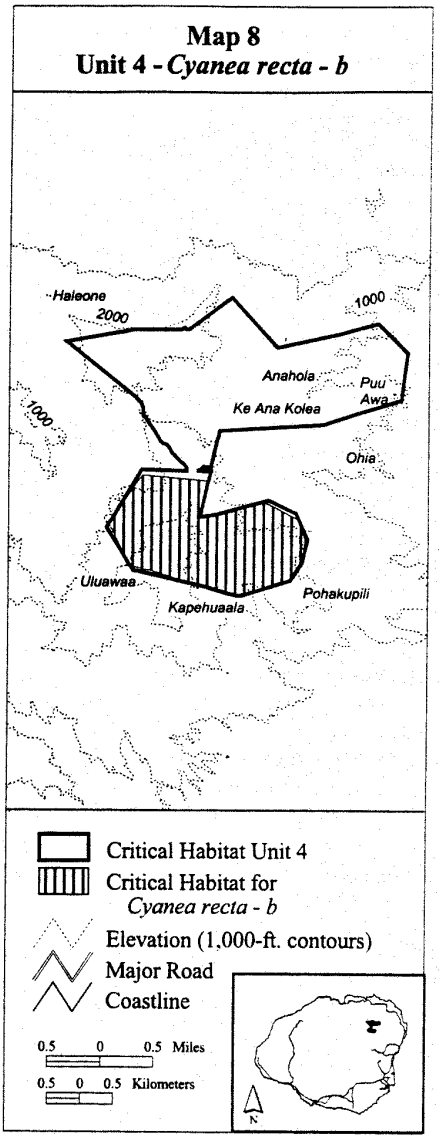
(B) Map 7 follows:



(xi) Kauai 4—*Cyanea recta*—b (351 ha; 868 ac)

(A) [Reserved]

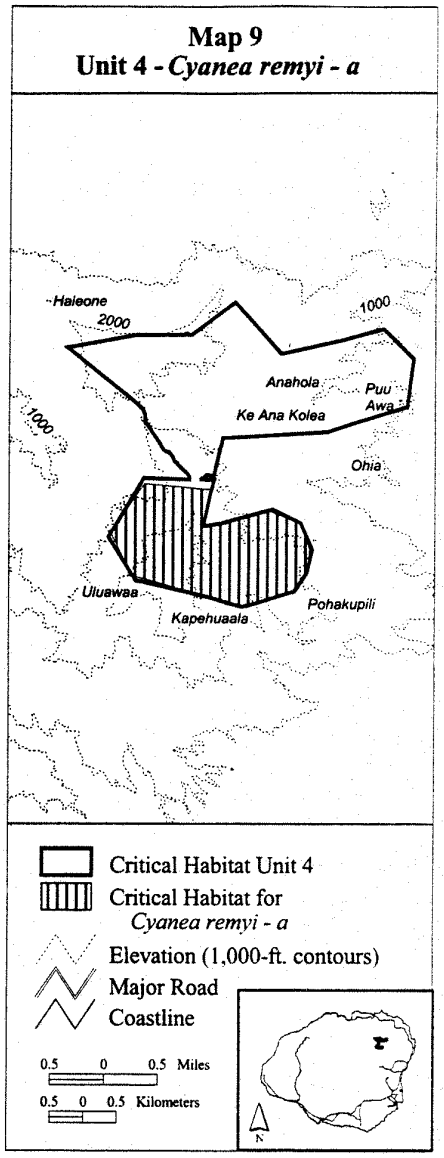
(B) Map 8 follows:



(xii) Kauai 4—*Cyanea remyi*—a (353 ha; 873 ac)

(A) [Reserved]

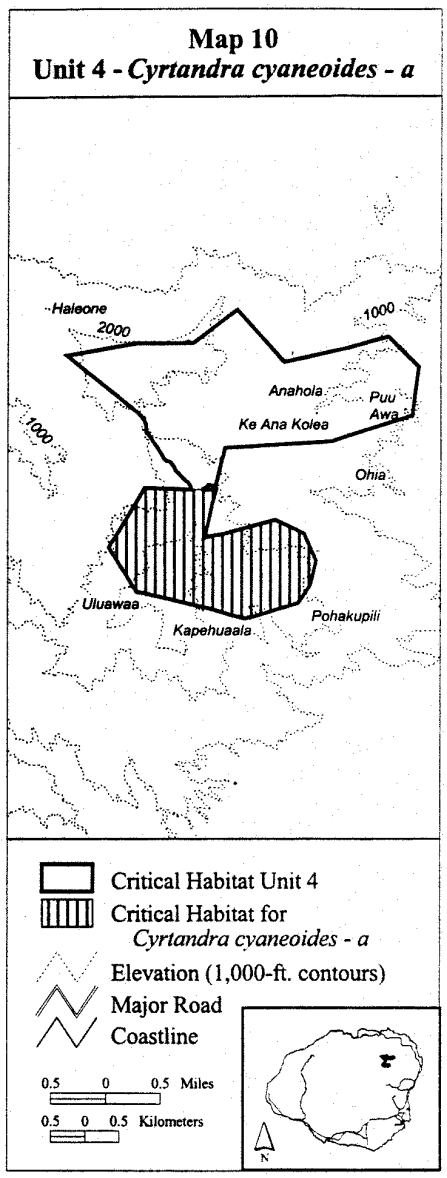
(B) Map 9 follows:



(xiii) Kauai 4—*Cyrtandra cyaneoides*—a (376 ha; 928 ac)

(A) [Reserved]

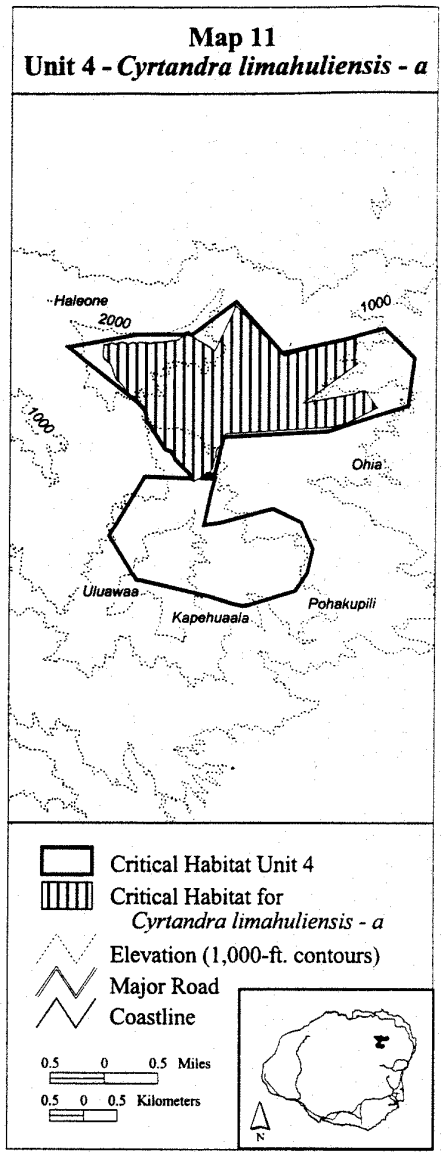
(B) Map 10 follows:



(xiv) Kauai 4—*Cyrtandra limahuliensis*—a (501 ha; 1,237 ac)

(A) [Reserved]

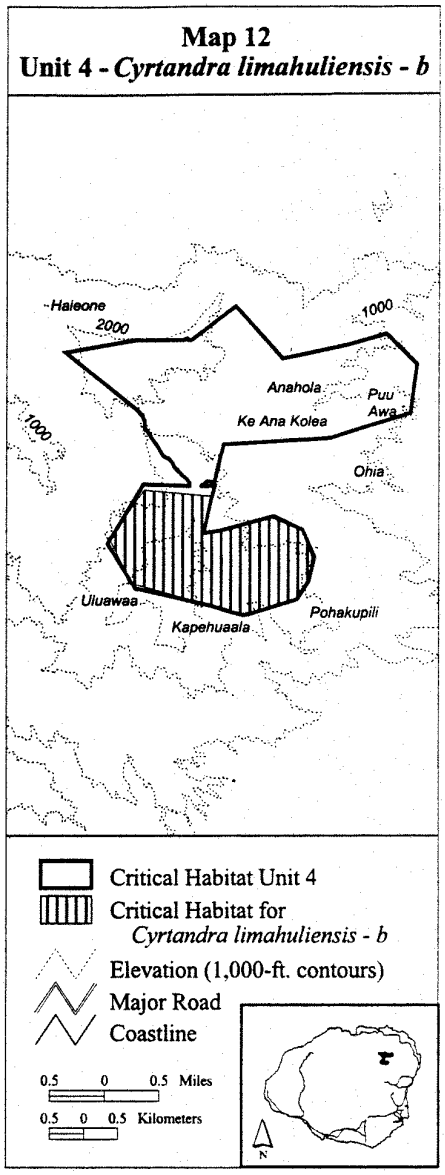
(B) Map 11 follows:



(xv) Kauai 4—*Cyrtandra limahuliensis*—b (353 ha; 873 ac)

(A) [Reserved]

(B) Map 12 follows:



(xvi) Kauai 4–*Cyrtandra oenobarba*–a

(A) [Reserved]

(B) See paragraph (a)(1)(vi)(B) of this section for the map of this unit.

(xvii) Kauai 4–*Cyrtandra paliku*–a

(A) [Reserved]

(B) See paragraph (a)(1)(vi)(B) of this section for the map of this unit.

(xviii) Kauai 4–*Dubautia plantaginea* ssp. *magnifolia*–a

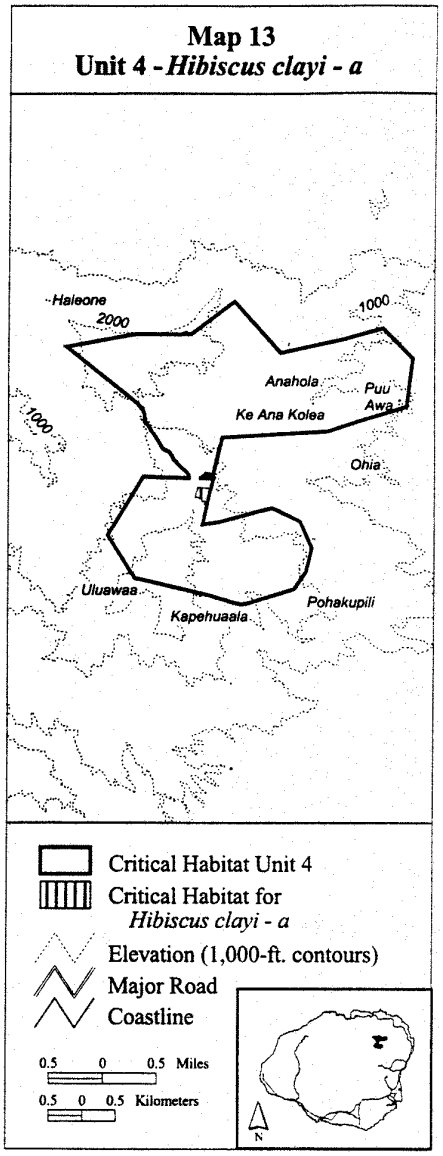
(A) [Reserved]

(B) See paragraph (a)(1)(vi)(B) of this section for the map of this unit.

(xix) Kauai 4—*Hibiscus clayi*—a (4 ha; 9 ac)

(A) [Reserved]

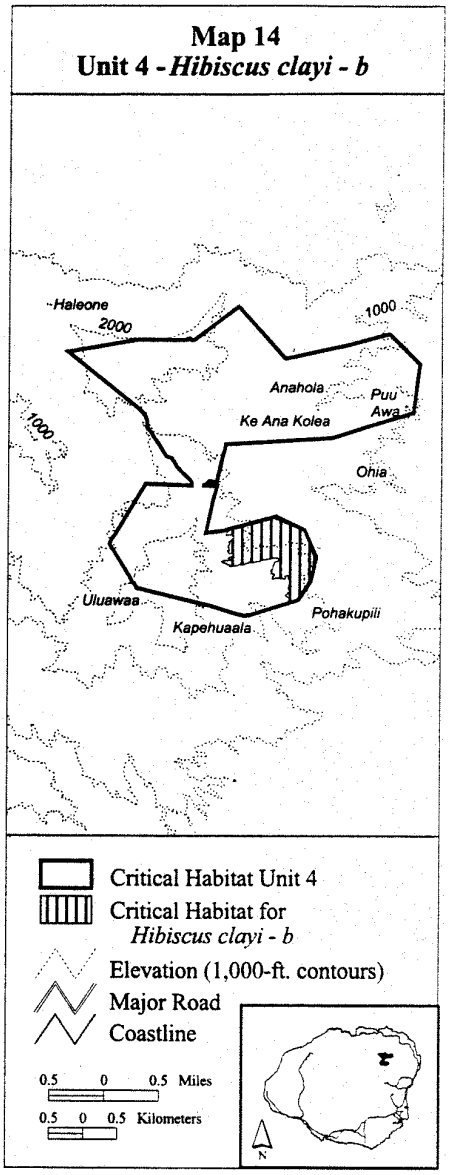
(B) Map 13 follows:



(xx) Kauai 4—*Hibiscus clayi*—b (85 ha; 210 ac)

(A) [Reserved]

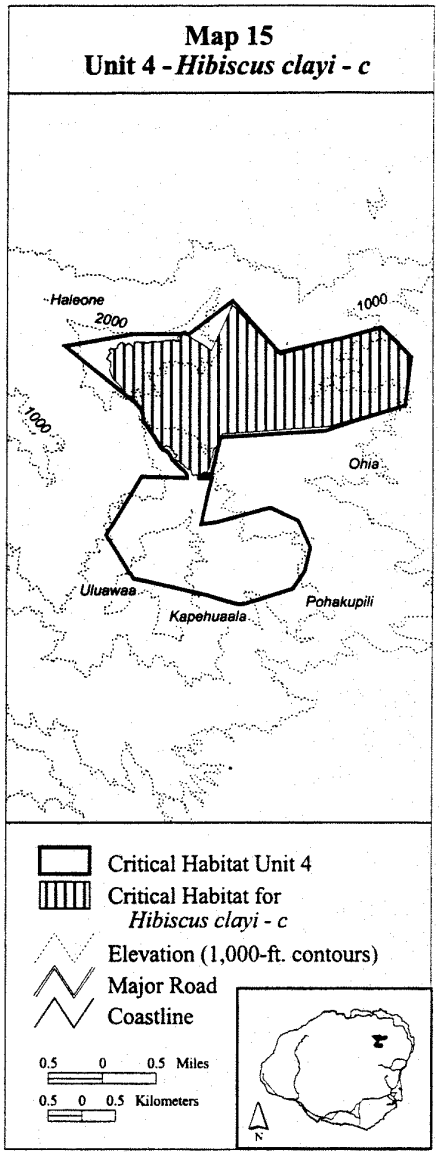
(B) Map 14 follows:



(xxi) Kauai 4—*Hibiscus clayi*—c (590 ha; 1,458 ac)

(A) [Reserved]

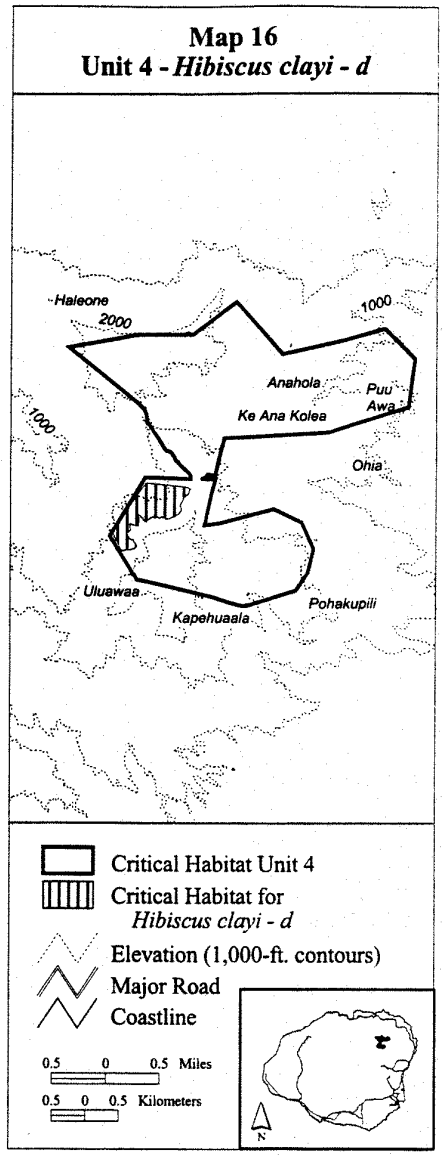
(B) Map 15 follows:



(xxii) Kauai 4—*Hibiscus clayi*—d (48 ha; 119 ac)

(A) [Reserved]

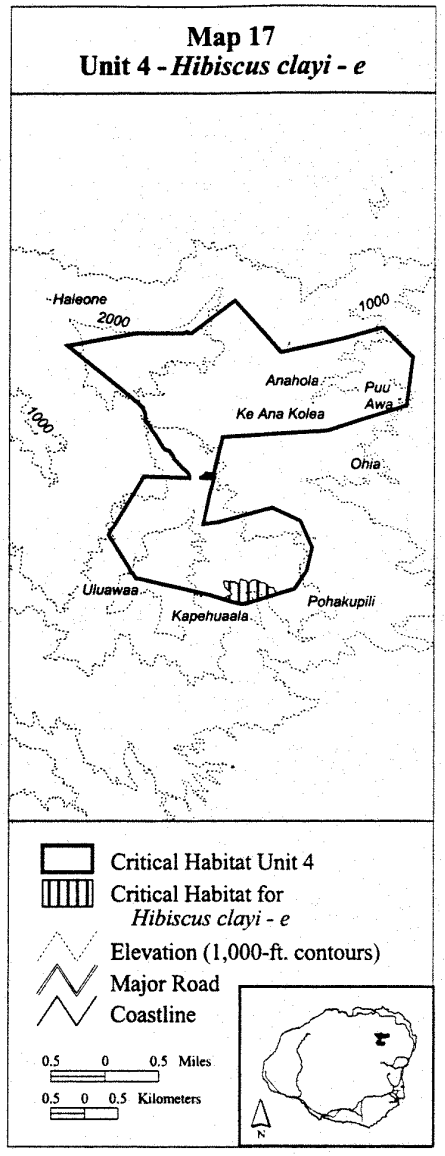
(B) Map 16 follows:



(xxiii) Kauai 4—*Hibiscus clayi*—e (19 ha; 47 ac)

(A) [Reserved]

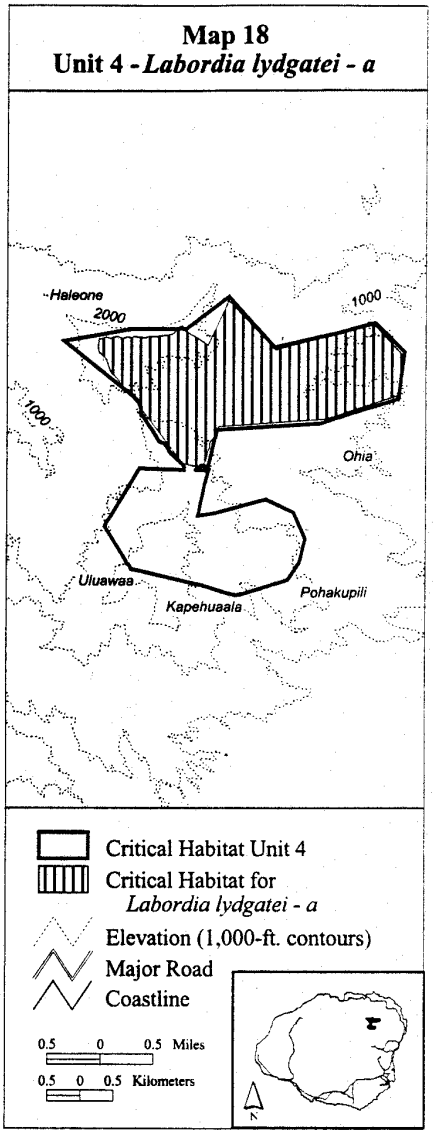
(B) Map 17 follows:



(xxiv) Kauai 4—*Labordia lydgatei*—a (588 ha; 1,453 ac)

(A) [Reserved]

(B) Map 18 follows:



(xxv) Kauai 4–*Lysimachia iniki*–a

(A) [Reserved]

(B) See paragraph (a)(1)(vi)(B) of this section for the map of this unit.

(xxvi) Kauai 4–*Lysimachia pendens*–a

(A) [Reserved]

(B) See paragraph (a)(1)(vi)(B) of this section for the map of this unit.

(xxvii) Kauai 4– *Lysimachia venosa*–a

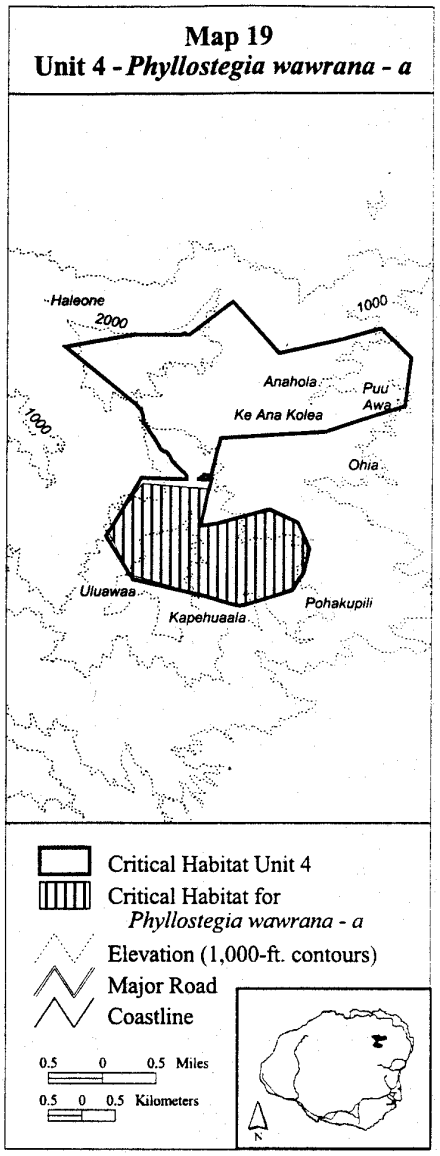
(A) [Reserved]

(B) See paragraph (a)(1)(vi)(B) of this section for the map of this unit.

(xxviii) Kauai 4—*Phyllostegia wawrana*—a (352 ha; 869 ac)

(A) [Reserved]

(B) Map 19 follows:



(xxix) Kauai 4–*Platydesma rostrata*–a

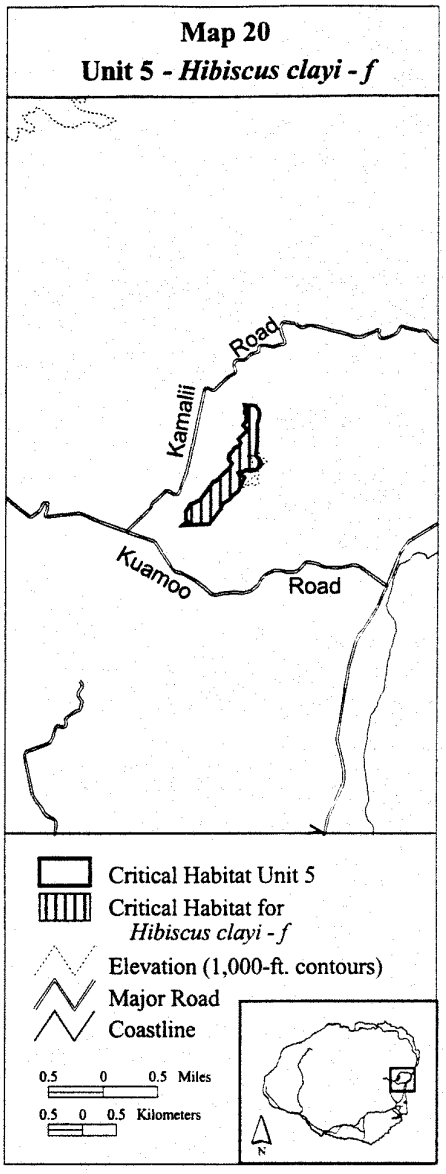
(A) [Reserved]

(B) See paragraph (a)(1)(vi)(B) of this section for the map of this unit.

(xxx) Kauai 5—*Hibiscus clayi*—f (60 ha; 148 ac)

(A) [Reserved]

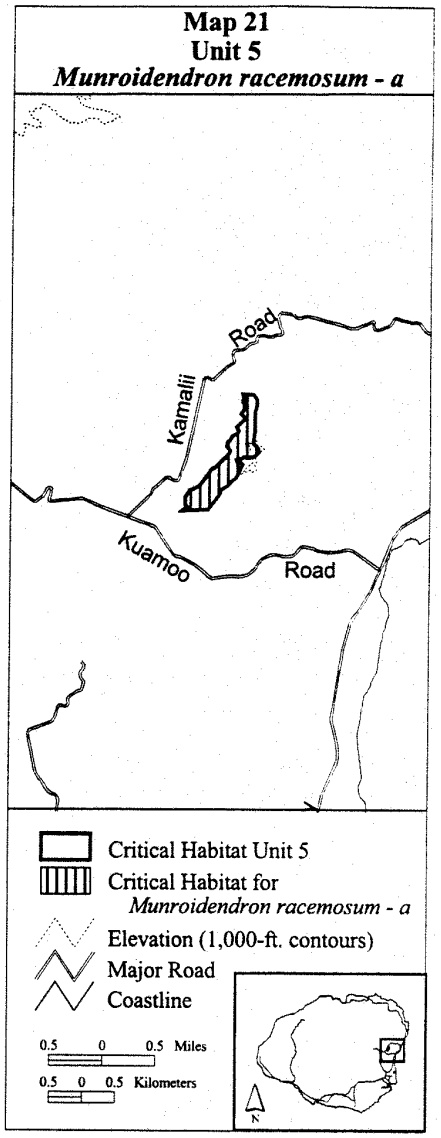
(B) Map 20 follows:



(xxxi) Kauai 5—*Munroidendron racemosum*—a (60 ha; 148 ac)

(A) [Reserved]

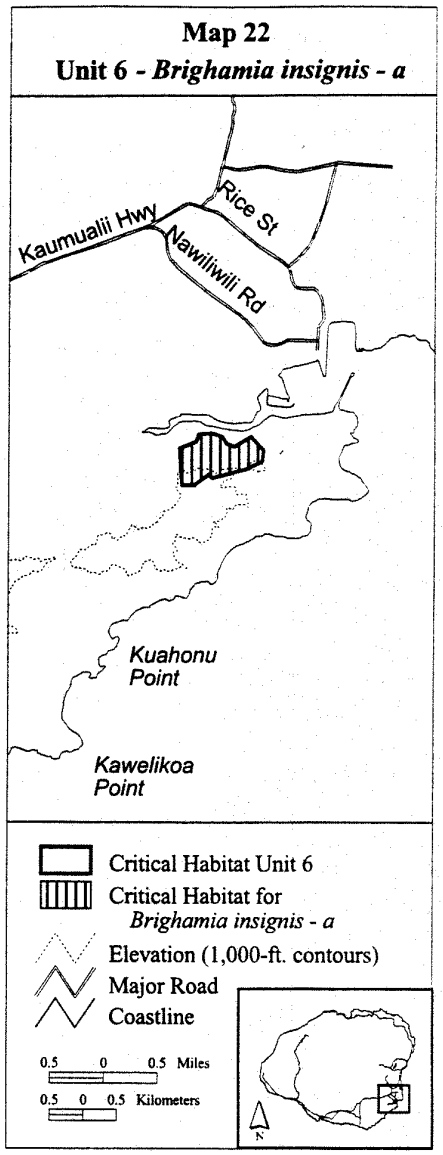
(B) Map 21 follows:

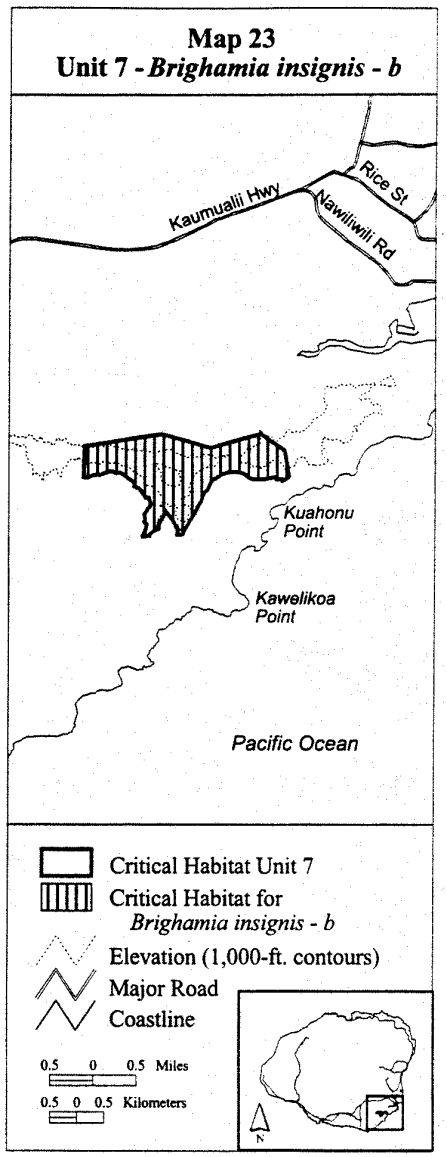


(xxxii) Kauai 6—*Brighamia insignis*—a (63 ha; 156 ac)

(A) [Reserved]

(B) Map 22 follows:





(xxxiii) Kauai 7—*Brighamia insignis*—b (341 ha; 842 ac)

(A) [Reserved]

(B) Map 23 follows:

(xxxiv) Kauai 7–*Canavalia napaliensis*–a (37 ac; 15 ha)

(A) This is a unit of the Lowland Mesic ecosystem and consists of 37 ac (15 ha). This unit is also critical habitat for Kauai 7–*Chamaesyce eleanoriae*–a, Kauai 7–*Chamaesyce remyi* var. *remyi*–b, Kauai 7–*Charpentiera densiflora*–a, Kauai 7–*Doryopteris angelica*–a, Kauai 7–*Dubautia kenwoodii*–a, Kauai 7–*Labordia*

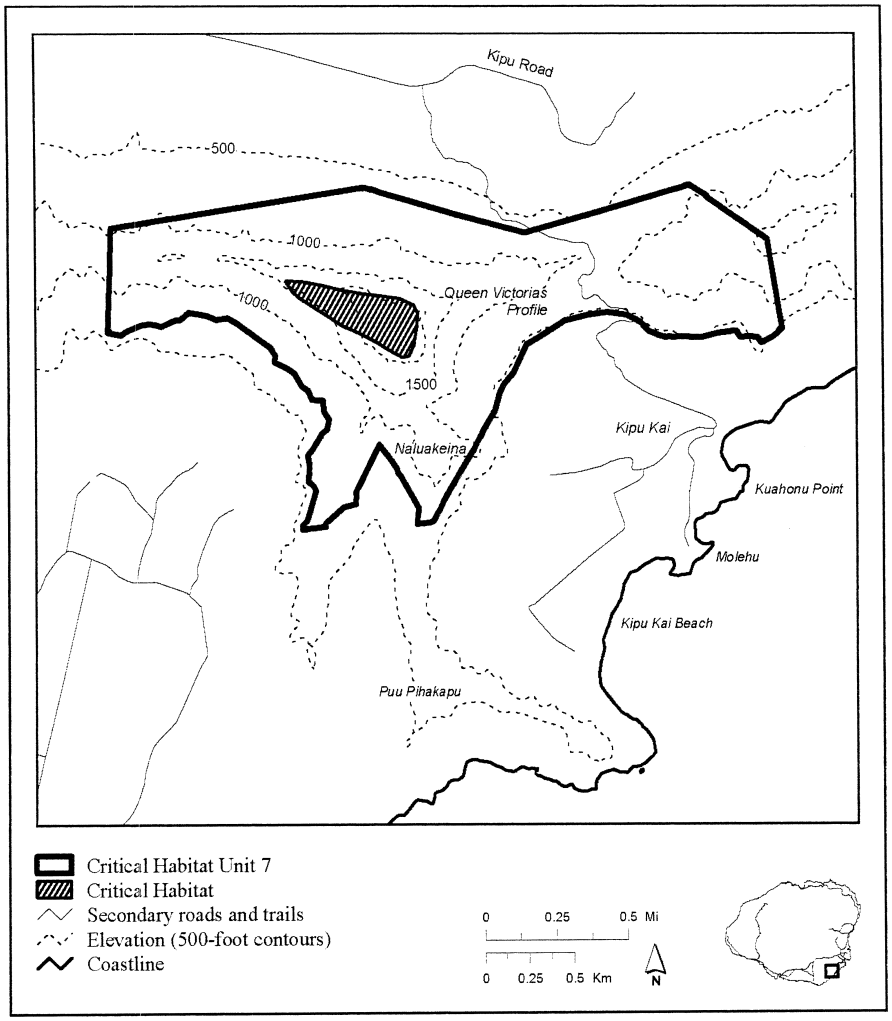
helleri–a, Kauai 7–*Pittosporum napaliense*–a, Kauai 7–*Platydesma rostrata*–b, Kauai 7–*Psychotria hobdyi*–a, and Kauai 7–*Tetraplasandra bisattenuata*–a (see paragraphs (a)(1)(xxxv), (a)(1)(xxxvi), (a)(1)(xxxvii), (a)(1)(xxxix), (a)(1)(xl), (a)(1)(xlii), (a)(1)(xlviii), (a)(1)(xlix), (a)(1)(l), and (a)(1)(liii), respectively, of this section).

(B) Map 23a follows:

Map 23a

Kauai 7–*Canavalia napaliensis*–a, Kauai 7–*Chamaesyce eleanoriae*–a, Kauai 7–*Chamaesyce remyi* var. *remyi*–b, Kauai 7–*Charpentiera densiflora*–a, Kauai 7–*Doryopteris angelica*–a, Kauai 7–*Dubautia kenwoodii*–a, Kauai 7–*Labordia helleri*–a, Kauai 7–*Pittosporum napaliense*–a, Kauai 7–*Platydesma rostrata*–b, Kauai 7–*Psychotria hobdyi*–a, Kauai 7–*Tetraplasandra bisattenuata*–a

Lowland Mesic



(xxxv) Kauai 7–*Chamaesyce eleanoriae*–a

(A) [Reserved]

(B) See paragraph (a)(1)(xxxiv)(B) of this section for the map of this unit.

(xxxvi) Kauai 7–*Chamaesyce remyi* var. *remyi*–b

(A) [Reserved]

(B) See paragraph (a)(1)(xxxiv)(B) of this section for the map of this unit.

(xxxvii) Kauai 7–*Charpentiera densiflora*–a

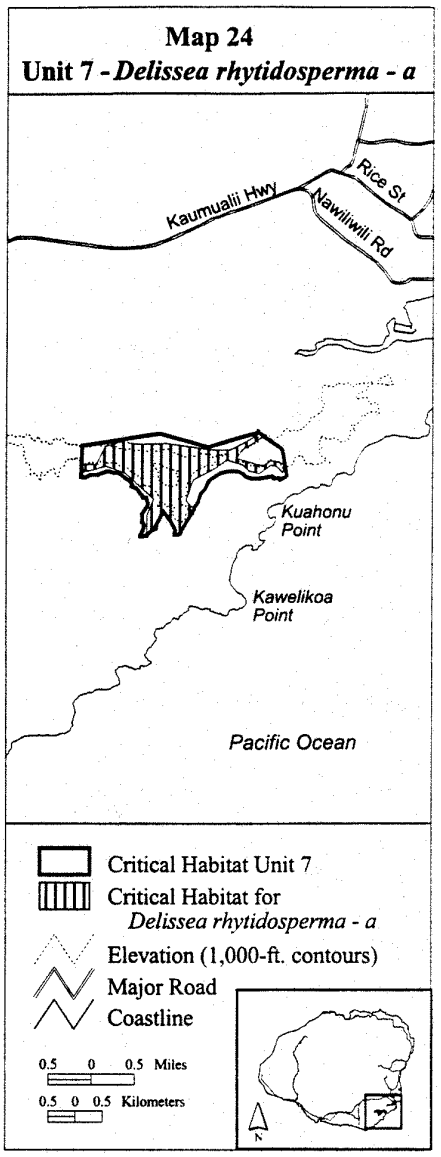
(A) [Reserved]

(B) See paragraph (a)(1)(xxxiv)(B) of this section for the map of this unit.

(xxxviii) Kauai 7—*Delissea rhytidosperma*—a (221 ha; 545 ac)

(A) [Reserved]

(B) Map 24 follows:



(xxxix) Kauai 7–*Doryopteris angelica*–a

(A) [Reserved]

(B) See paragraph (a)(1)(xxxiv)(B) of this section for the map of this unit.

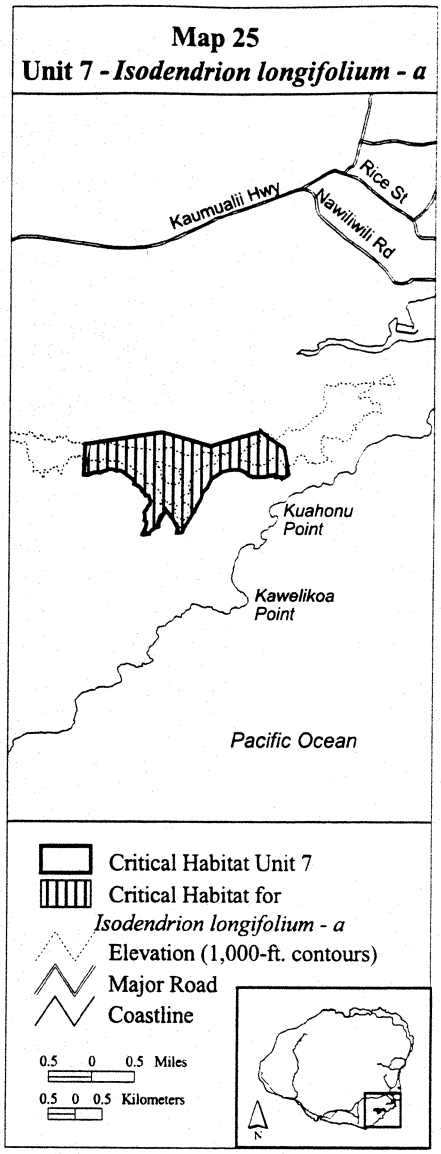
(xl) Kauai 7–*Dubautia kenwoodii*–a

(A) [Reserved]

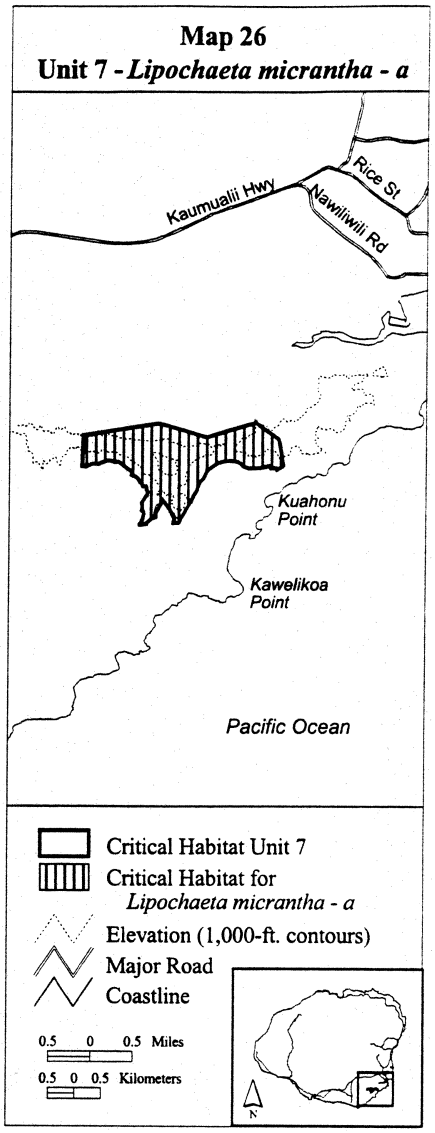
(B) See paragraph (a)(1)(xxxiv)(B) of this section for the map of this unit.

(xli) Kauai 7—*Isodendrion longifolium*—a (337 ha; 833 ac)

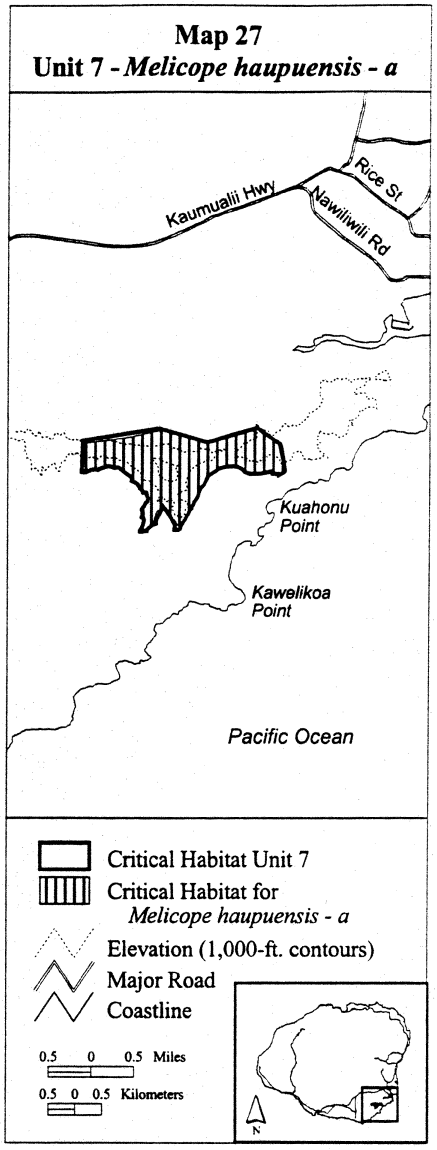
(A) [Reserved]
(B) Map 25 follows:



(xlii) Kauai 7–*Labordia helleri*–a
(A) [Reserved]
(B) See paragraph (a)(1)(xxxiv)(B) of this section for the map of this unit.
(xliii) Kauai 7—*Lipochaeta micrantha*—a (341 ha; 842 ac)
(A) [Reserved]
(B) Map 26 follows:



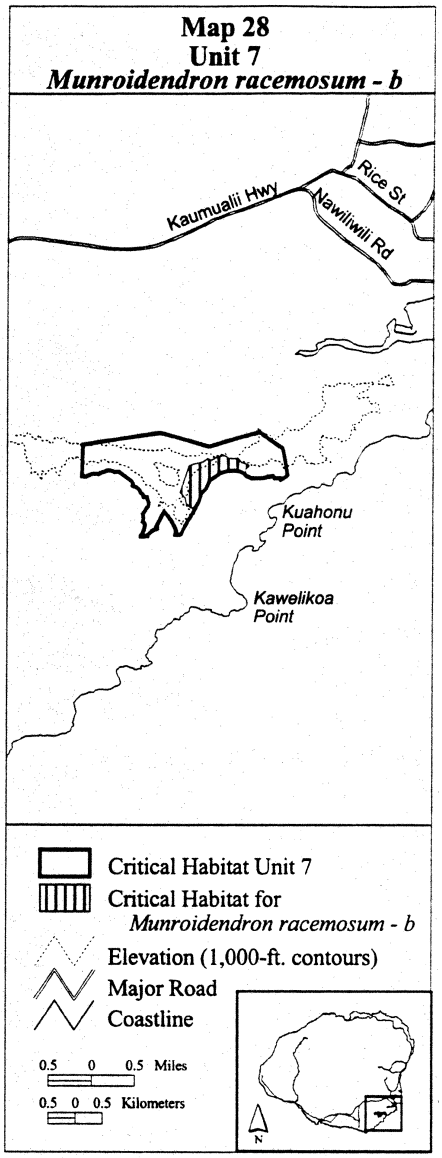
(xliv) Kauai 7—*Melicope haupuensis*—a (330 ha; 816 ac)
(A) [Reserved]
(B) Map 27 follows:



(xlv) Kauai 7—*Munroidendron racemosum*—b (50 ha; 123 ac)

(A) [Reserved]

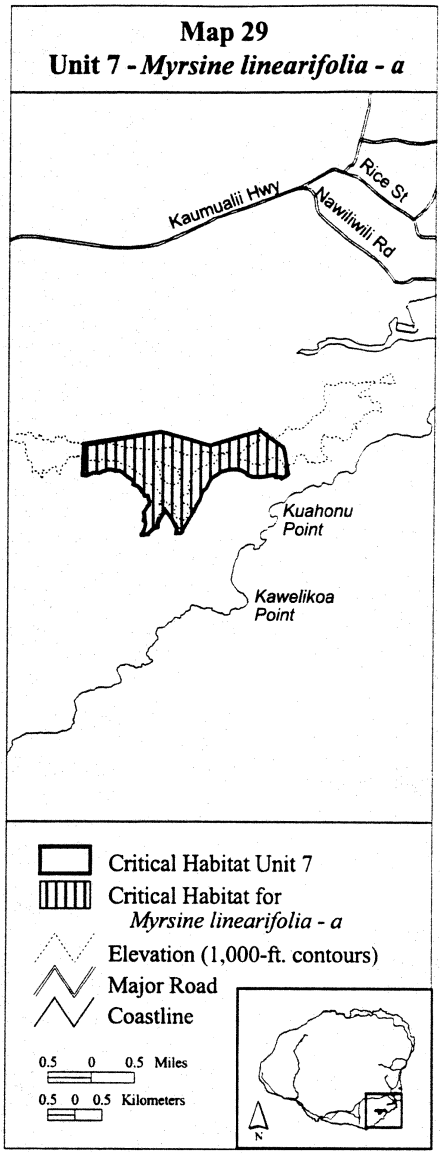
(B) Map 28 follows:



(xlvi) Kauai 7—*Myrsine linearifolia*—a (334 ha; 826 ac)

(A) [Reserved]

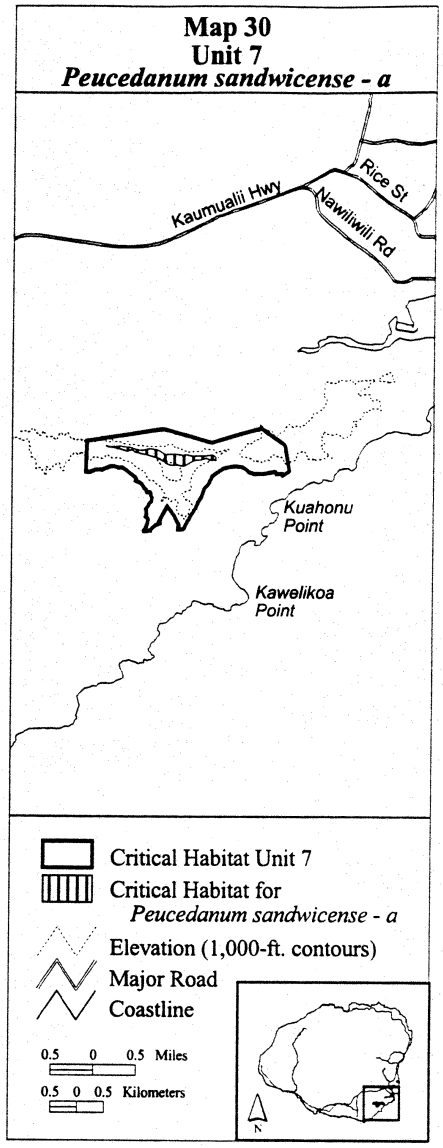
(B) Map 29 follows:



(xlvii) Kauai 7—*Peucedanum sandwicense*—a (21 ha; 52 ac)

(A) [Reserved]

(B) Map 30 follows:



(xlviii) Kauai 7–*Pittosporum napaliense*–a

(A) [Reserved]

(B) See paragraph (a)(1)(xxxiv)(B) of this section for the map of this unit.

(xlix) Kauai 7–*Platydesma rostrata*–b

(A) [Reserved]

(B) See paragraph (a)(1)(xxxiv)(B) of this section for the map of this unit.

(l) Kauai 7–*Psychotria hobdyi*–a

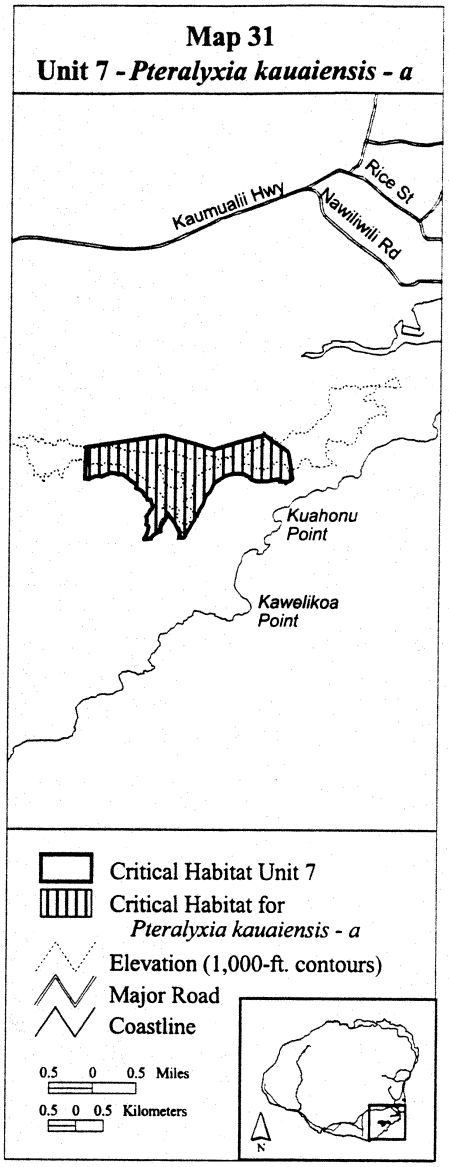
(A) [Reserved]

(B) See paragraph (a)(1)(xxxiv)(B) of this section for the map of this unit.

(li) Kauai 7—*Pteralyxia kauaiensis*—a (346 ha; 854 ac)

(A) [Reserved]

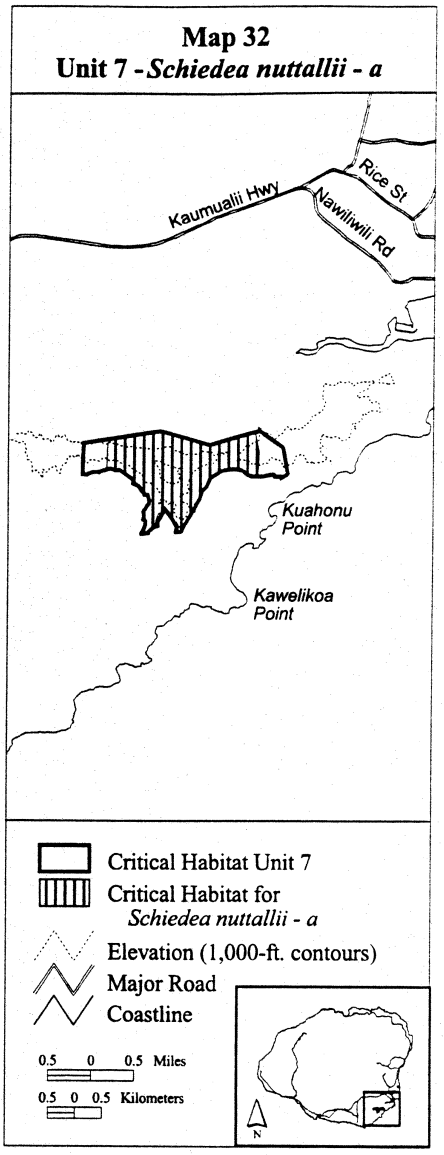
(B) Map 31 follows:



(lii) Kauai 7—*Schiedea nuttallii*—a (282 ha; 697 ac)

(A) [Reserved]

(B) Map 32 follows:



(liii) Kauai 7–*Tetraplasandra bisattenuata*–a

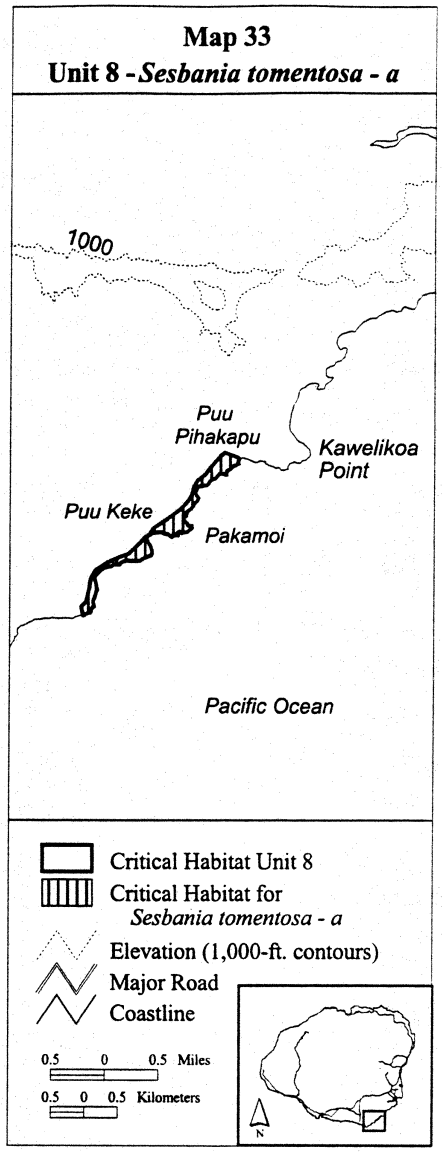
(A) [Reserved]

(B) See paragraph (a)(1)(xxxiv)(B) of this section for the map of this unit.

(liv) Kauai 8—*Sesbania tomentosa*—a (47 ha; 117 ac)

(A) [Reserved]

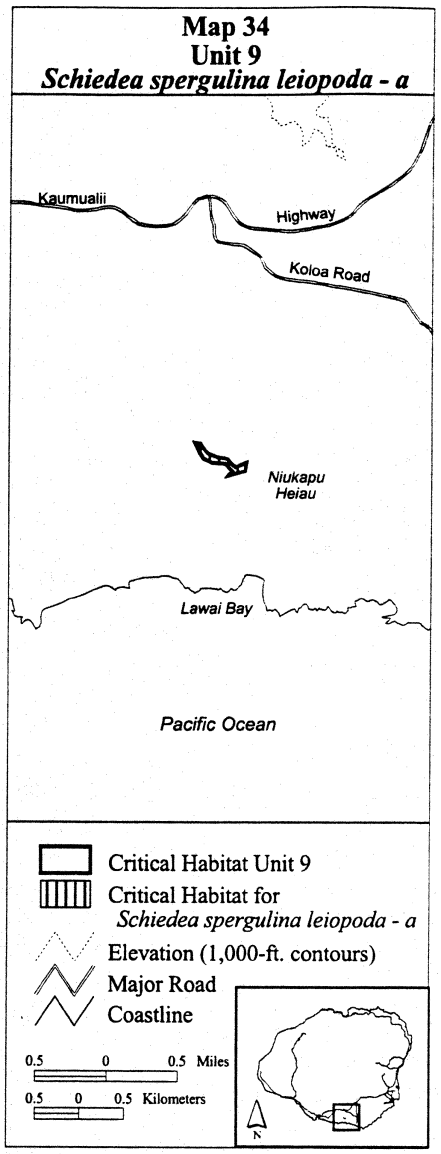
(B) Map 33 follows:



(lv) Kauai 9—*Schiedea spergulina* var. *leiopoda*—a (5 ha; 11 ac)

(A) [Reserved]

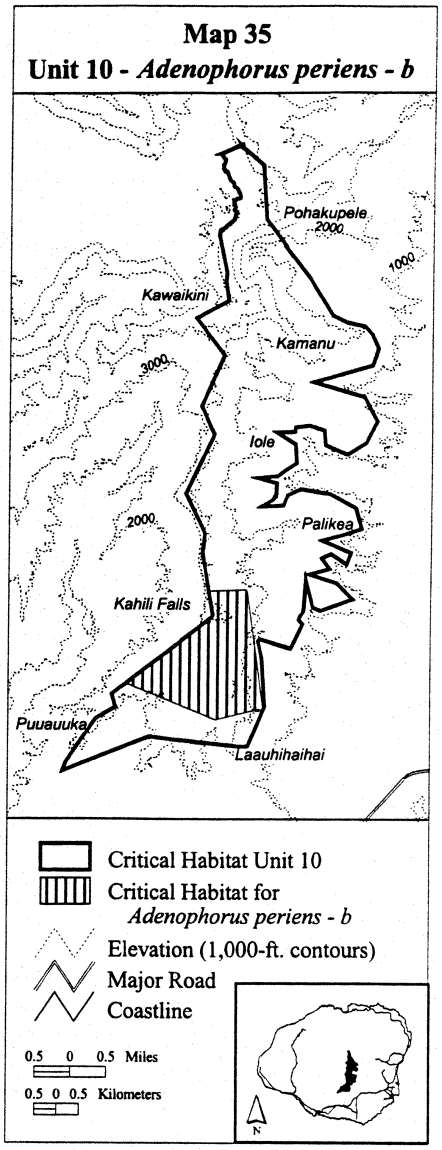
(B) Map 34 follows:



(lvi) Kauai 10—*Adenophorus periens*—b (491 ha; 1,215 ac)

(A) [Reserved]

(B) Map 35 follows:



(lvii) Kauai 10—*Astelia waialealae*—a

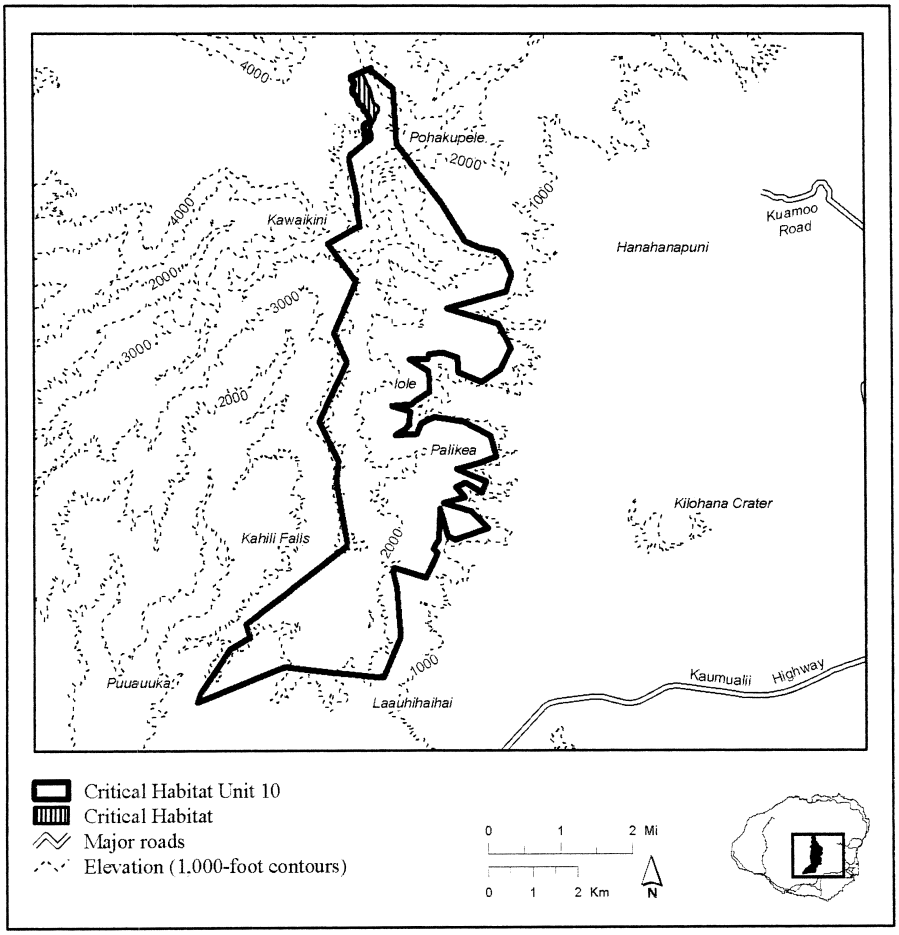
(A) This is a unit of the Montane Wet ecosystem and consists of 99 ac (40 ha). This unit is also critical habitat for Kauai 10–*Chamaesyce remyi* var. *remyi*–c, Kauai 10–*Dryopteris crinalis* var. *podosorus*–a, Kauai 10–*Dubautia kalalauensis*–a, Kauai 10–*Dubautia waialealae*–a, Kauai 10–*Geranium kauaiense*–a, Kauai 10–*Keysseria erici*–a, Kauai 10–*Keysseria helenae*–a, Kauai 10–*Labordia helleri*–b, Kauai 10–*Labordia pumila*–a, Kauai 10–*Lysimachia daphnoides*–a, Kauai 10–*Melicope degeneri*–a, Kauai 10–*Melicope puberula*–a, Kauai 10–*Myrsine mezii*–a, Kauai 10–*Phyllostegia renovans*–a, Kauai 10–*Platydesma rostrata*–c, Kauai 10–*Psychotria grandiflora*–a, and Kauai 10–*Tetraplasandra flynnii*–a (see paragraphs (a)(1)(lxi), (a)(1)(lxxvi), (a)(1)(lxxviii), (a)(1)(lxxxi), (a)(1)(lxxxiii), (a)(1)(lxxxvi), (a)(1)(lxxxvii), (a)(1)(lxxxviii), (a)(1)(xci), (a)(1)(xciii), (a)(1)(xcviii), (a)(1)(c), (a)(1)(ciii), (a)(1)(cv), (a)(1)(cviii), (a)(1)(cxi), and (a)(1)(cxv), respectively, of this section).

(B) Map 35a follows:

Map 35a

Kauai 10–*Astelia waialealae*–a, Kauai 10–*Chamaesyce remyi* var. *remyi*–c, Kauai 10–*Dryopteris crinalis* var. *podosorus*–a, Kauai 10–*Dubautia kalalauensis*–a, Kauai 10–*Dubautia waialealae*–a, Kauai 10–*Geranium kauaiense*–a, Kauai 10–*Keysseria erici*–a, Kauai 10–*Keysseria helenae*–a, Kauai 10–*Labordia helleri*–b, Kauai 10–*Labordia pumila*–a, Kauai 10–*Lysimachia daphnoides*–a, Kauai 10–*Melicope degeneri*–a, Kauai 10–*Melicope puberula*–a, Kauai 10–*Myrsine mezii*–a, Kauai 10–*Phyllostegia renovans*–a, Kauai 10–*Platydesma rostrata*–c, Kauai 10–*Psychotria grandiflora*–a, Kauai 10–*Tetraplasandra flynnii*–a

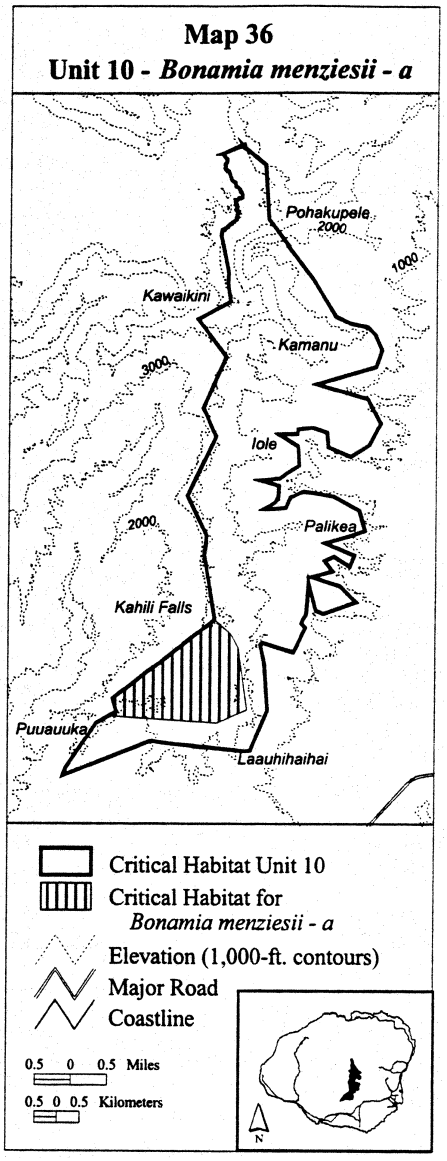
Montane Wet



(lviii) Kauai 10—*Bonamia menziesii*—a (421 ha; 1,039 ac)

(A) [Reserved]

(B) Map 36 follows:



(lix) Kauai 10–*Chamaesyce remyi* var. *kauaiensis*–b

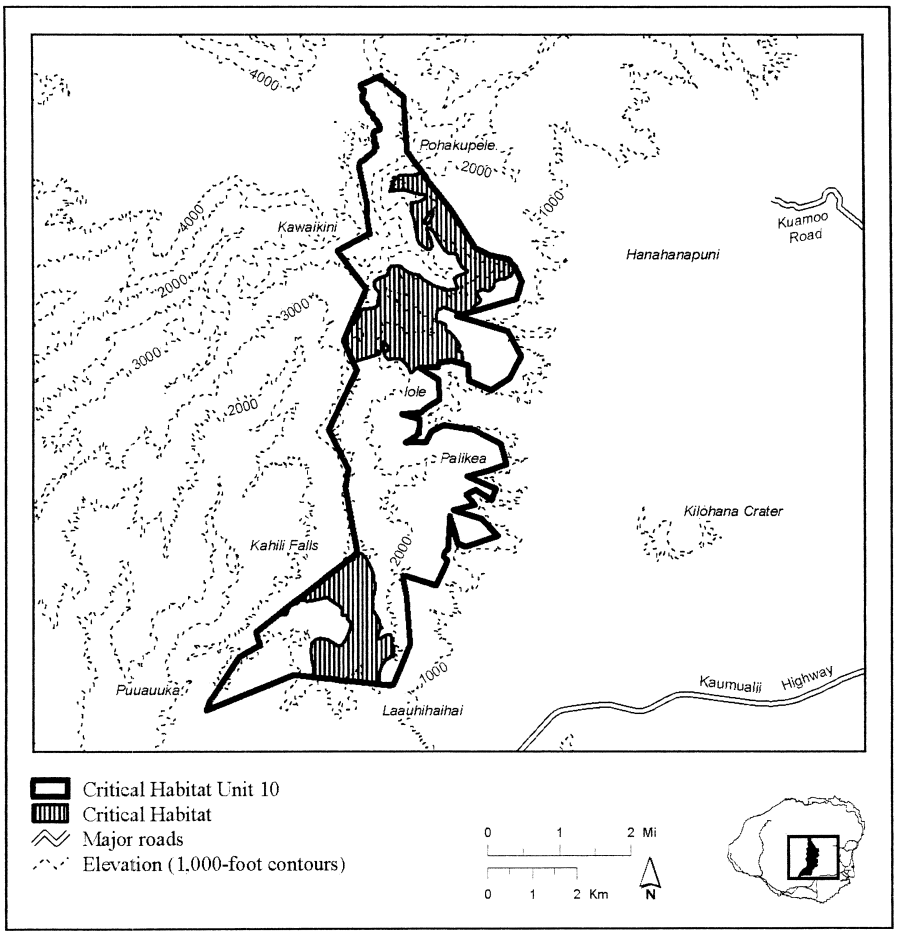
(A) This is a unit of the Lowland Wet ecosystem and consists of 2,330 ac (943 ha). This unit is also critical habitat for Kauai 10–*Chamaesyce remyi* var. *remyi*–d, Kauai 10–*Charpentiera densiflora*–b, Kauai 10–*Cyanea eleeleensis*–a, Kauai 10–*Cyanea kolekoleensis*–a, Kauai 10–*Cyanea kuhihewa*–a, Kauai 10–*Cyrtandra oenobarba*–b, Kauai 10–*Dubautia imbricata* ssp. *imbricata*–a, Kauai 10–*Labordia helleri*–c, Kauai 10–*Melicope paniculata*–a, Kauai 10–*Melicope puberula*–b, Kauai 10–*Phyllostegia renovans*–b, Kauai 10–*Platydesma rostrata*–d, Kauai 10–*Stenogyne kealiae*–a, Kauai 10–*Tetraplasandra bisattenuata*–b, and Kauai 10–*Tetraplasandra flynii*–b, (see paragraphs (a)(1)(lxii), (a)(1)(lxiv), (a)(1)(lxvii), (a)(1)(lxviii), (a)(1)(lxix), (a)(1)(lxxiii), (a)(1)(lxxvii), (a)(1)(lxxxix), (a)(1)(xcix), (a)(1)(ci), (a)(1)(cvi), (a)(1)(cix), (a)(1)(cxiii), (a)(1)(cxiv), and (a)(1)(cxvi), respectively, of this section).

(B) Map 36a follows:

Map 36a

Kauai 10–*Chamaesyce remyi* var. *kauaiensis*–b, Kauai 10–*Chamaesyce remyi* var. *remyi*–d, Kauai 10–*Charpentiera densiflora*–b, Kauai 10–*Cyanea eleeleensis*–a, Kauai 10–*Cyanea kolekoleensis*–a, Kauai 10–*Cyanea kuhihewa*–a, Kauai 10–*Cyrtandra oenobarba*–b, Kauai 10–*Dubautia imbricata* ssp. *imbricata*–a, Kauai 10–*Labordia helleri*–c, Kauai 10–*Melicope paniculata*–a, Kauai 10–*Melicope puberula*–b, Kauai 10–*Phyllostegia renovans*–b, Kauai 10–*Platydesma rostrata*–d, Kauai 10–*Stenogyne kealiae*–a, Kauai 10–*Tetraplasandra bisattenuata*–b, Kauai 10–*Tetraplasandra flynnii*–b

Lowland Wet



(lx) Kauai 10–*Chamaesyce remyi* var. *kauaiensis*–c

(A) This is a unit of the Wet Cliff ecosystem and consists of 489 ac (198 ha). This unit is also critical habitat for Kauai 10–*Chamaesyce remyi* var. *remyi*–e, Kauai 10–*Cyanea dolichopoda*–b, Kauai 10–*Cyrtandra oenobarba*–c, Kauai 10–

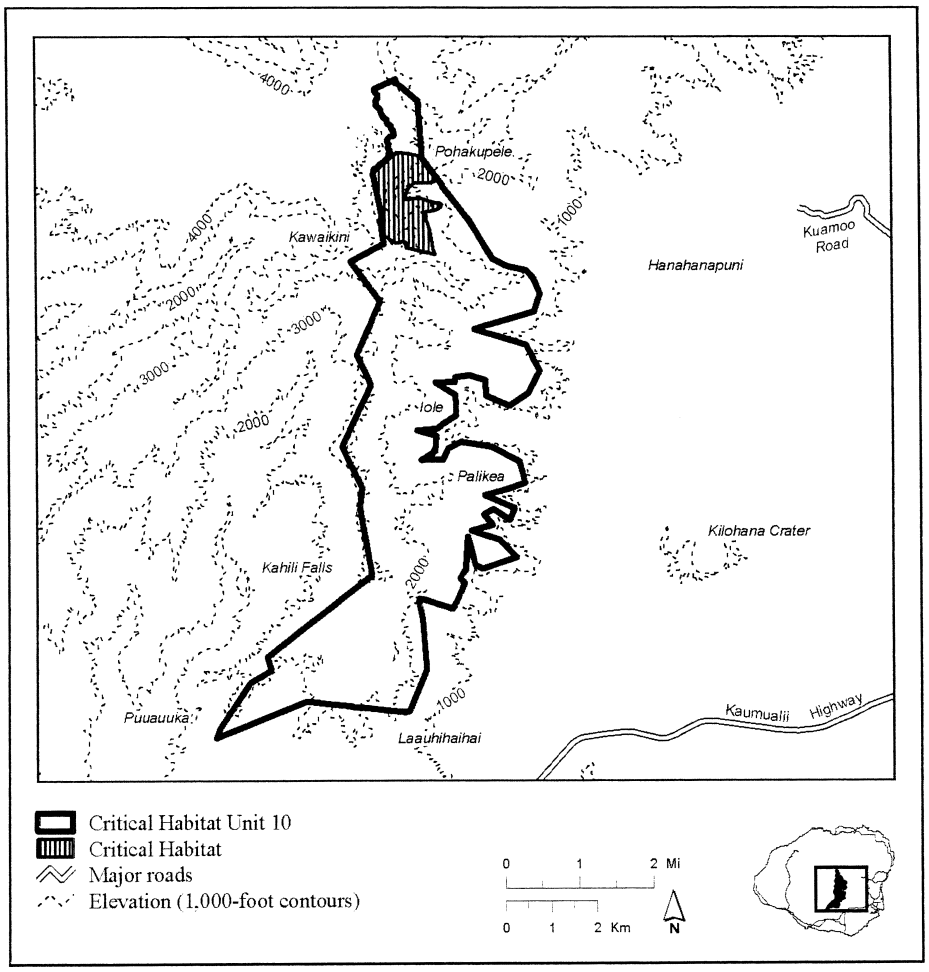
Cyrtandra paliku–b, Kauai 10–*Dubautia plantaginea* ssp. *magnifolia*–b, Kauai 10–*Lysimachia iniki*–b, Kauai 10–*Lysimachia pendens*–b, Kauai 10–*Lysimachia venosa*–b, and Kauai 10–*Platydesma rostrata*–e (see paragraphs (a)(1)(lxiii), (a)(1)(lxvi), (a)(1)(lxxiv), (a)(1)(lxxv), (a)(1)(lxxx), (a)(1)(xcv), (a)(1)(xcvi), (a)(1)(xcvii), and (a)(1)(cx), respectively, of this section).

(B) Map 36b follows:

Map 36b

Kauai 10–*Chamaesyce remyi* var. *kauaiensis*–c, Kauai 10–*Chamaesyce remyi* var. *remyi*–e, Kauai 10–*Cyanea dolichopoda*–b, Kauai 10–*Cyrtandra oenobarba*–c, Kauai 10–*Cyrtandra paliku*–b, Kauai 10–*Dubautia plantaginea* ssp. *magnifolia*–b, Kauai 10–*Lysimachia iniki*–b, Kauai 10–*Lysimachia pendens*–b, Kauai 10–*Lysimachia venosa*–b, Kauai 10–*Platydesma rostrata*–e

Wet Cliff



(lxi) Kauai 10–*Chamaesyce remyi* var. *remyi*–c

(A) [Reserved]

(B) See paragraph (a)(1)(lvii)(B) of this section for the map of this unit.

(lxii) Kauai 10–*Chamaesyce remyi* var. *remyi*–d

(A) [Reserved]

(B) See paragraph (a)(1)(lix)(B) of this section for the map of this unit.

(lxiii) Kauai 10–*Chamaesyce remyi* var. *remyi*–e

(A) [Reserved]

(B) See paragraph (a)(1)(lx)(B) of this section for the map of this unit.

(lxiv) Kauai 10–*Charpentiera densiflora*–b

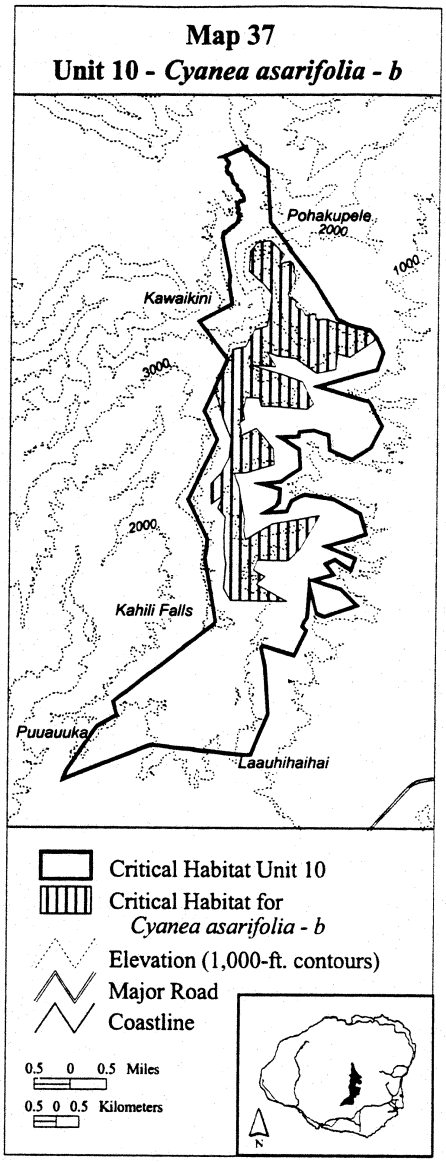
(A) [Reserved]

(B) See paragraph (a)(1)(lix)(B) of this section for the map of this unit.

(lxv) Kauai 10—*Cyanea asarifolia*—b (903 ha; 2,232 ac)

(A) [Reserved]

(B) Map 37 follows:



(lxvi) Kauai 10–*Cyanea dolichopoda*–b

(A) [Reserved]

(B) See paragraph (a)(1)(lx)(B) of this section for the map of this unit.

(lxvii) Kauai 10–*Cyanea eleeleensis*–a

(A) [Reserved]

(B) See paragraph (a)(1)(lix)(B) of this section for the map of this unit.

(lxviii) Kauai 10–*Cyanea kolekoleensis*–a

(A) [Reserved]

(B) See paragraph (a)(1)(lix)(B) of this section for the map of this unit.

(lxix) Kauai 10–*Cyanea kuhihewa*–a

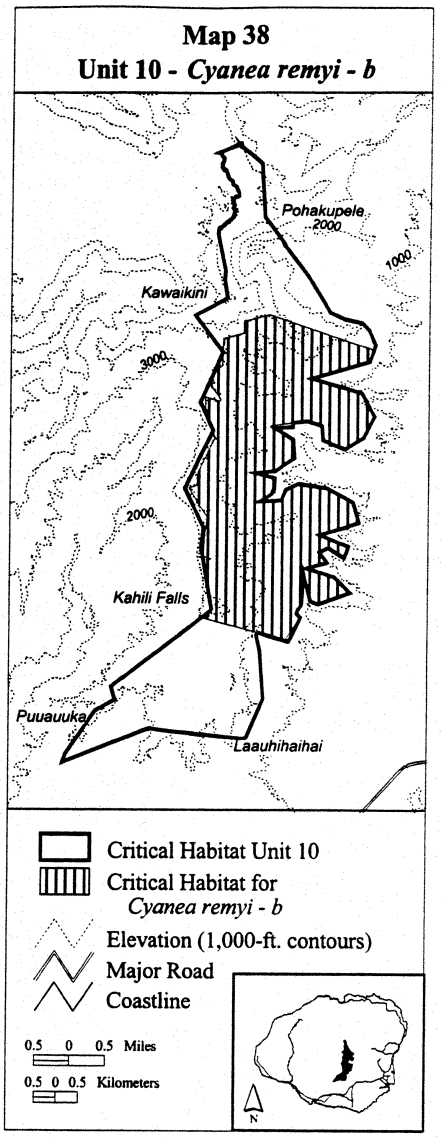
(A) [Reserved]

(B) See paragraph (a)(1)(lix)(B) of this section for the map of this unit.

(lxx) Kauai 10—*Cyanea remyi*—b (1,904 ha; 4,705 ac)

(A) [Reserved]

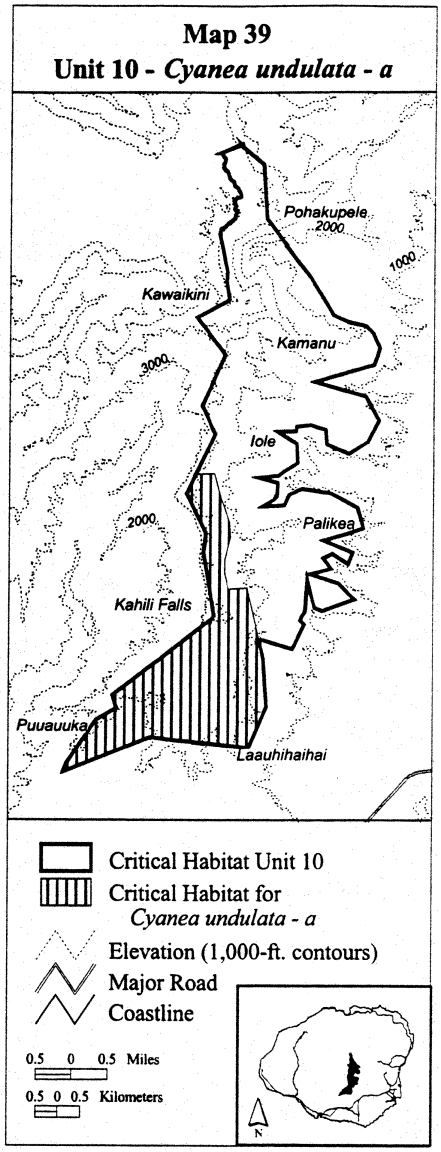
(B) Map 38 follows:

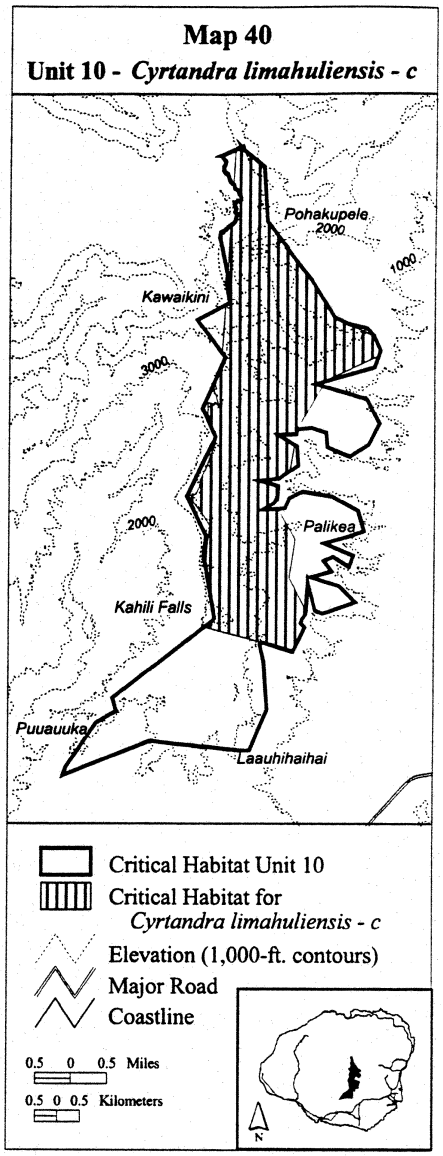


(lxxi) Kauai 10—*Cyanea undulata*—a (1,005 ha; 2,484 ac)

(A) [Reserved]

(B) Map 39 follows:





(lxxii) Kauai 10—*Cyrtandra limahuliensis*—c (2,013 ha; 4,975 ac)

(A) [Reserved]

(B) Map 40 follows:

(lxxiii) Kauai 10–*Cyrtandra oenobarba*–b

(A) [Reserved]

(B) See paragraph (a)(1)(lix)(B) of this section for the map of this unit.

(lxxiv) Kauai 10–*Cyrtandra oenobarba*–c

(A) [Reserved]

(B) See paragraph (a)(1)(lx)(B) of this section for the map of this unit.

(lxxv) Kauai 10–*Cyrtandra paliku*–b

(A) [Reserved]

(B) See paragraph (a)(1)(lx)(B) of this section for the map of this unit.

(lxxvi) Kauai 10–*Dryopteris crinalis* var. *podosorus*–a

(A) [Reserved]

(B) See paragraph (a)(1)(lvii)(B) of this section for the map of this unit.

(lxxvii) Kauai 10–*Dubautia imbricata* ssp. *imbricata*–a

(A) [Reserved]

(B) See paragraph (a)(1)(lix)(B) of this section for the map of this unit.

(lxxviii) Kauai 10–*Dubautia kalalauensis*–a

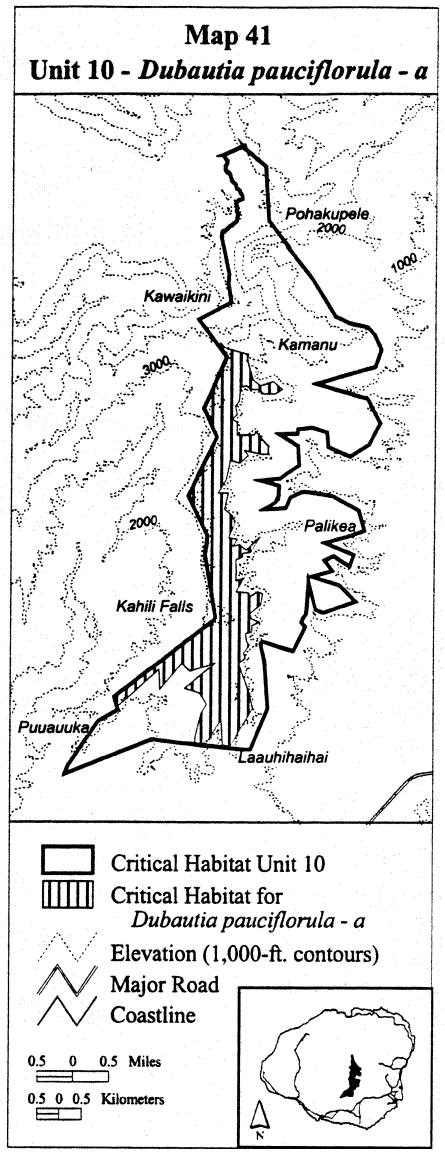
(A) [Reserved]

(B) See paragraph (a)(1)(lvii)(B) of this section for the map of this unit.

(lxxix) Kauai 10—*Dubautia pauciflorula*—a (814 ha; 2,012 ac)

(A) [Reserved]

(B) Map 41 follows:



(lxxx) Kauai 10–*Dubautia plantaginea* ssp. *magnifolia*–b

(A) [Reserved]

(B) See paragraph (a)(1)(lx)(B) of this section for the map of this unit.

(lxxxi) Kauai 10–*Dubautia waialealae*–a

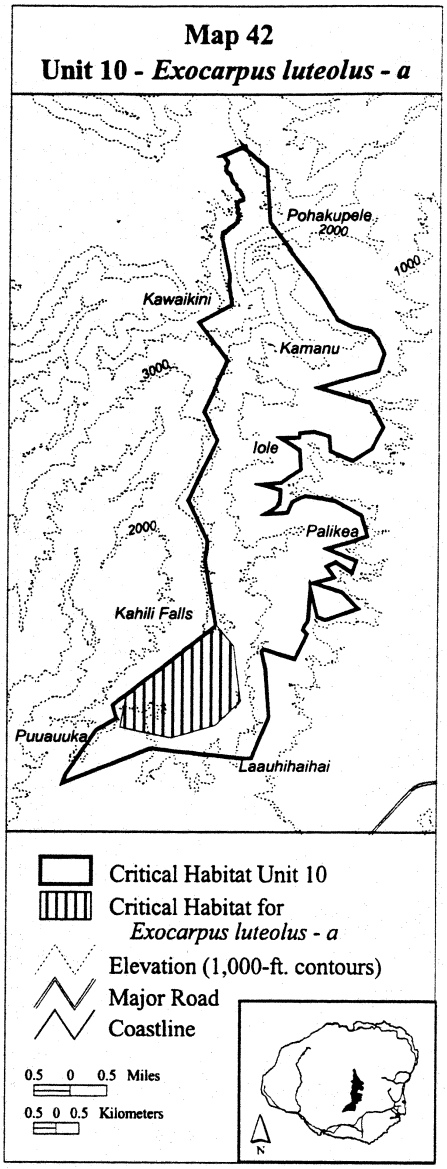
(A) [Reserved]

(B) See paragraph (a)(1)(lvii)(B) of this section for the map of this unit.

(lxxxii) Kauai 10—*Exocarpos luteolus*—a (401 ha; 991 ac)

(A) [Reserved]

(B) Map 42 follows:



(lxxxiii) Kauai 10–*Geranium kauaiense*–a

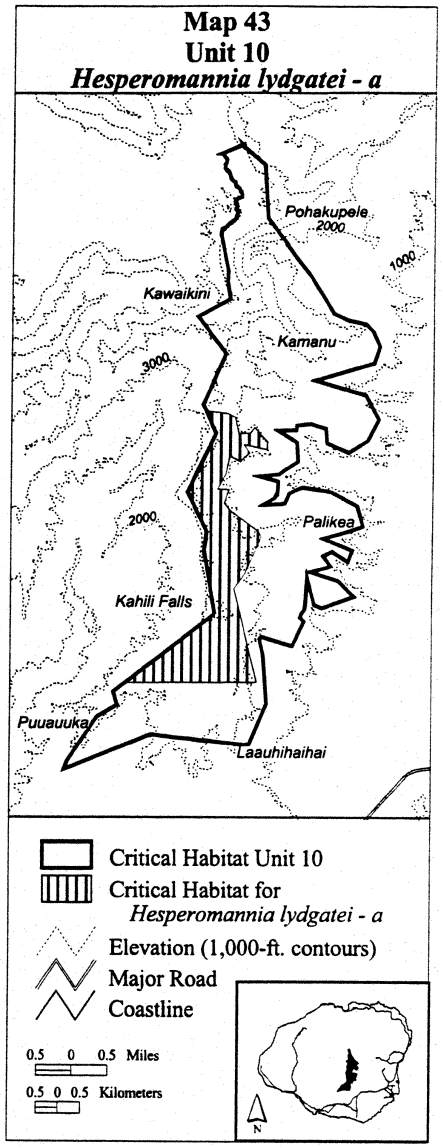
(A) [Reserved]

(B) See paragraph (a)(1)(lvii)(B) of this section for the map of this unit.

(lxxxiv) Kauai 10—*Hesperomannia lydgatei*—a (646 ha; 1,596 ac)

(A) [Reserved]

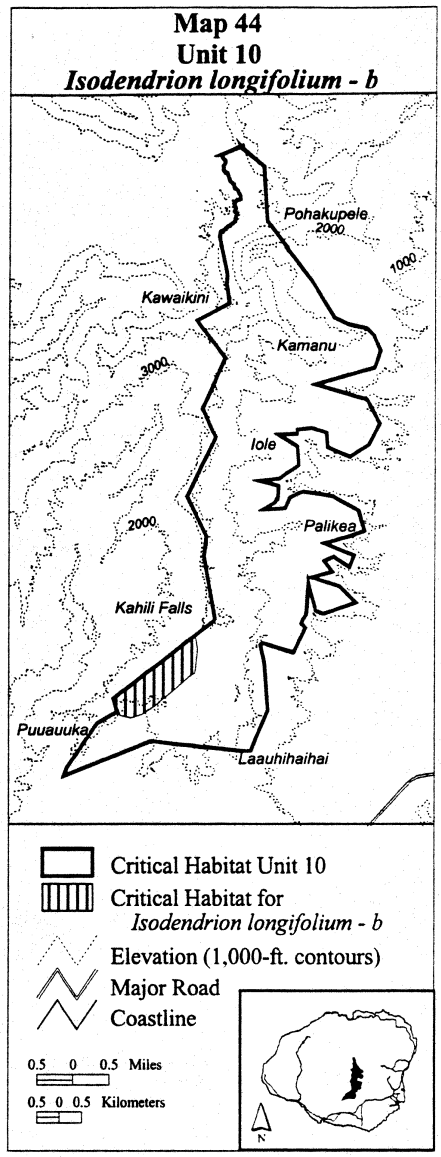
(B) Map 43 follows:



(lxxxv) Kauai 10—*Isodendrion longifolium*—b (142 ha; 350 ac)

(A) [Reserved]

(B) Map 44 follows:



(lxxxvi) Kauai 10–*Keysseria erici*–a

(A) [Reserved]

(B) See paragraph (a)(1)(lvii)(B) of this section for the map of this unit.

(lxxxvii) Kauai 10–*Keysseria helenae*–a

(A) [Reserved]

(B) See paragraph (a)(1)(lvii)(B) of this section for the map of this unit.

(lxxxviii) Kauai 10–*Labordia helleri*–b

(A) [Reserved]

(B) See paragraph (a)(1)(lvii)(B) of this section for the map of this unit.

(lxxxix) Kauai 10–*Labordia helleri*–c

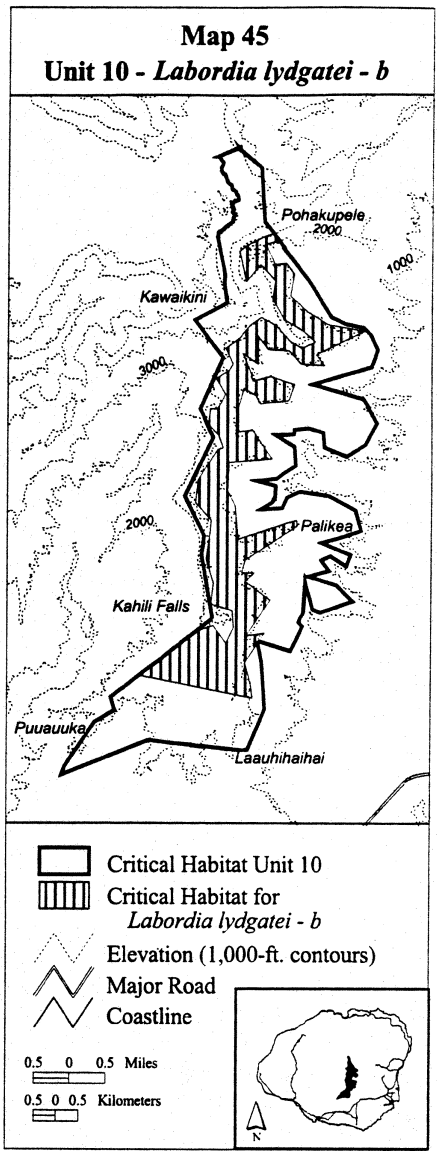
(A) [Reserved]

(B) See paragraph (a)(1)(lix)(B) of this section for the map of this unit.

(xc) Kauai 10—*Labordia lydgatei*—b (1,035 ha; 2,558 ac)

(A) [Reserved]

(B) Map 45 follows:



(xci) Kauai 10–*Labordia pumila*–a

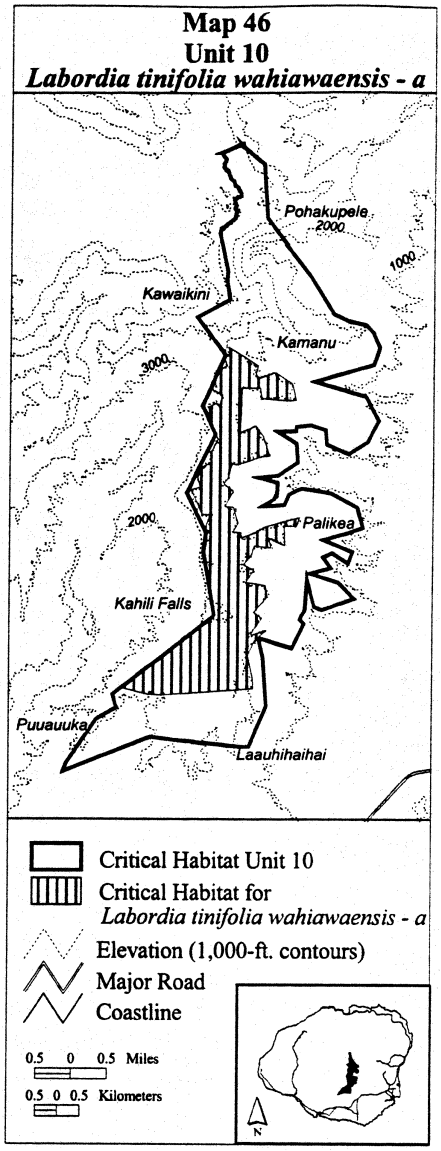
(A) [Reserved]

(B) See paragraph (a)(1)(lvii)(B) of this section for the map of this unit.

(xcii) Kauai 10—*Labordia tinifolia* var. *wahiawaensis*—a (913 ha; 2,255 ac)

(A) [Reserved]

(B) Map 46 follows:



(xciii) Kauai 10–*Lysimachia daphnoides*–a

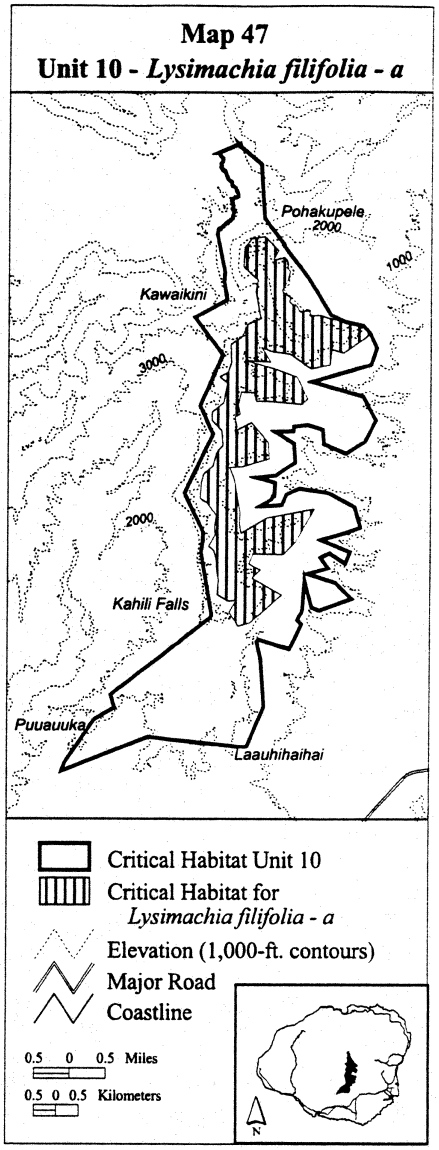
(A) [Reserved]

(B) See paragraph (a)(1)(lvii)(B) of this section for the map of this unit.

(xciv) Kauai 10—*Lysimachia filifolia*—a (995 ha; 2,458 ac)

(A) [Reserved]

(B) Map 47 follows:



(xcv) Kauai 10–*Lysimachia iniki*–b

(A) [Reserved]

(B) See paragraph (a)(1)(lx)(B) of this section for the map of this unit.

(xcvi) Kauai 10–*Lysimachia pendens*–b

(A) [Reserved]

(B) See paragraph (a)(1)(lx)(B) of this section for the map of this unit.

(xcvii) Kauai 10–*Lysimachia venosa*–b

(A) [Reserved]

(B) See paragraph (a)(1)(lx)(B) of this section for the map of this unit.

(xcviii) Kauai 10–*Melicope degeneri*–a

(A) [Reserved]

(B) See paragraph (a)(1)(lvii)(B) of this section for the map of this unit.

(xcix) Kauai 10–*Melicope paniculata*–a

(A) [Reserved]

(B) See paragraph (a)(1)(lix)(B) of this section for the map of this unit.

(c) Kauai 10–*Melicope puberula*–a

(A) [Reserved]

(B) See paragraph (a)(1)(lvii)(B) of this section for the map of this unit.

(ci) Kauai 10–*Melicope puberula*–b

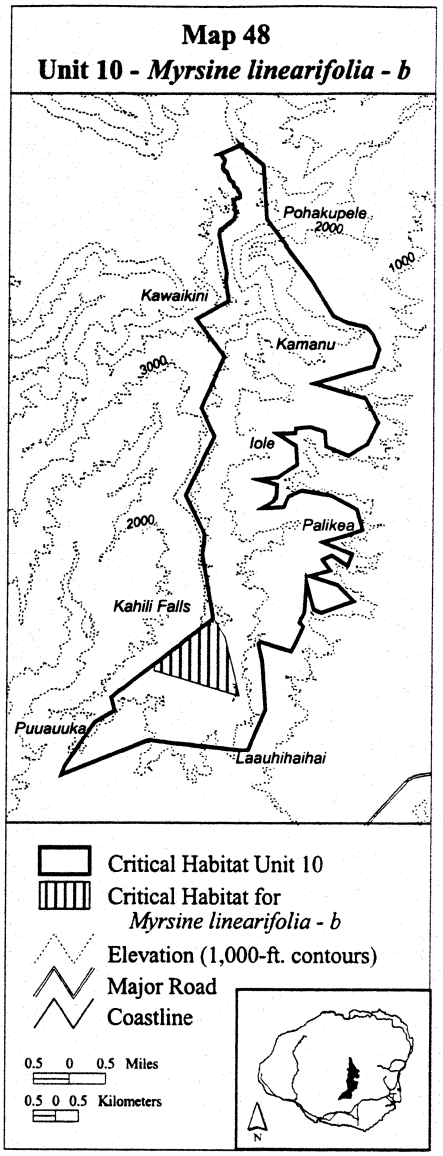
(A) [Reserved]

(B) See paragraph (a)(1)(lix)(B) of this section for the map of this unit.

(cii) Kauai 10—Myrsine linearifolia—b (167 ha; 413 ac)

(A) [Reserved]

(B) Map 48 follows:



(ciii) Kauai 10–*Myrsine mezii*–a

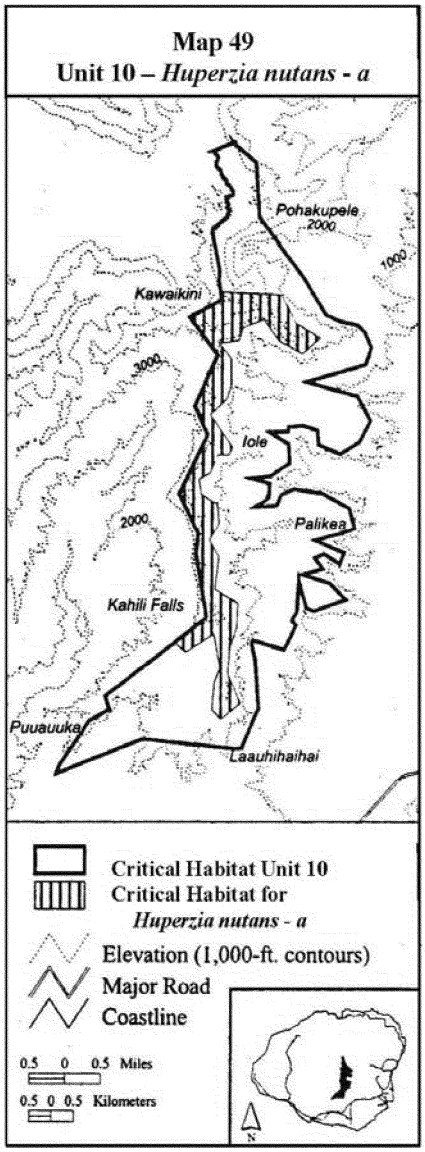
(A) [Reserved]

(B) See paragraph (a)(1)(lvii)(B) of this section for the map of this unit.

(civ) Kauai 10—*Huperzia nutans*—a (620 ha; 1,533 ac)

(A) [Reserved]

(B) Map 49 follows:



(cv) Kauai 10–*Phyllostegia renovans*–a

(A) [Reserved]

(B) See paragraph (a)(1)(lvii)(B) of this section for the map of this unit.

(cvi) Kauai 10–*Phyllostegia renovans*–b

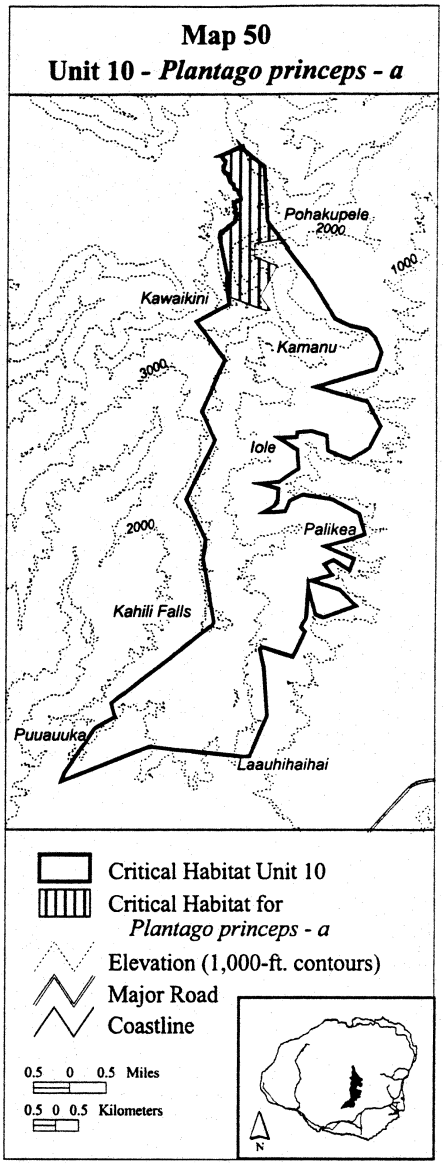
(A) [Reserved]

(B) See paragraph (a)(1)(lix)(B) of this section for the map of this unit.

(cvii) Kauai 10—*Plantago princeps*—a (276 ha; 683 ac)

(A) [Reserved]

(B) Map 50 follows:



(cviii) Kauai 10–*Platydesma rostrata*–c

(A) [Reserved]

(B) See paragraph (a)(1)(lvii)(B) of this section for the map of this unit.

(cix) Kauai 10–*Platydesma rostrata*–d

(A) [Reserved]

(B) See paragraph (a)(1)(lix)(B) of this section for the map of this unit.

(cx) Kauai 10–*Platydesma rostrata*–e

(A) [Reserved]

(B) See paragraph (a)(1)(lx)(B) of this section for the map of this unit.

(cxi) Kauai 10–*Psychotria grandiflora*–a

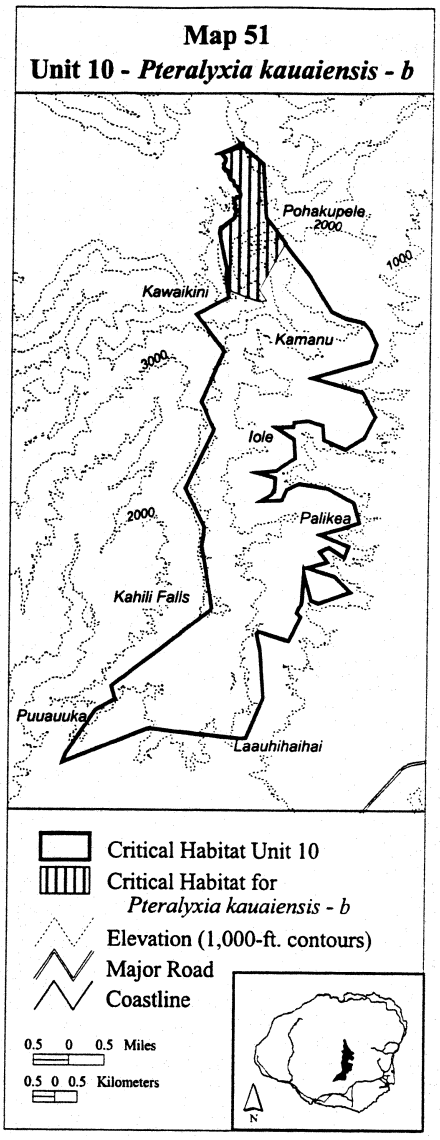
(A) [Reserved]

(B) See paragraph (a)(1)(lvii)(B) of this section for the map of this unit.

(cxii) Kauai 10—*Pteralyxia kauaiensis*—b (304 ha; 751 ac)

(A) [Reserved]

(B) Map 51 follows:



(cxiii) Kauai 10–*Stenogyne kealiae*–a

(A) [Reserved]

(B) See paragraph (a)(1)(lix)(B) of this section for the map of this unit.

(cxiv) Kauai 10–*Tetraplasandra bisattenuata*–b

(A) [Reserved]

(B) See paragraph (a)(1)(lix)(B) of this section for the map of this unit.

(cxv) Kauai 10–*Tetraplasandra flynnii*–a

(A) [Reserved]

(B) See paragraph (a)(1)(lvii)(B) of this section for the map of this unit.

(cxvi) Kauai 10–*Tetraplasandra flynnii*–b

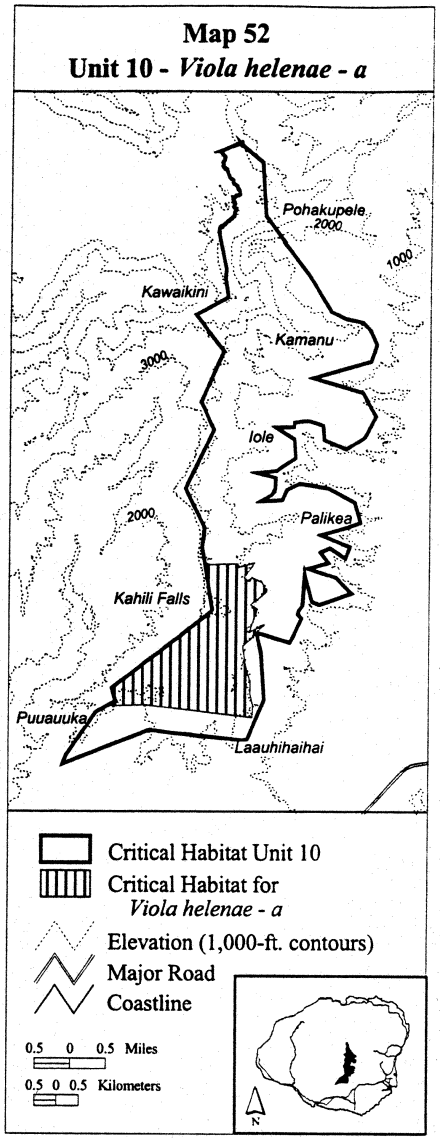
(A) [Reserved]

(B) See paragraph (a)(1)(lix)(B) of this section for the map of this unit.

(cxvii) Kauai 10—*Viola helenae*—a (611 ha; 1,510 ac)

(A) [Reserved]

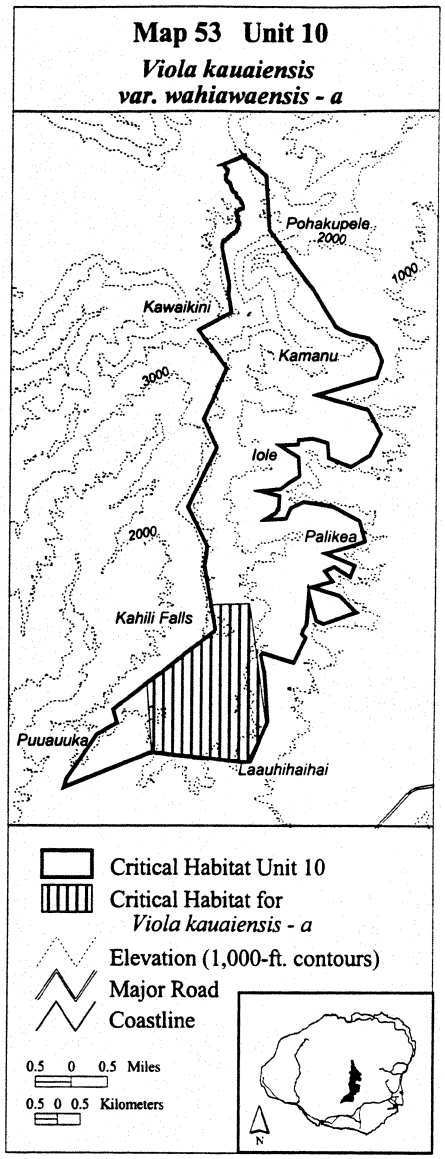
(B) Map 52 follows:



(cxviii) Kauai 10—*Viola kauaiensis* var. *wahiawaensis*—a (657 ha; 1,623 ac)

(A) [Reserved]

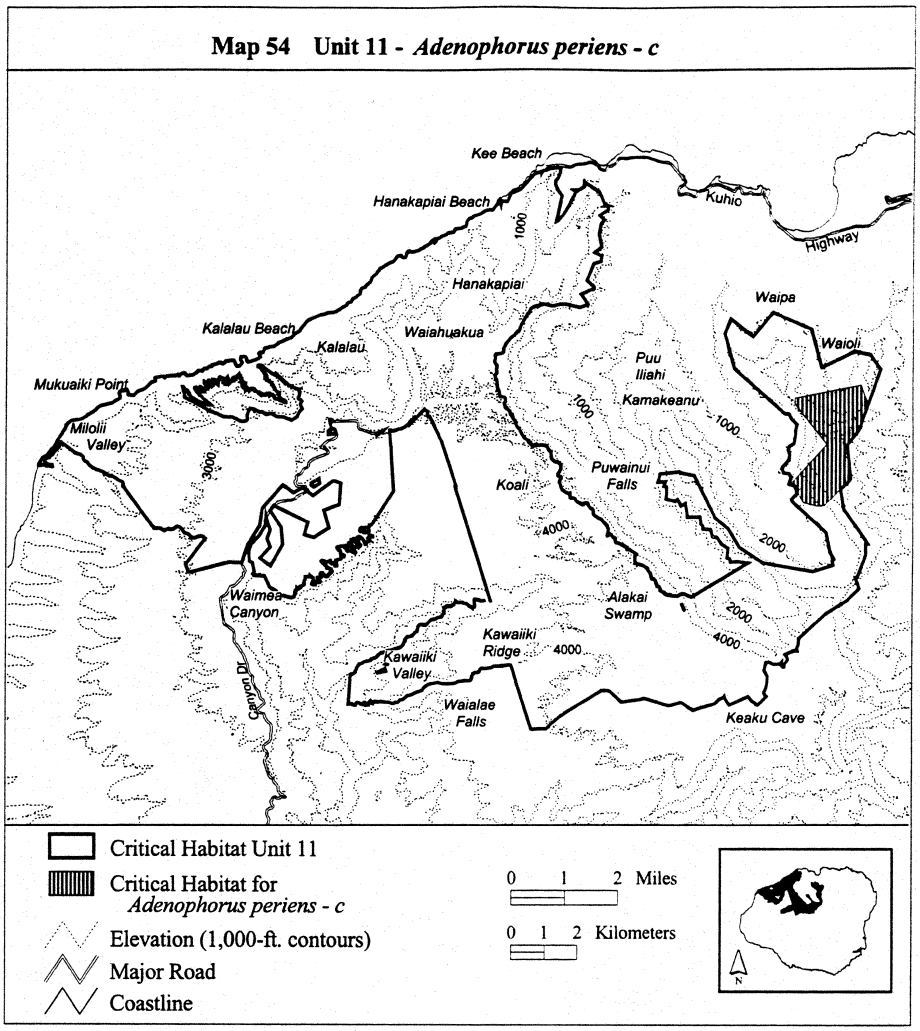
(B) Map 53 follows:



(cxix) Kauai 11—*Adenophorus periens*—c (469 ha; 1,158 ac)

(A) [Reserved]

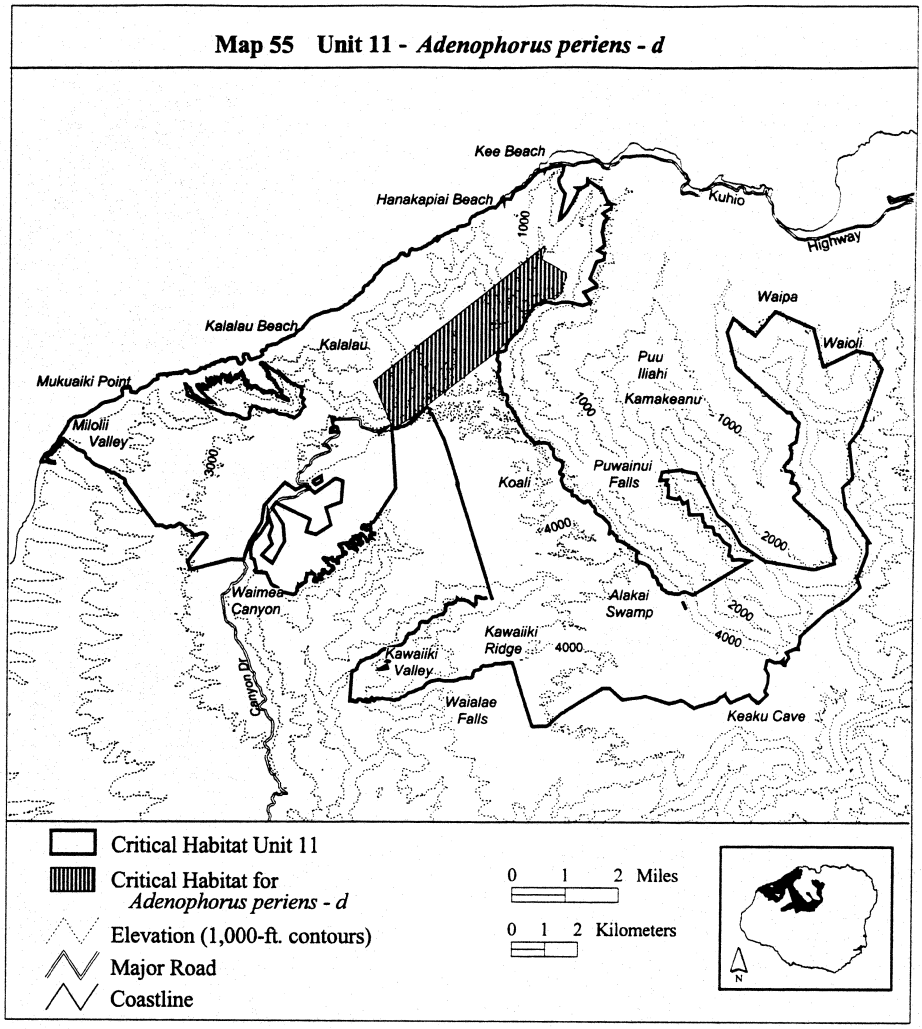
(B) Map 54 follows:



(cxx) Kauai 11—*Adenophorus periens*—d (1,006 ha; 2,485 ac)

(A) [Reserved]

(B) Map 55 follows:



(cxxi) Kauai 11—*Alectryon macrococcus*—a (382 ha; 943 ac)

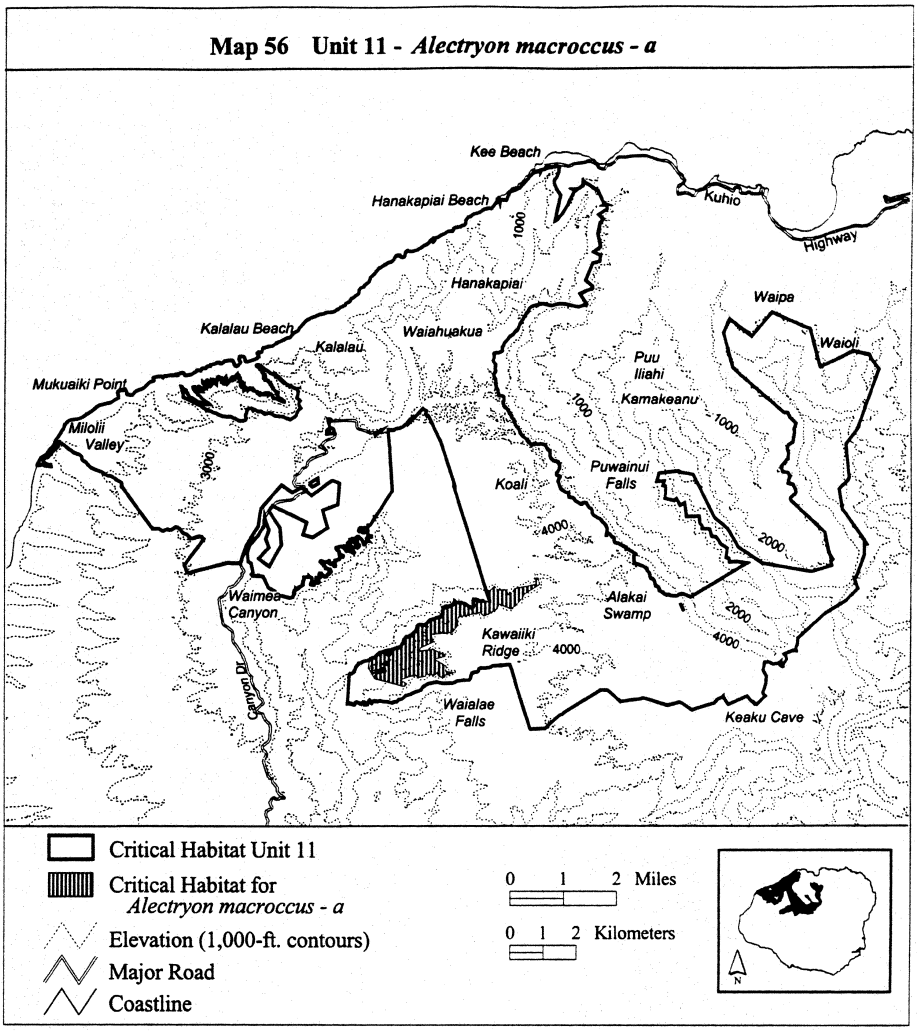
(A) [Reserved]

(B) Excluding 2 areas:

(*1*) Bounded by the following 3 points (1 ha; 3 ac): Start at 435132, 2442248; 435160, 2442164; 434848, 2442098; return to starting point; and

(*2*) Bounded by the following 4 points: (0 ha; 1 ac): Start at 435151, 2442425; 435215, 2442393; 435195, 2442353; 435128, 2442379; return to starting point.

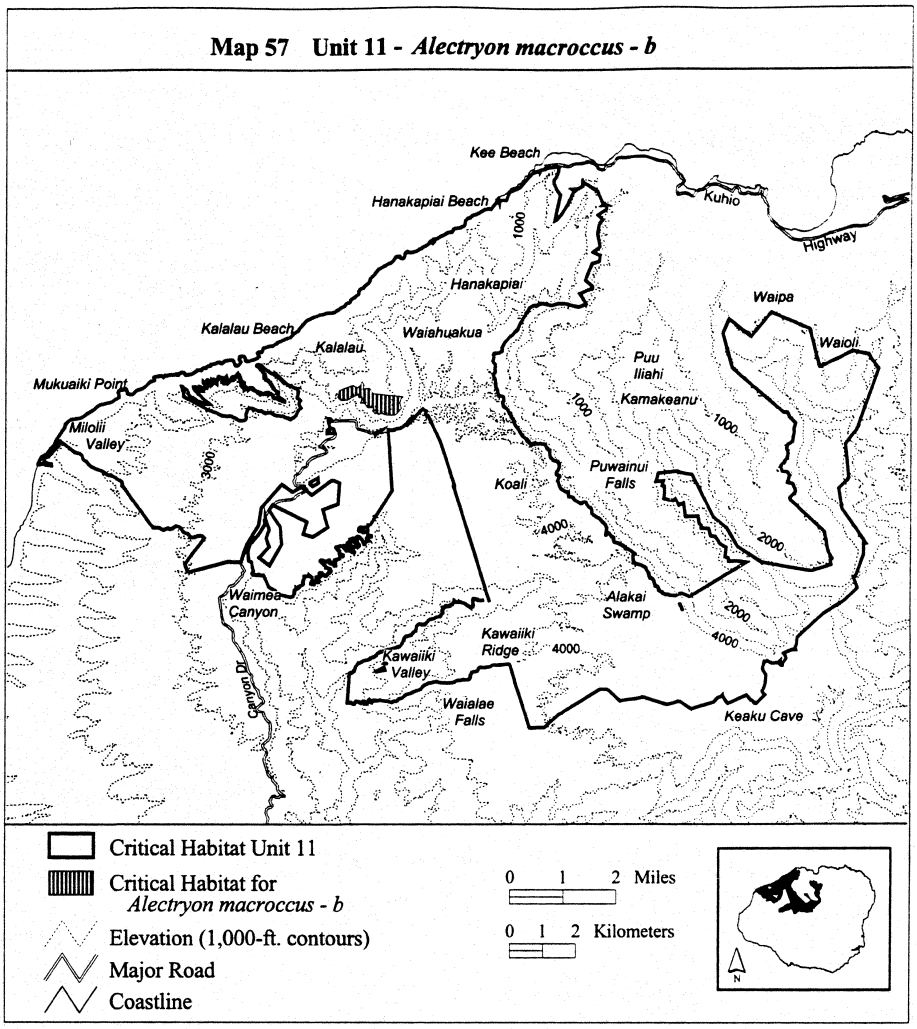
(C) Map 56 follows:



(cxxii) Kauai 11—*Alectryon macrococcus*—b (90 ha; 222 ac)

(A) [Reserved]

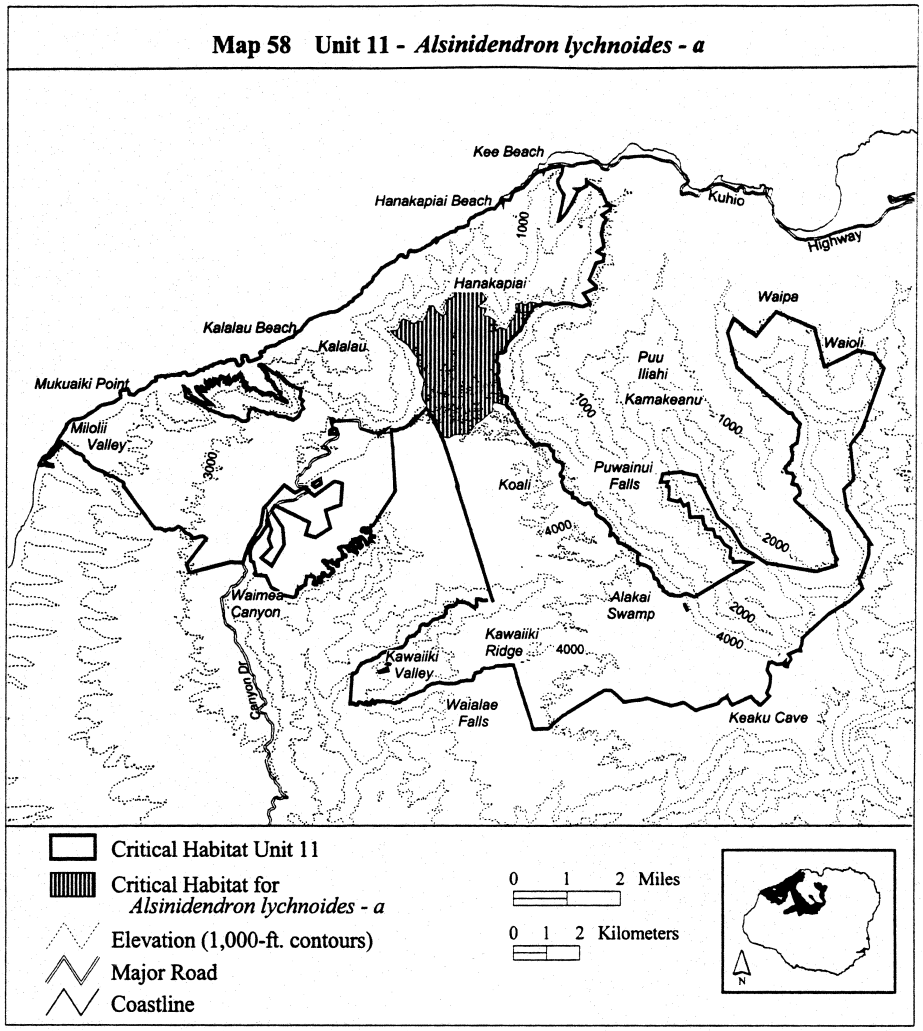
(B) Map 57 follows:



(cxxiii) Kauai 11—*Alsinidendron lychnoides*—a (993 ha; 2,455 ac)

(A) [Reserved]

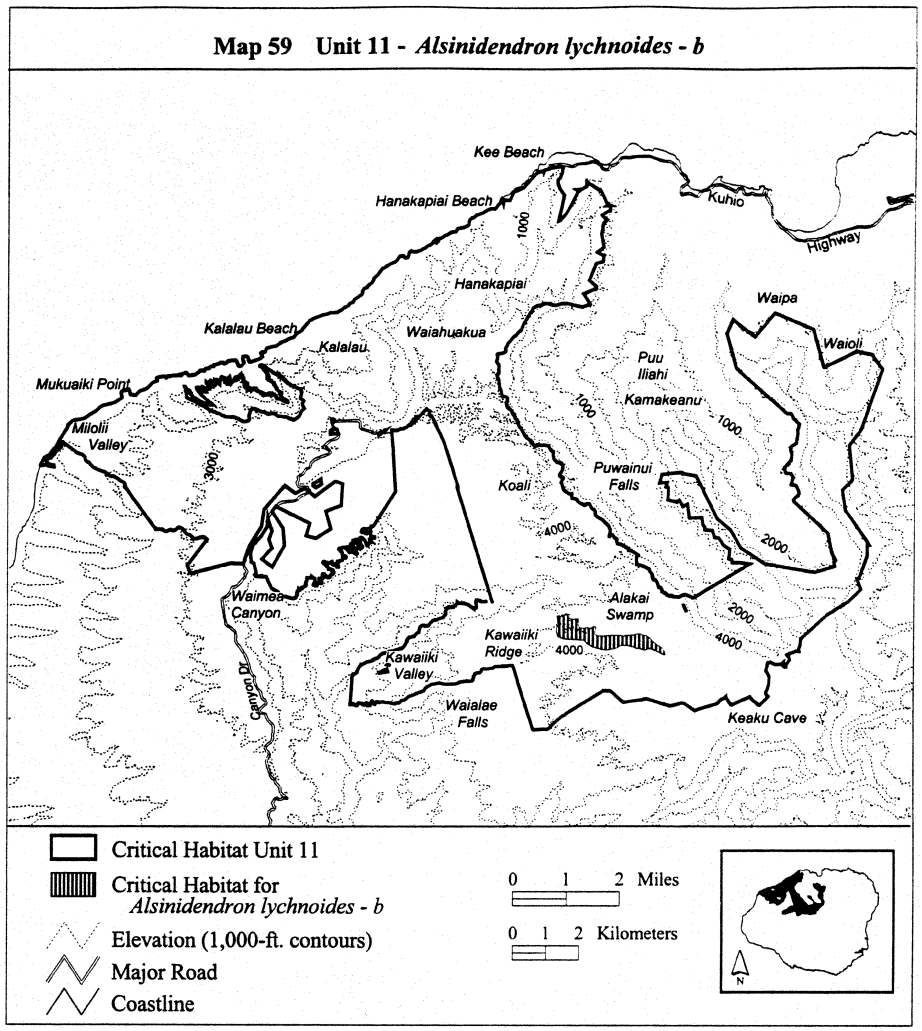
(B) Map 58 follows:



(cxxiv) Kauai 11—*Alsinidendron lychnoides*—b (138 ha; 340 ac)

(A) [Reserved]

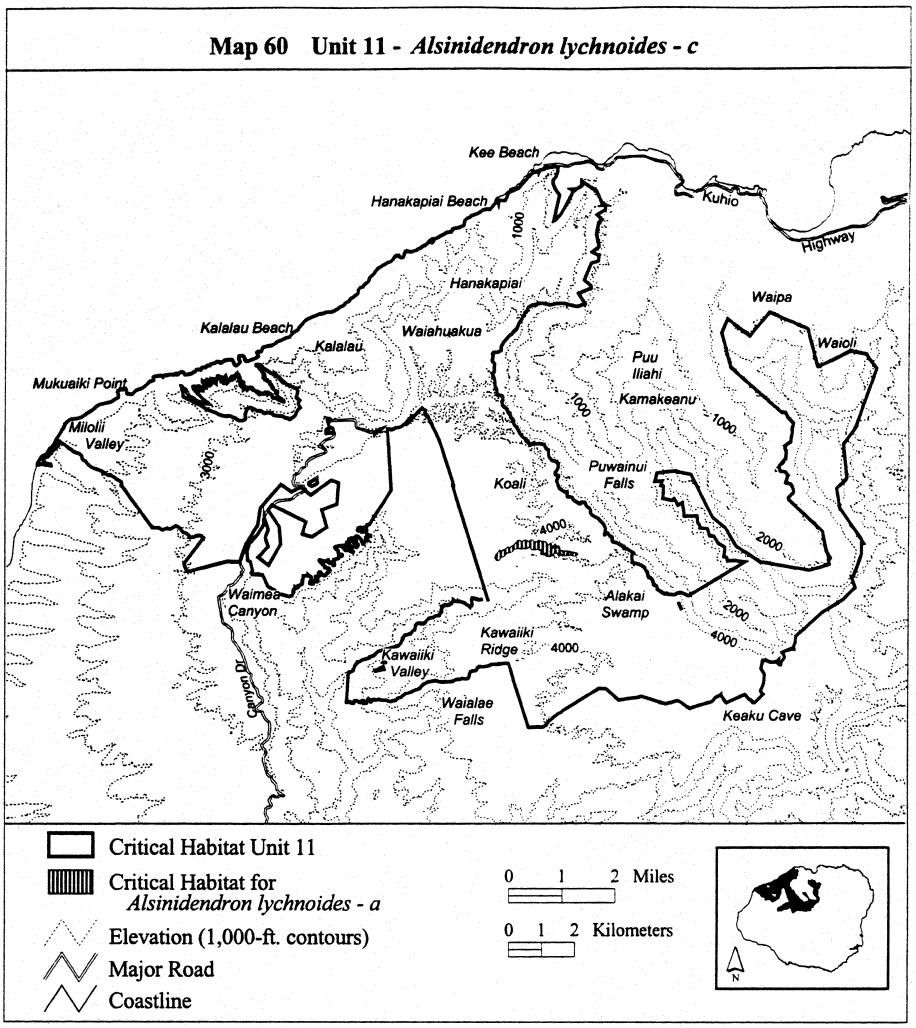
(B) Map 59 follows:



(cxxv) Kauai 11—*Alsinidendron lychnoides*—c (55 ha; 136 ac)

(A) [Reserved]

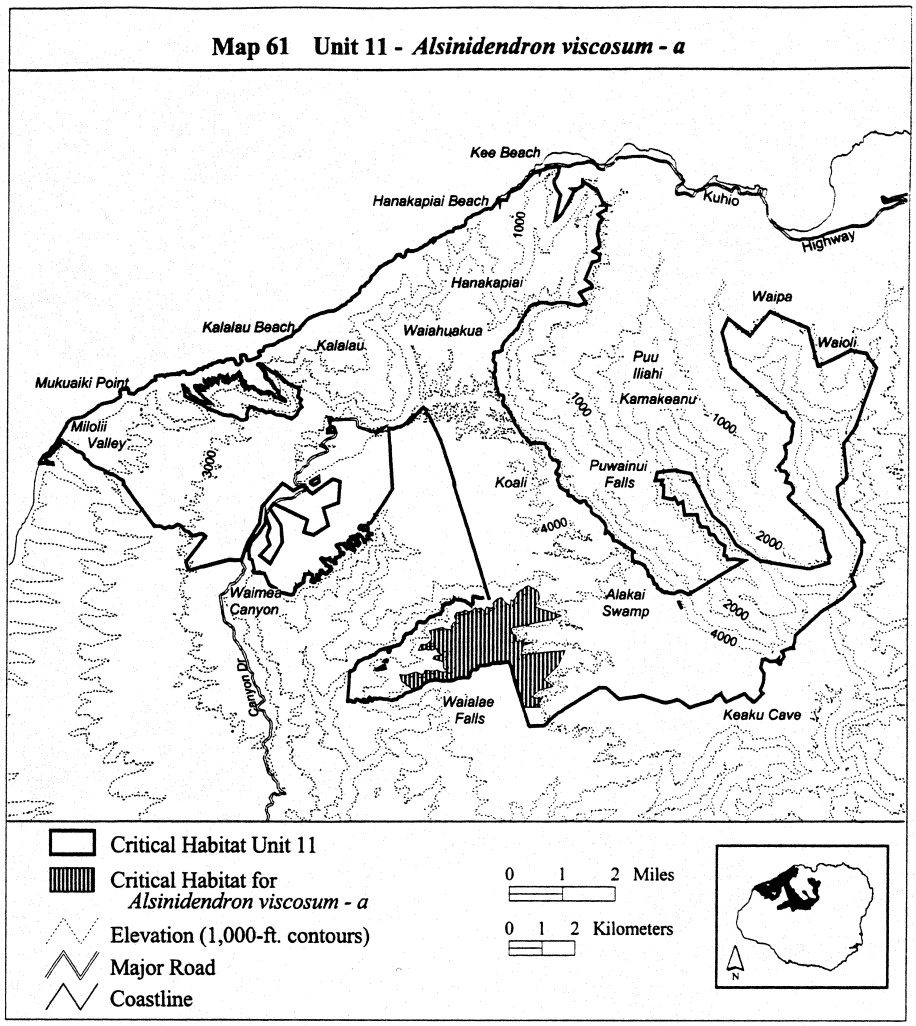
(B) Map 60 follows:



(cxxvi) Kauai 11—*Alsinidendron viscosum*—a (736 ha; 1,819 ac)

(A) [Reserved]

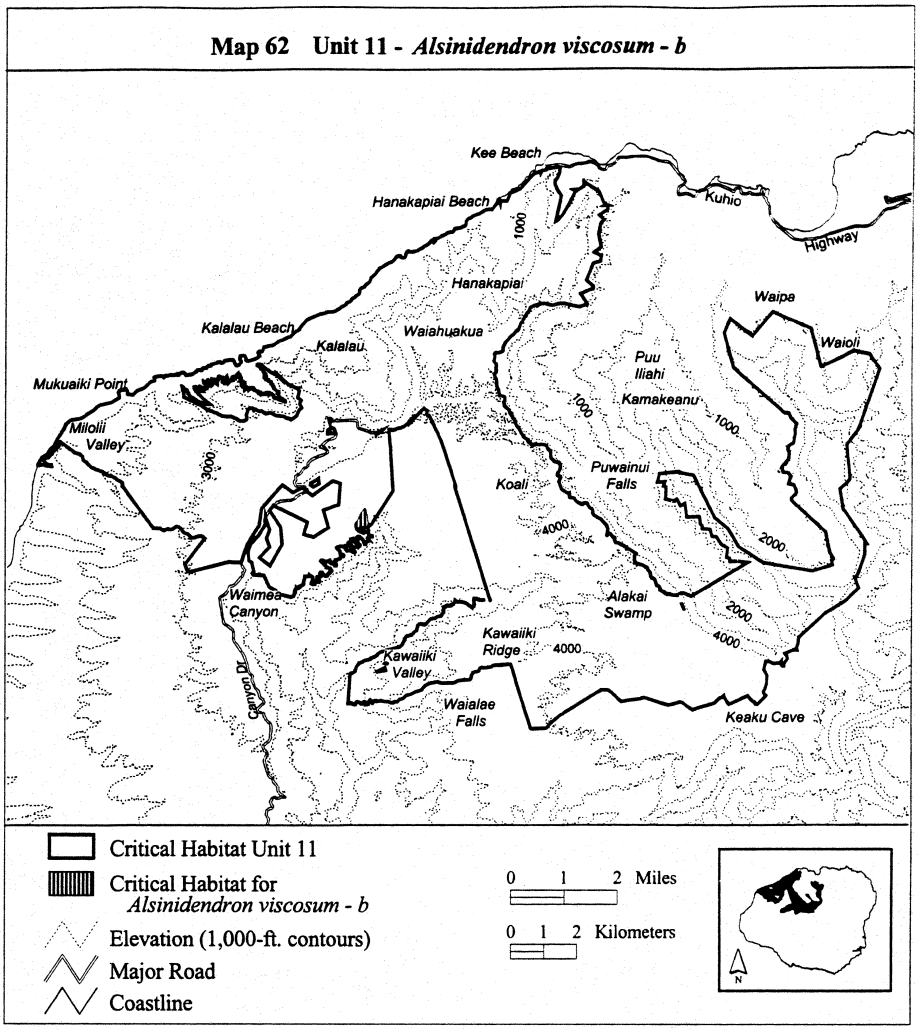
(B) Map 61 follows:



(cxxvii) Kauai 11—*Alsinidendron viscosum*—b (17 ha; 42 ac)

(A) [Reserved]

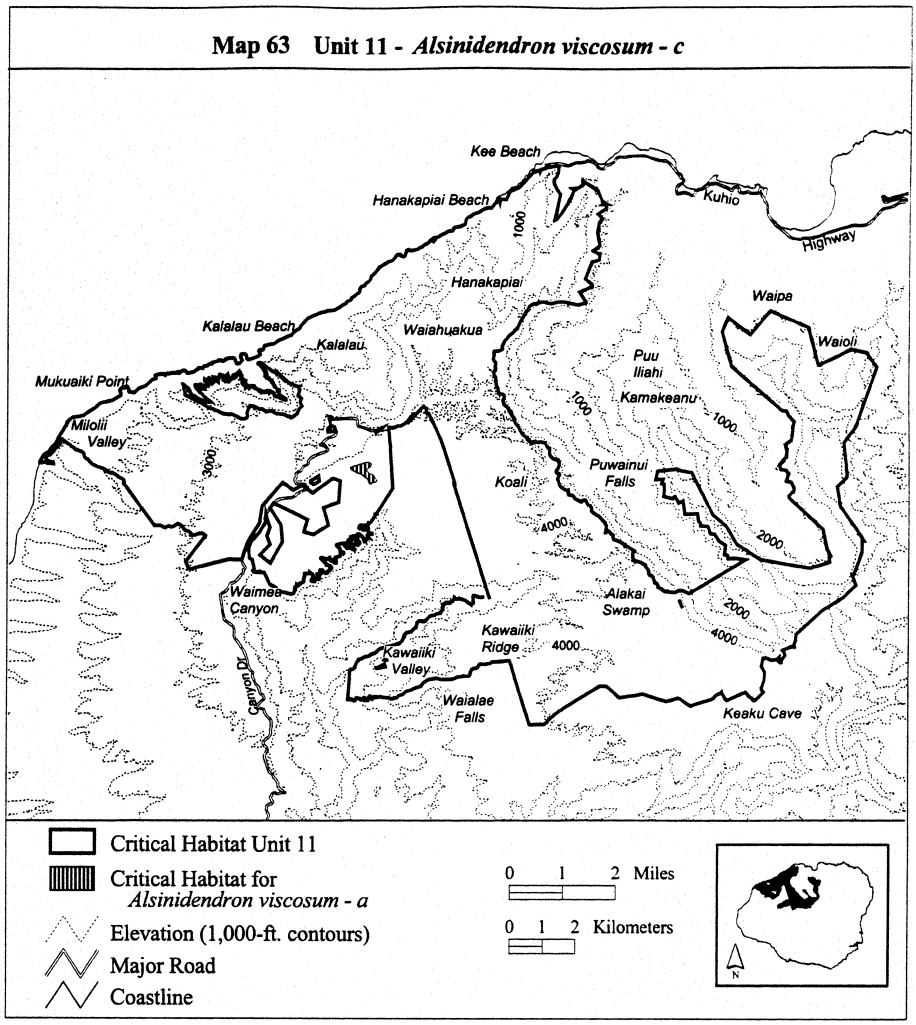
(B) Map 62 follows:



(cxxviii) Kauai 11—*Alsinidendron viscosum*—c (22 ha; 55 ac)

(A) [Reserved]

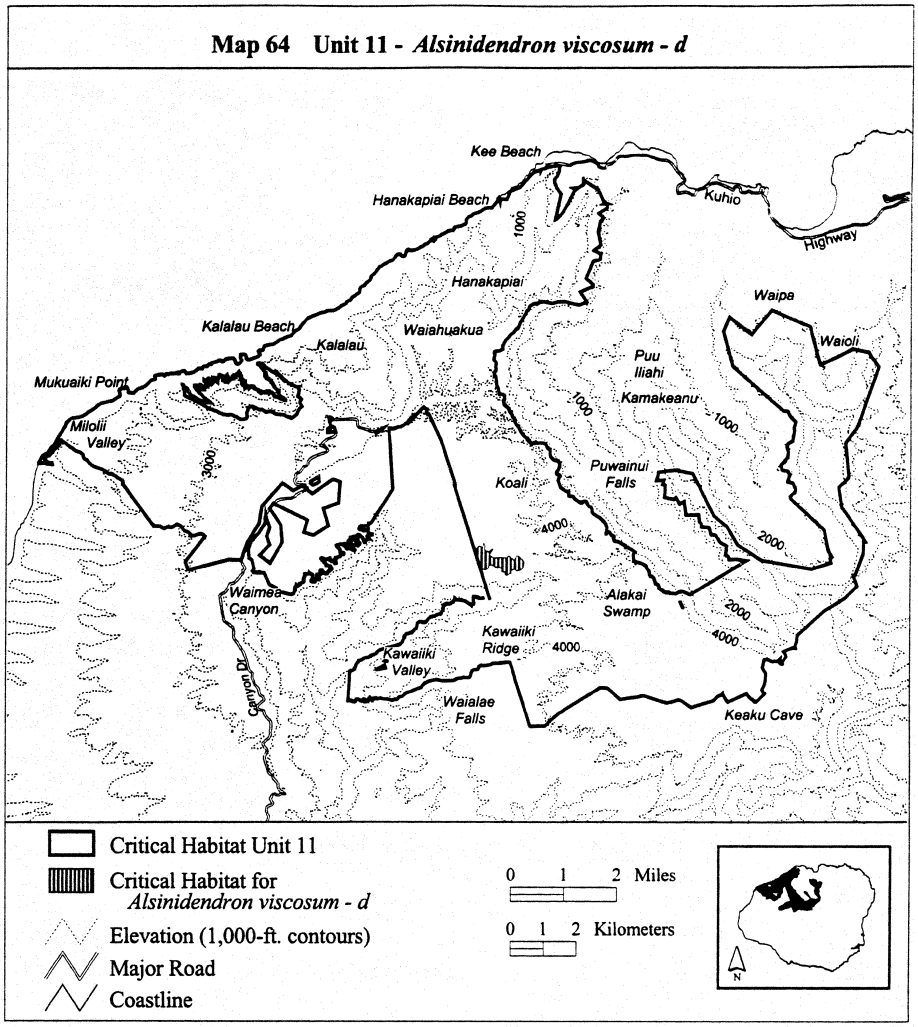
(B) Map 63 follows:



(cxxix) Kauai 11—*Alsinidendron viscosum*—d (61 ha; 150 ac)

(A) [Reserved]

(B) Map 64 follows:



(cxxx) Kauai 11—*Astelia waialealae*—b

(A) This is a unit of the Montane Wet ecosystem and consists of 14,096 ac (5,704 ha). This unit is also critical habitat for Kauai 11–*Chamaesyce remyi* var. *remyi*–f, Kauai 11–*Dryopteris crinalis* var. *podosorus*–b, Kauai 11–*Dubautia kalalauensis*–b, Kauai 11–*Dubautia waialealae*–b, Kauai 11–*Geranium kauaiense*–b, Kauai 11–*Keysseria erici*–b, Kauai 11–*Keysseria helenae*–b, Kauai 11–*Labordia helleri*–d, Kauai 11–*Labordia pumila*–b, Kauai 11–*Lysimachia daphnoides*–b, Kauai 11–*Melicope degeneri*–b, Kauai 11–*Melicope puberula*–c, Kauai 11–*Myrsine mezii*–b, Kauai 11–*Phyllostegia renovans*–c, Kauai 11–*Platydesma rostrata*–f, Kauai 11–*Psychotria grandiflora*–b, and Kauai 11–*Tetraplasandra flynnii*–c (see paragraphs (a)(1)(cxlii), (a)(1)(clxxvii), (a)(1)(clxxix), (a)(1)(clxxxv), (a)(1)(cxcix), (a)(1)(ccxvi), (a)(1)(ccxvii), (a)(1)(ccxxii), (a)(1)(ccxxix), (a)(1)(ccxxxv), (a)(1)(ccxli), (a)(1)(ccxlix), (a)(1)(cclviii),

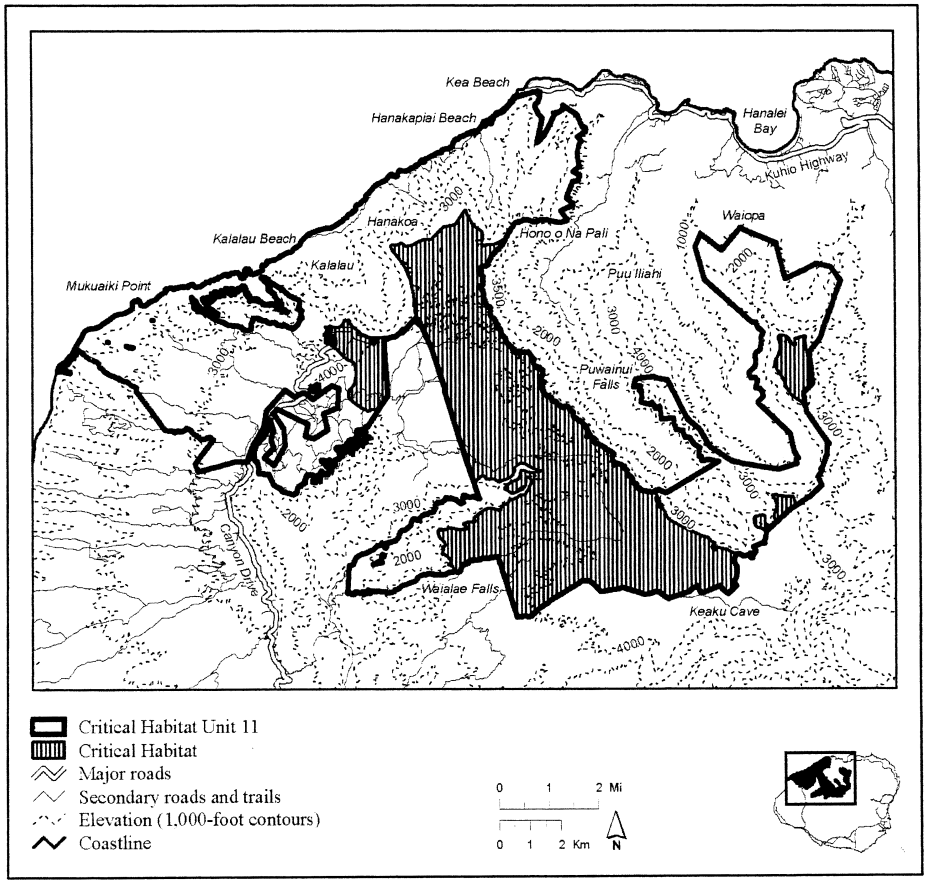
(a)(1)(cclxvi), (a)(1)(cclxxvii), (a)(1)(ccxc), and (a)(1)(cccxxxiv), respectively, of this section).

(B) Map 64a follows:

Map 64a

Kauai 11–*Astelia waialealae*–b, Kauai 11–*Chamaesyce remyi* var. *remyi*–f, Kauai 11–*Dryopteris crinalis* var. *podosorus*–b, Kauai 11–*Dubautia kalalauensis*–b, Kauai 11–*Dubautia waialealae*–b, Kauai 11–*Geranium kauaiense*–b, Kauai 11–*Keysseria erici*–b, Kauai 11–*Keysseria helenae*–b, Kauai 11–*Labordia helleri*–d, Kauai 11–*Labordia pumila*–b, Kauai 11–*Lysimachia daphnoides*–b, Kauai 11–*Melicope degeneri*–b, Kauai 11–*Melicope puberula*–c, Kauai 11–*Myrsine mezii*–b, Kauai 11–*Phyllostegia renovans*–c, Kauai 11–*Platydesma rostrata*–f, Kauai 11–*Psychotria grandiflora*–b, Kauai 11–*Tetraplasandra flynnii*–c

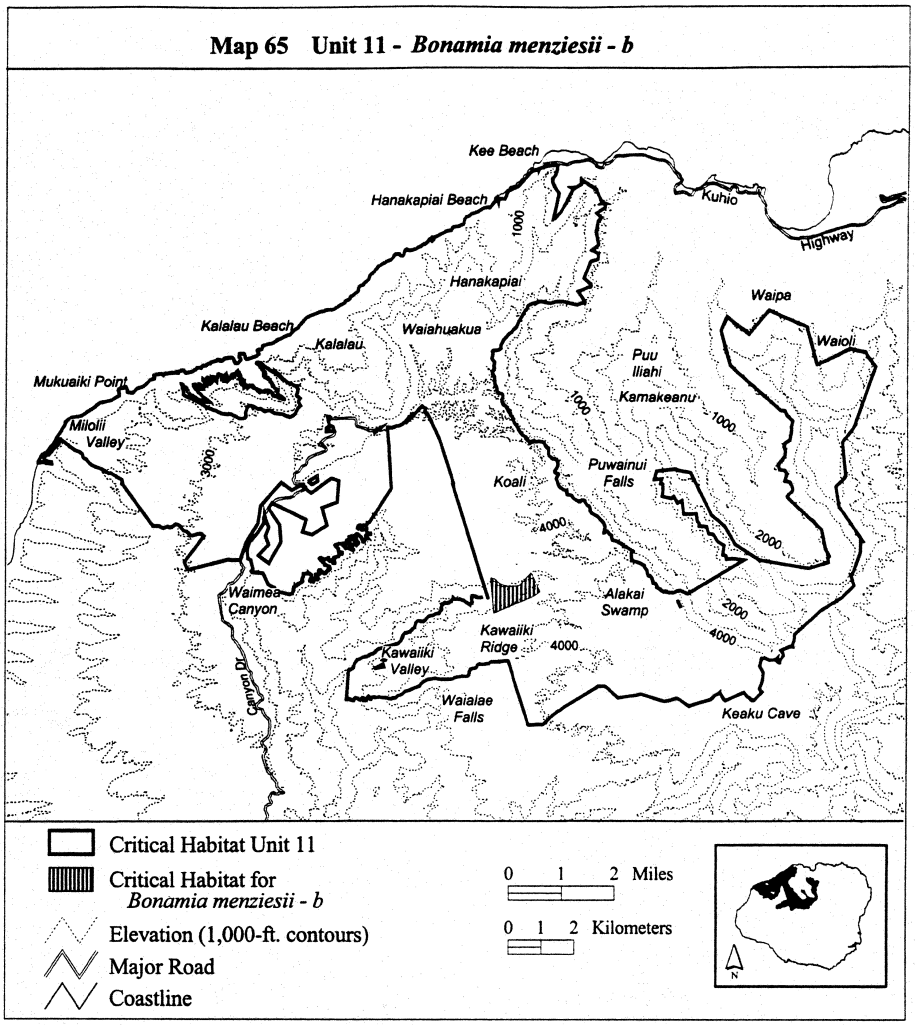
Montane Wet



(cxxxi) Kauai 11—*Bonamia menziesii*—b (93 ha; 229 ac)

(A) [Reserved]

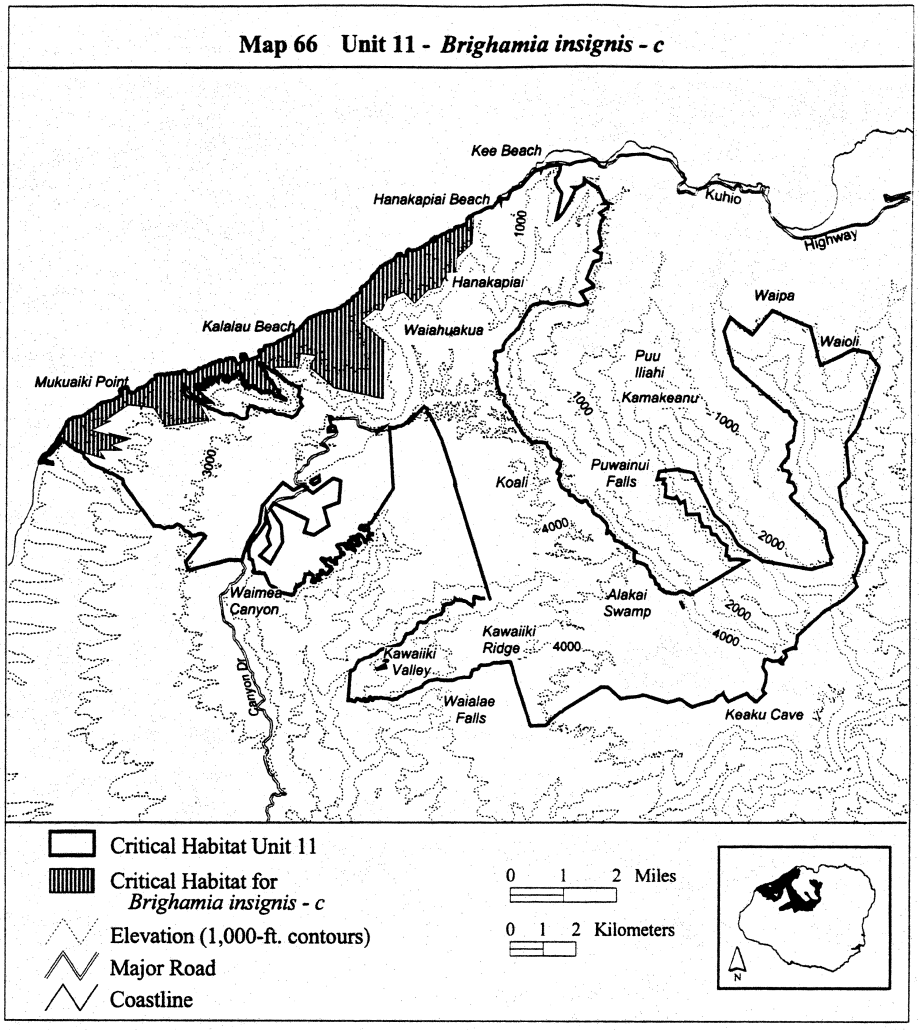
(B) Map 65 follows:



(cxxxii) Kauai 11—*Brighamia insignis*—c (1,645 ha; 4,066 ac)

(A) [Reserved]

(B) Map 66 follows:



(cxxxiii) Kauai 11–*Canavalia napaliensis*–b

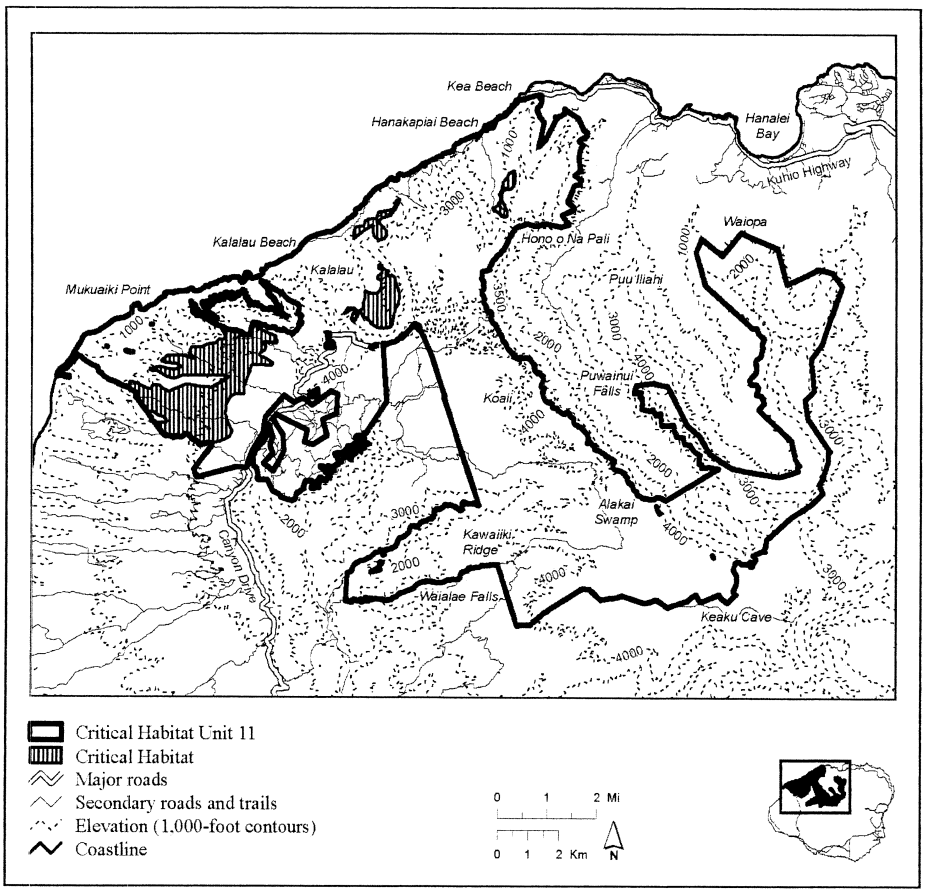
(A) This is a unit of the Lowland Mesic ecosystem and consists of 2,590 ac (1,048 ha). This unit is also critical habitat for Kauai 11–*Chamaesyce eleanoriae*–b, Kauai 11–*Chamaesyce remyi* var. *remyi*–g, Kauai 11–*Charpentiera densiflora*–c, Kauai 11–*Doryopteris angelica*–b, Kauai 11–*Dubautia kenwoodii*–b, Kauai 11–*Labordia helleri*–e, Kauai 11–*Pittosporum napaliense*–b, Kauai 11–*Platydesma rostrata*–g, Kauai 11–*Psychotria hobdyi*–b, and Kauai 11–*Tetraplasandra bisattenuata*–c (see paragraphs (a)(1)(cxxxv), (a)(1)(cxliii), (a)(1)(cxlvii), (a)(1)(clxxvi), (a)(1)(clxxx), (a)(1)(ccxxiii), (a)(1)(cclxxii), (a)(1)(cclxxviii), (a)(1)(ccxcii), and (a)(1)(cccxxxii), respectively, of this section).

(B) Map 66a follows:

Map 66a

Kauai 11–*Canavalia napaliensis*–b, Kauai 11–*Chamaesyce eleanoriae*–b, Kauai 11–*Chamaesyce remyi* var. *remyi*–g, Kauai 11–*Charpentiera densiflora*–c, Kauai 11–*Doryopteris angelica*–b, Kauai 11–*Dubautia kenwoodii*–b, Kauai 11–*Labordia helleri*–e, Kauai 11–*Pittosporum napaliense*–b, Kauai 11–*Platydesma rostrata*–g, Kauai 11–*Psychotria hobdyi*–b, Kauai 11–*Tetraplasandra bisattenuata*–c

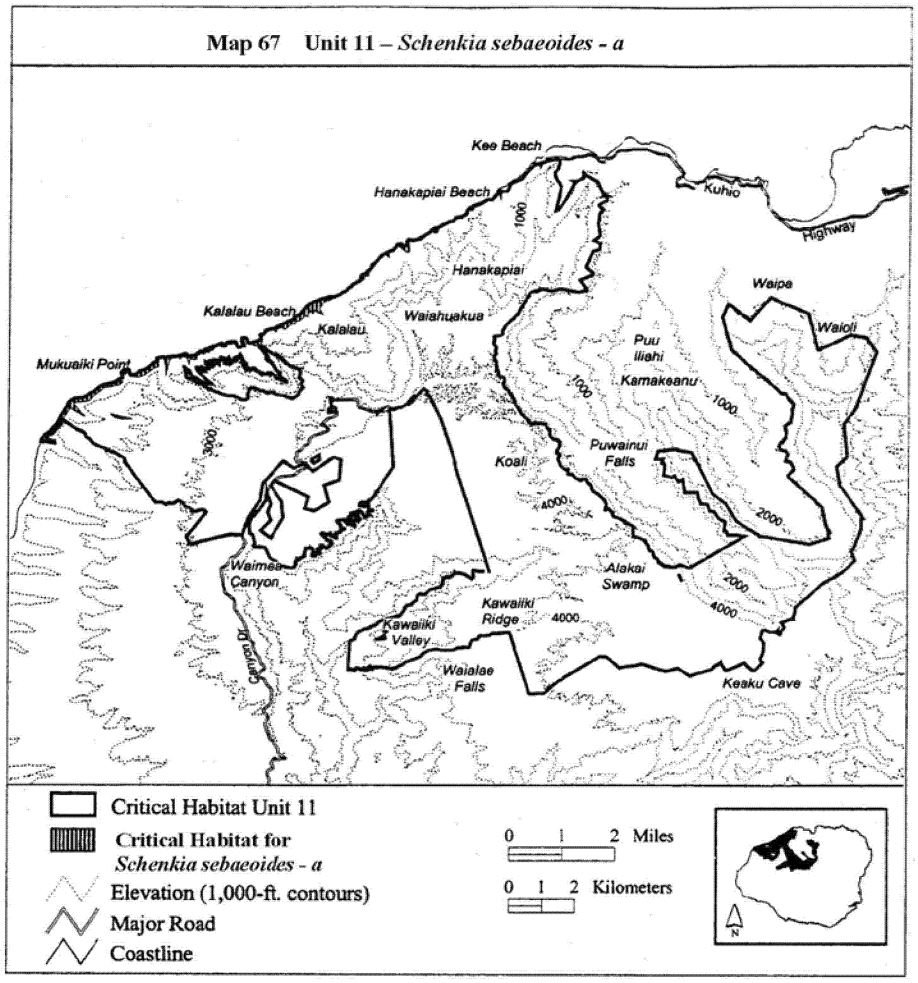
Lowland Mesic



(cxxxiv) Kauai 11—*Schenkia sebaeoides*—a (157 ha; 389 ac)

(A) [Reserved]

(B) Map 67 follows:



(cxxxv) Kauai 11–*Chamaesyce eleanoriae*–b

(A) [Reserved]

(B) See paragraph (a)(1)(cxxxiii)(B) of this section for the map of this unit.

(cxxxvi) Kauai 11–*Chamaesyce eleanoriae*–c

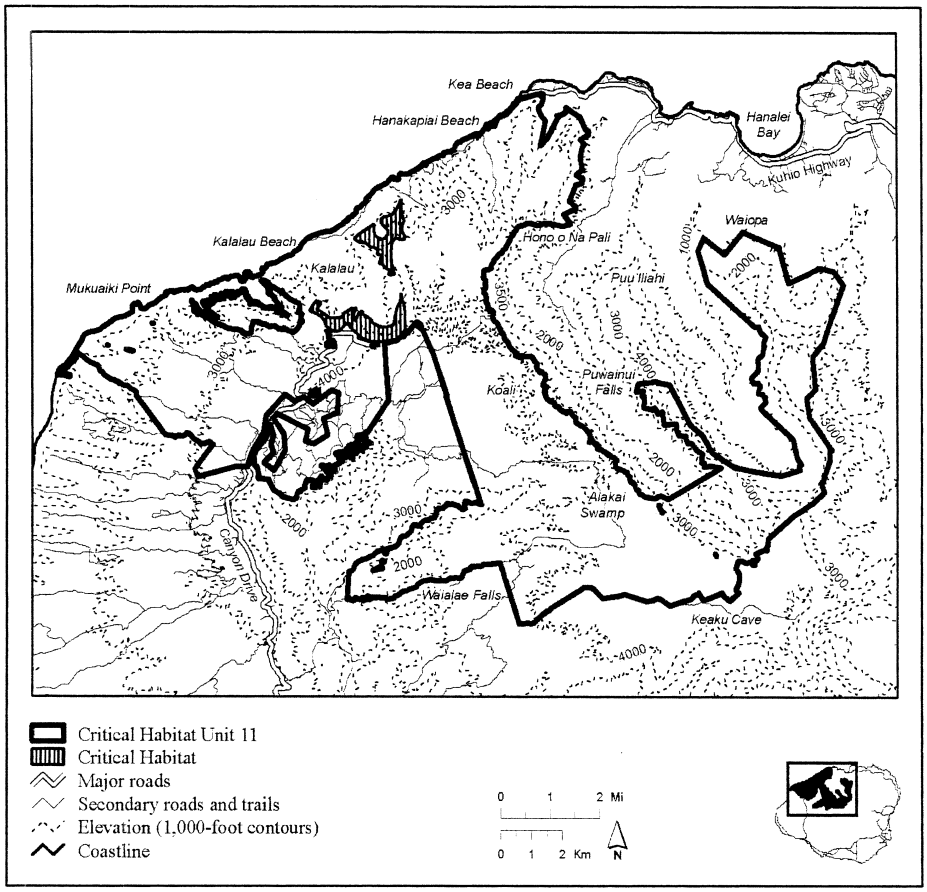
(A) This is a unit of the Dry Cliff ecosystem and consists of 712 ac (288 ha). This unit is also critical habitat for Kauai 11–*Lysimachia scopulensis*–a, Kauai 11–*Schiedea attenuata*–a, and Kauai 11–*Stenogyne kealiae*–b (see paragraphs (a)(1)(ccxxxviii), (a)(1)(cccix), and (a)(1)(cccxxix), respectively, of this section).

(B) Map 67a follows:

Map 67a

Kauai 11–*Chamaesyce eleanoriae*–c, Kauai 11–*Lysimachia scopulensis*–a, Kauai 11–*Schiedea attenuata*–a, Kauai 11–*Stenogyne kealiae*–b

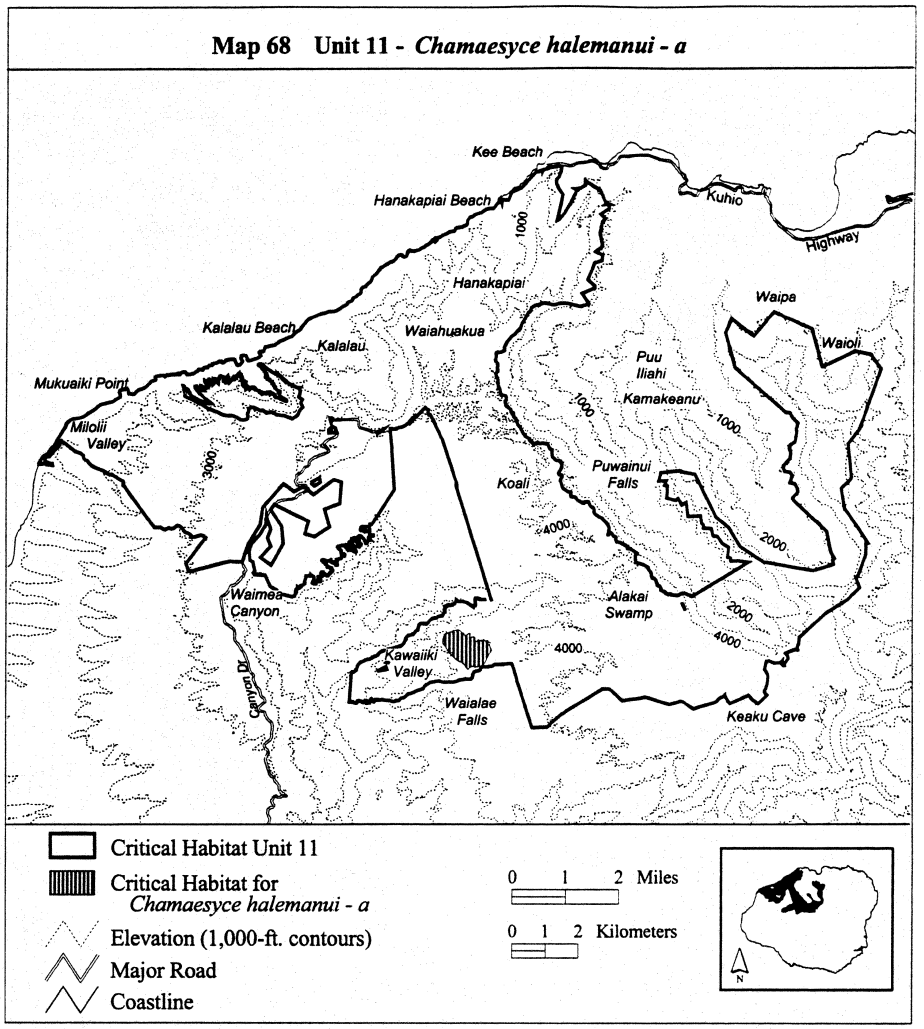
Dry Cliff



(cxxxvii) Kauai 11—*Chamaesyce halemanui*—a (108 ha; 267 ac)

(A) [Reserved]

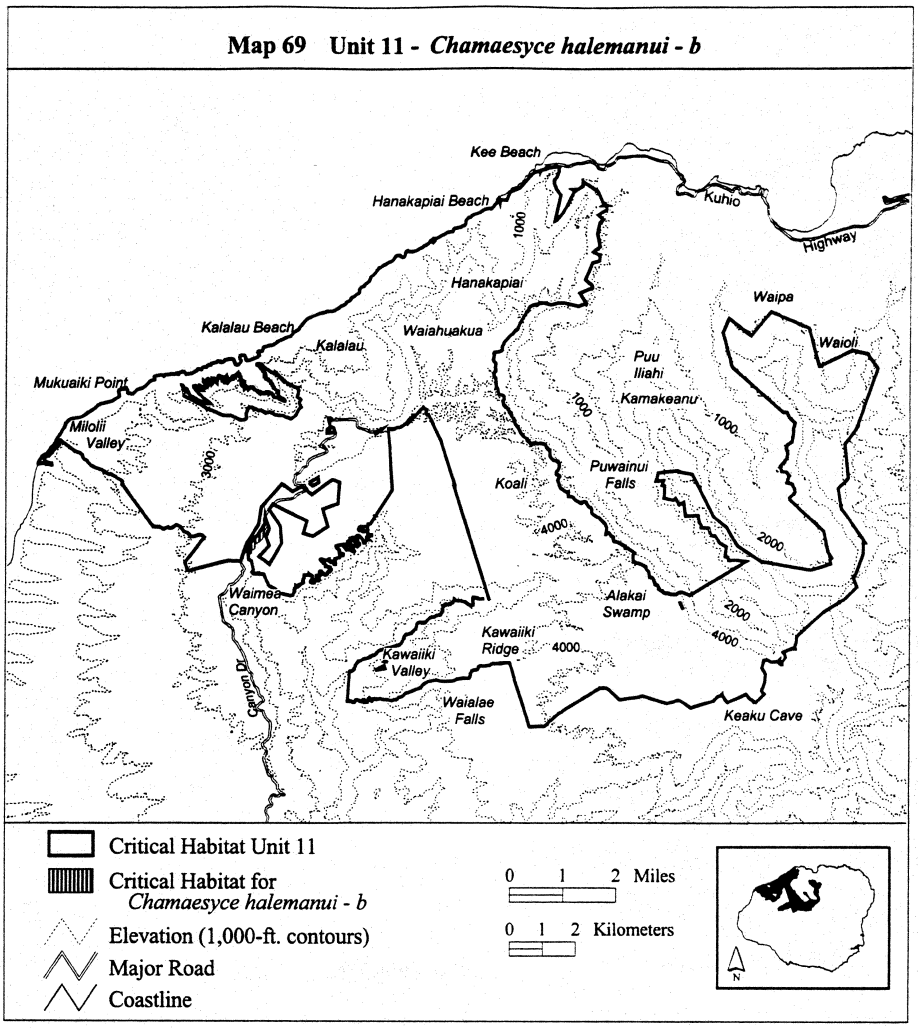
(B) Map 68 follows:



(cxxxviii) Kauai 11—*Chamaesyce halemanui*—b (17 ha; 43 ac)

(A) [Reserved]

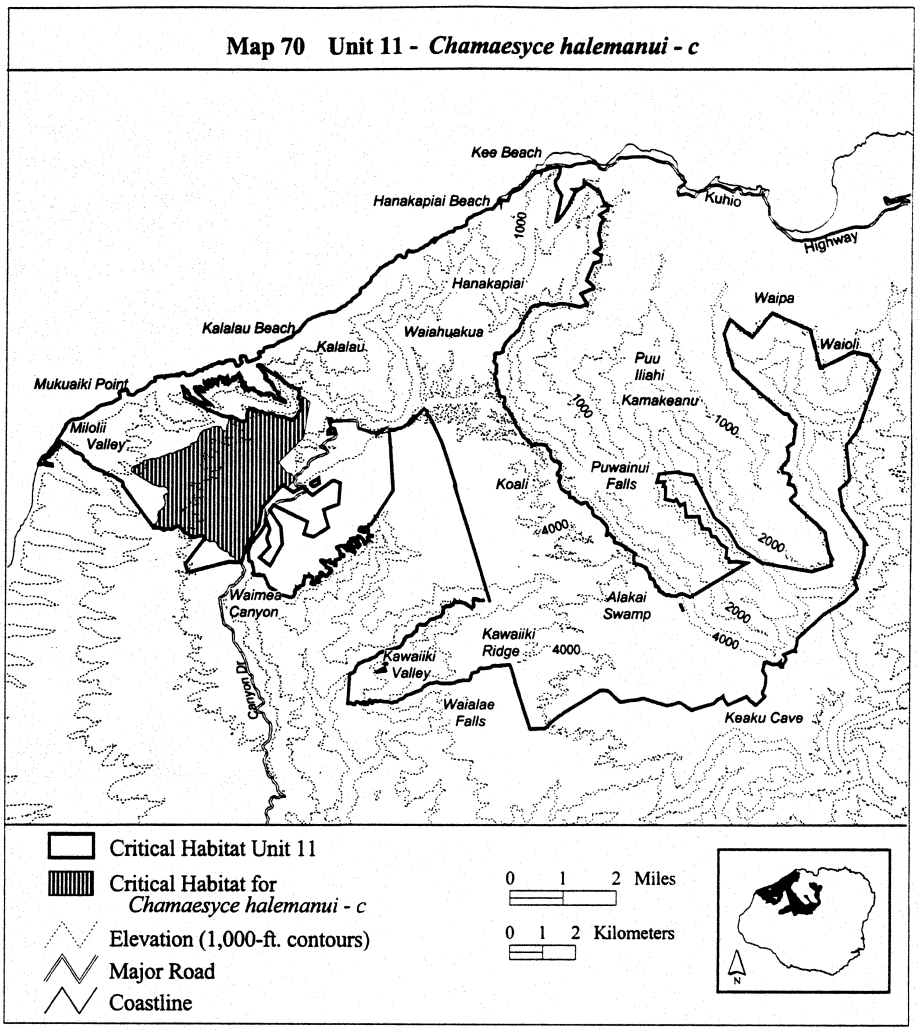
(B) Map 69 follows:



(cxxxix) Kauai 11—*Chamaesyce halemanui*—c (1,283 ha; 3,171 ac)

(A) [Reserved]

(B) Map 70 follows:



(cxl) Kauai 11–*Chamaesyce remyi* var. *kauaiensis*–d

(A) This is a unit of the Lowland Wet ecosystem and consists of 2,618 ac (1,060 ha). This unit is also critical habitat for Kauai 11–*Chamaesyce remyi* var. *remyi*–h, Kauai 11–*Charpentiera densiflora*–d, Kauai 11–*Cyanea eleeleensis*–b, Kauai 11–*Cyanea kolekoleensis*–b, Kauai 11–*Cyanea kuhihewa*–b, Kauai 11–*Cyrtandra oenobarba*–d, Kauai 11–*Dubautia imbricata* ssp. *imbricata*–b, Kauai 11–*Labordia helleri*–f, Kauai 11–*Melicope paniculata*–b, Kauai 11–*Melicope puberula*–d, Kauai 11–*Phyllostegia renovans*–d, Kauai 11–*Platydesma rostrata*–h, Kauai 11–*Stenogyne kealiae*–c, Kauai 11–*Tetraplasandra bisattenuata*–d, and Kauai 11–*Tetraplasandra flynii*–d (see paragraphs (a)(1)(cxliv), (a)(1)(cxlviii), (a)(1)(cli), (a)(1)(clii), (a)(1)(cliii), (a)(1)(clxiii), (a)(1)(clxxviii), (a)(1)(ccxxiv), (a)(1)(ccxlviii), (a)(1)(ccl), (a)(1)(cclxvii), (a)(1)(cclxxix),

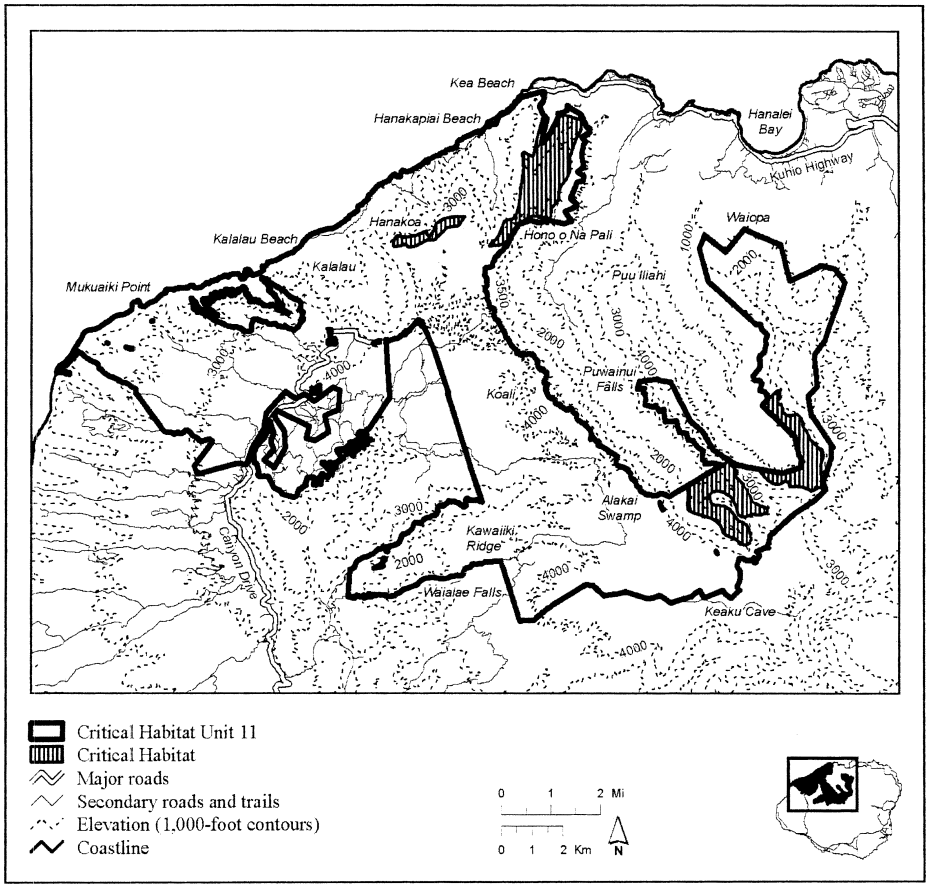
(a)(1)(cccxxx), (a)(1)(cccxxxiii), and (a)(1)(cccxxxv) respectively, of this section).

(B) Map 70a follows:

Map 70a

Kauai 11–*Chamaesyce remyi* var. *kauaiensis*–d, Kauai 11–*Chamaesyce remyi* var. *remyi*–h, Kauai 11–*Charpentiera densiflora*–d, Kauai 11–*Cyanea eleeleensis*–b, Kauai 11–*Cyanea kolekoleensis*–b, Kauai 11–*Cyanea kuhihewa*–b, Kauai 11–*Cyrtandra oenobarba*–d, Kauai 11–*Dubautia imbricata* ssp. *imbricata*–b, Kauai 11–*Labordia helleri*–f, Kauai 11–*Melicope paniculata*–b, Kauai 11–*Melicope puberula*–d, Kauai 11–*Phyllostegia renovans*–d, Kauai 11–*Platydesma rostrata*–h, Kauai 11–*Stenogyne kealiae*–c, Kauai 11–*Tetraplasandra bisattenuata*–d, Kauai 11–*Tetraplasandra flynnii*–d

Lowland Wet



(cxli) Kauai 11–*Chamaesyce remyi* var. *kauaiensis*–e

(A) This is a unit of the Wet Cliff ecosystem and consists of 190 ac; 77 ha. This unit is also critical habitat for

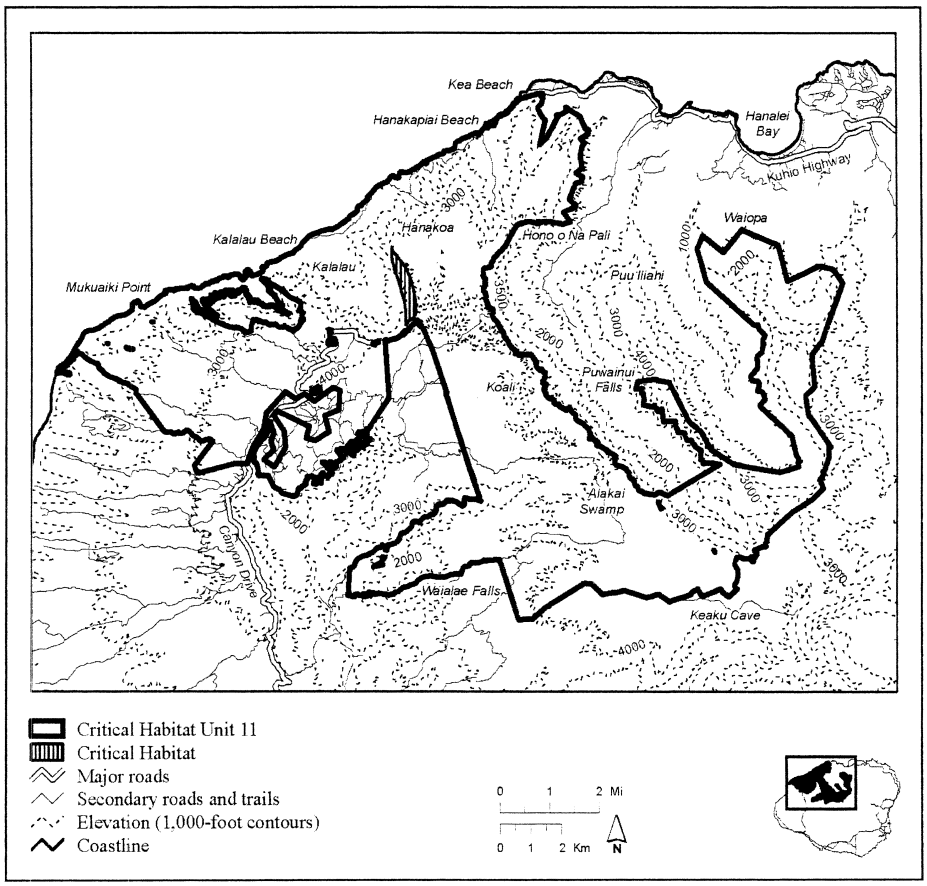
Kauai 11–*Chamaesyce remyi* var. *remyi*–i, Kauai 11–*Cyanea dolichopoda*–c, Kauai 11–*Cyrtandra oenobarba*–e, Kauai 11–*Cyrtandra paliku*–c, Kauai 11–*Dubautia plantaginea* ssp. *magnifolia*–c, Kauai 11–*Lysimachia iniki*–c, Kauai 11–*Lysimachia pendens*–c, Kauai 11– *Lysimachia venosa*–c, and Kauai 11–*Platydesma rostrata*–i (see paragraphs (a)(1)(cxlv), (a)(1)(cl), (a)(1)(clxiv), (a)(1)(clxv), (a)(1)(clxxxiv), (a)(1)(ccxxxvi), (a)(1)(ccxxxvii), (a)(1)(ccxxxix), and (a)(1)(cclxxx), respectively, of this section).

(B) Map 70b follows:

Map 70b

Kauai 11–*Chamaesyce remyi* var. *kauaiensis*–e, Kauai 11–*Chamaesyce remyi* var. *remyi*–i, Kauai 11–*Cyanea dolichopoda*–c, Kauai 11–*Cyrtandra oenobarba*–e, Kauai 11–*Cyrtandra paliku*–c, Kauai 11–*Dubautia plantaginea* ssp. *magnifolia*–c, Kauai 11–*Lysimachia iniki*–c, Kauai 11–*Lysimachia pendens*–c, Kauai 11–*Lysimachia venosa*–c, Kauai 11–*Platydesma rostrata*–i

Wet Cliff



(cxlii) Kauai 11–*Chamaesyce remyi* var. *remyi*–f

(A) [Reserved]

(B) See paragraph (a)(1)(cxxx)(B) of this section for the map of this unit.

(cxliii) Kauai 11–*Chamaesyce remyi* var. *remyi*–g

(A) [Reserved]

(B) See paragraph (a)(1)(cxxxiii)(B) of this section for the map of this unit.

(cxliv) Kauai 11–*Chamaesyce remyi* var. *remyi*–h

(A) [Reserved]

(B) See paragraph (a)(1)(cxl)(B) of this section for the map of this unit.

(cxlv) Kauai 11–*Chamaesyce remyi* var. *remyi*–i

(A) [Reserved]

(B) See paragraph (a)(1)(cxli)(B) of this section for the map of this unit.

(cxlvi) Kauai 11–*Chamaesyce remyi* var. *remyi*–j

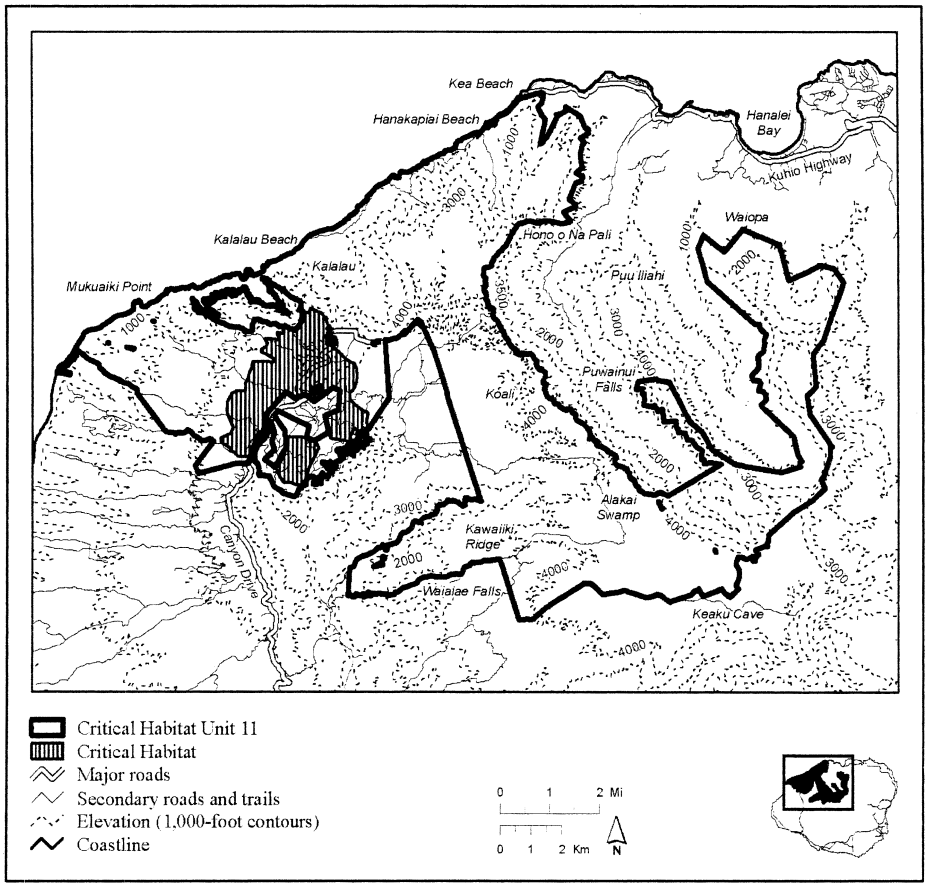
(A) This is a unit of the Montane Mesic ecosystem and consists of 2,790 ac (1,129 ha). This unit is also critical habitat for Kauai 11–*Diellia mannii*–a, Kauai 11–*Labordia helleri*–g, Kauai 11–*Myrsine knudsenii*–a, Kauai 11–*Myrsine mezii*–c, Kauai 11–*Platydesma rostrata*–j, Kauai 11–*Psychotria grandiflora*–c, Kauai 11–*Stenogyne kealiae*–d, and Kauai 11–*Tetraplasandra flynnii*–e (see paragraphs (a)(1)(clxxii), (a)(1)(ccxxv), (a)(1)(ccliii), (a)(1)(cclix), (a)(1)(cclxxxi), (a)(1)(ccxci), (a)(1)(ccxxxi), and (a)(1)(cccxxxvi), respectively, of this section).

(B) Map 70c follows:

Map 70c

Kauai 11–*Chamaesyce remyi* var. *remyi*–j, Kauai 11–*Diellia mannii*–a, Kauai 11–*Labordia helleri*–g, Kauai 11–*Myrsine knudsenii*–a, Kauai 11–*Myrsine mezii*–c, Kauai 11–*Platydesma rostrata*–j, Kauai 11–*Psychotria grandiflora*–c, Kauai 11–*Stenogyne kealiae*–d, Kauai 11–*Tetraplasandra flynnii*–e

Montane Mesic



(cxlvii) Kauai 11–*Charpentiera densiflora*–c

(A) [Reserved]

(B) See paragraph (a)(1)(cxxxiii)(B) of this section for the map of this unit.

(cxlviii) Kauai 11–*Charpentiera densiflora*–d

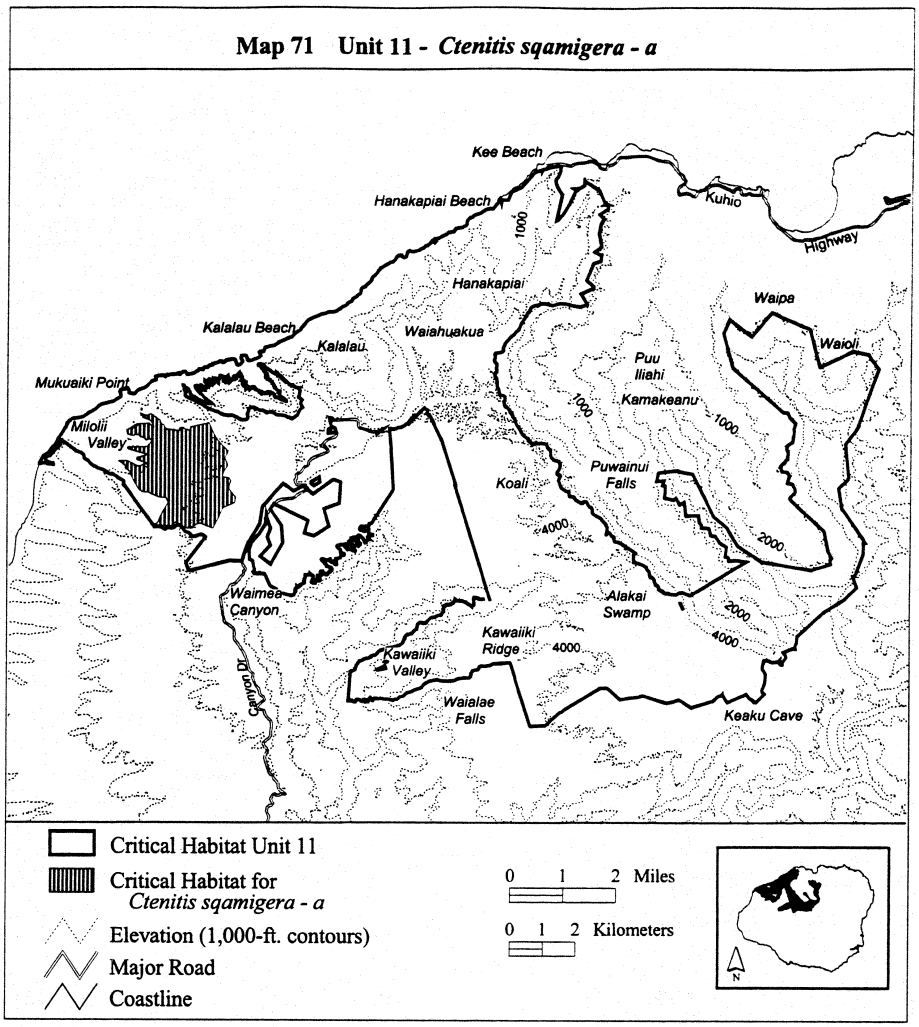
(A) [Reserved]

(B) See paragraph (a)(1)(cxl)(B) of this section for the map of this unit.

(cxlix) Kauai 11—*Ctenitis squamigera*—a (735 ha; 1,817 ac)

(A) [Reserved]

(B) Map 71 follows:



(cl) Kauai 11–*Cyanea dolichopoda*–c

(A) [Reserved]

(B) See paragraph (a)(1)(cxli)(B) of this section for the map of this unit.

(cli) Kauai 11–*Cyanea eleeleensis*–b

(A) [Reserved]

(B) See paragraph (a)(1)(cxl)(B) of this section for the map of this unit.

(clii) Kauai 11–*Cyanea kolekoleensis*–b

(A) [Reserved]

(B) See paragraph (a)(1)(cxl)(B) of this section for the map of this unit.

(cliii) Kauai 11–*Cyanea kuhihewa*–b

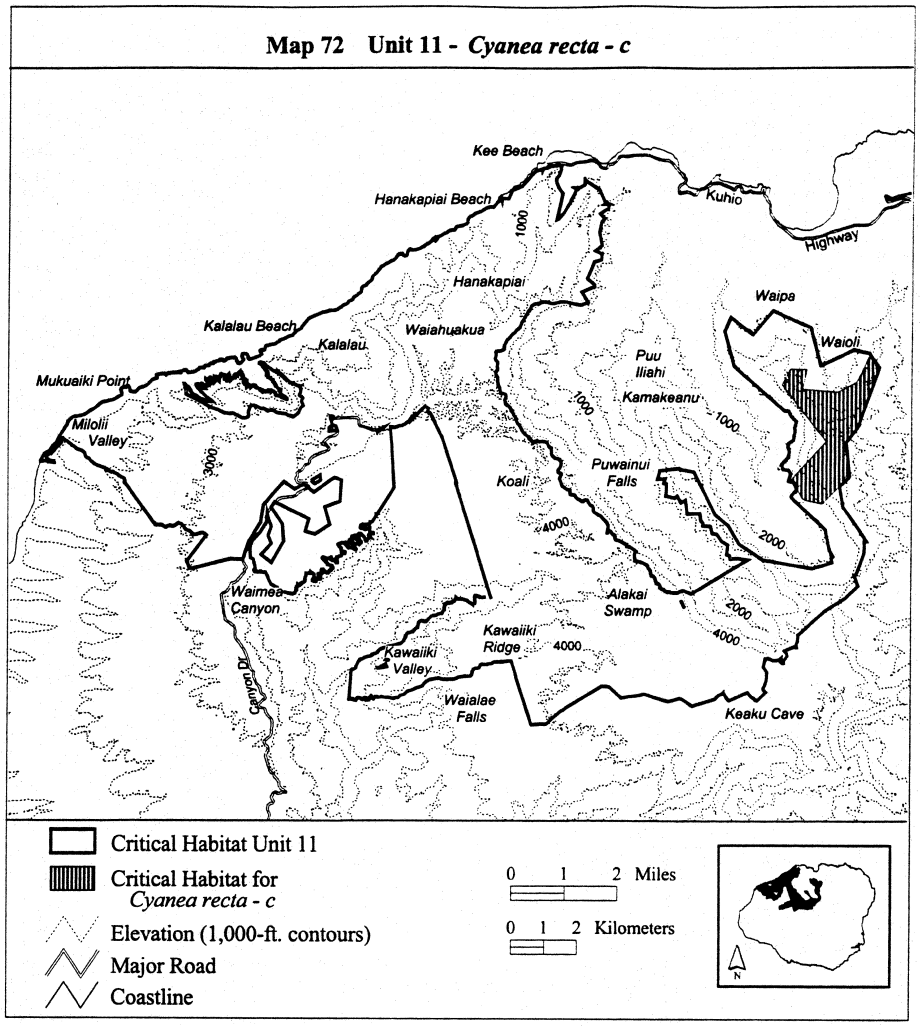
(A) [Reserved]

(B) See paragraph (a)(1)(cxl)(B) of this section for the map of this unit.

(cliv) Kauai 11—*Cyanea recta*—c (553 ha; 1,367 ac)

(A) [Reserved]

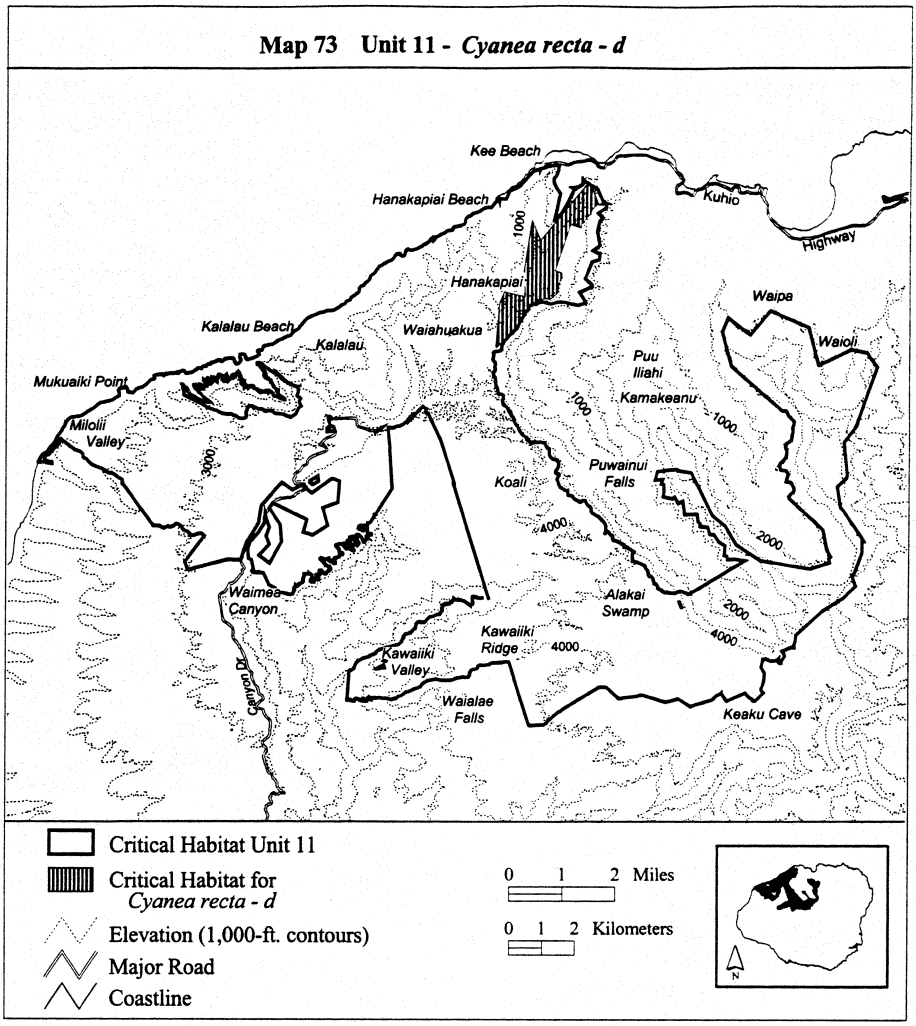
(B) Map 72 follows:



(clv) Kauai 11—*Cyanea recta*—d (397 ha; 981 ac)

(A) [Reserved]

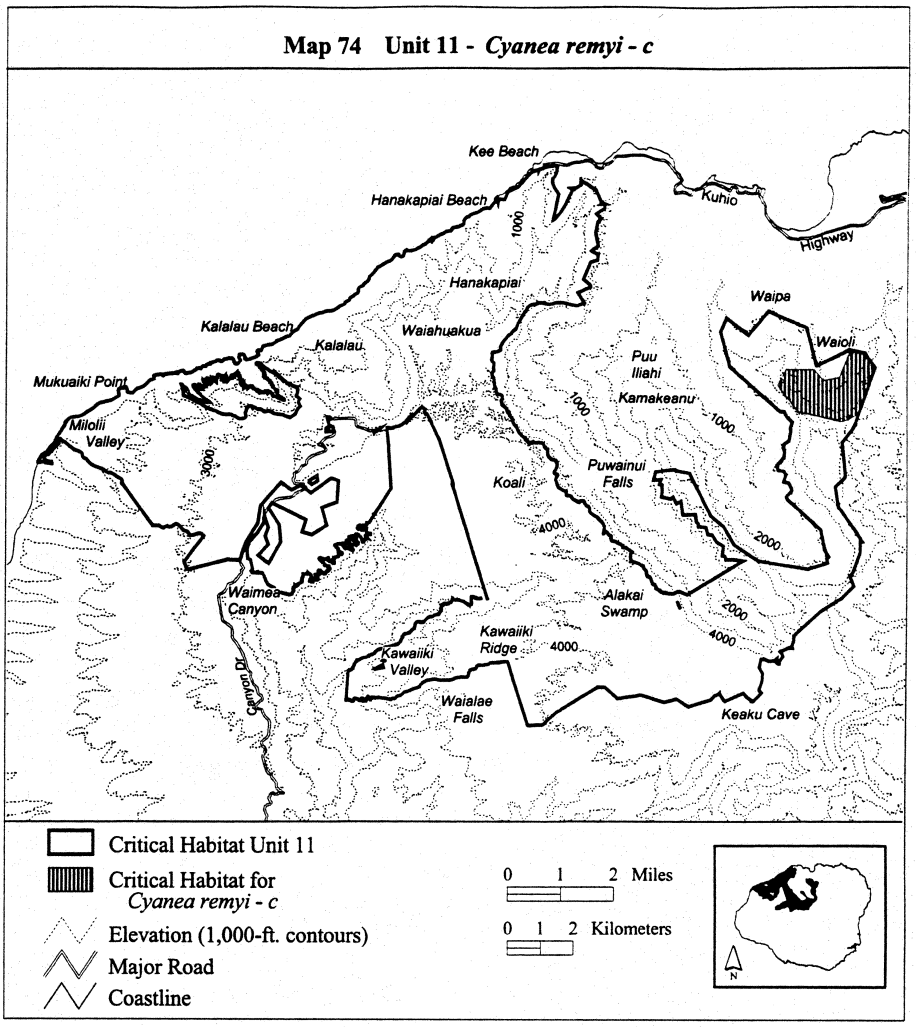
(B) Map 73 follows:



(clvi) Kauai 11—*Cyanea remyi*—c (365 ha; 901 ac)

(A) [Reserved]

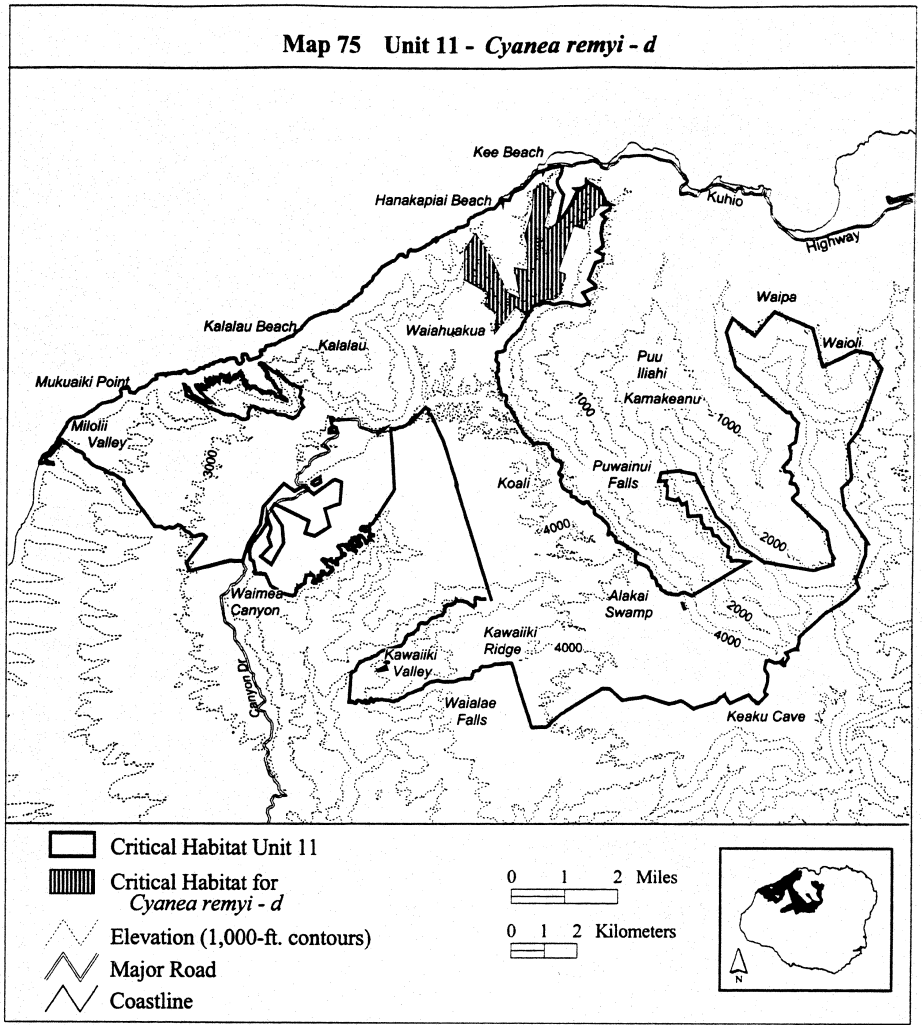
(B) Map 74 follows:



(clvii) Kauai 11—*Cyanea remyi*—d (663 ha; 1,638 ac)

(A) [Reserved]

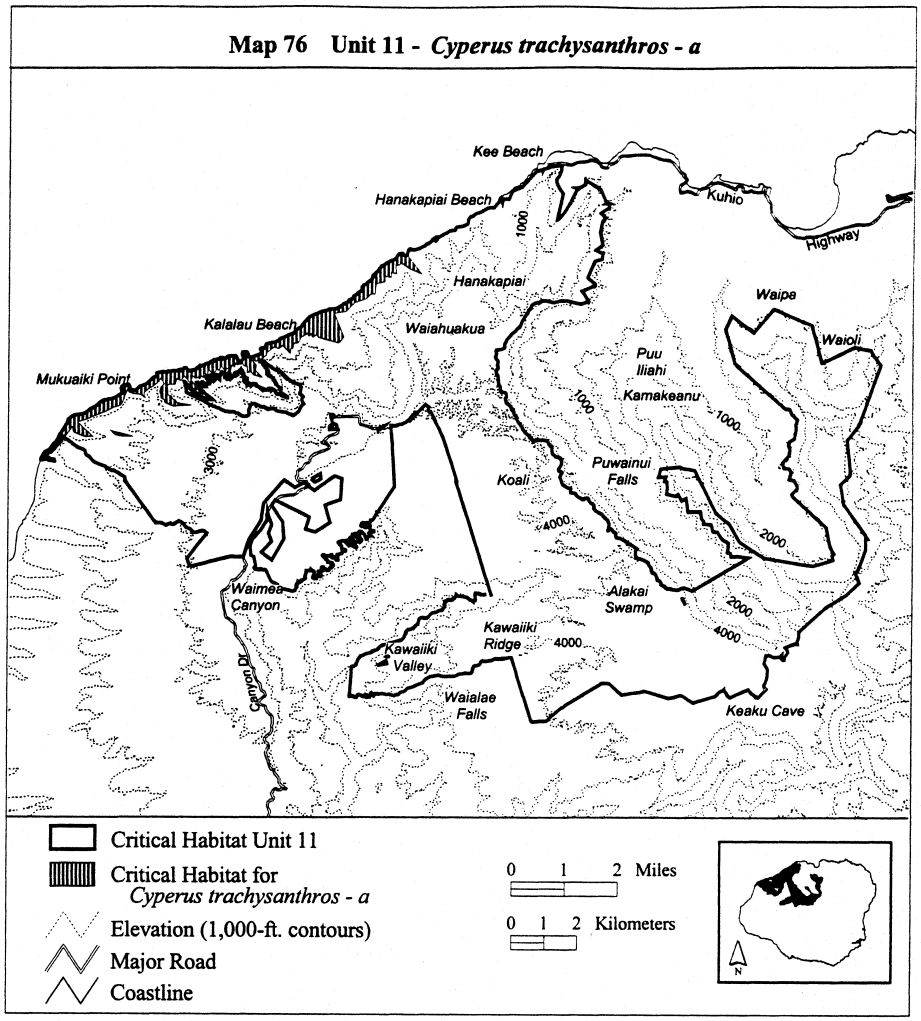
(B) Map 75 follows:



(clviii) Kauai 11—*Cyperus trachysanthos*—a (434 ha; 1,071 ac)

(A) [Reserved]

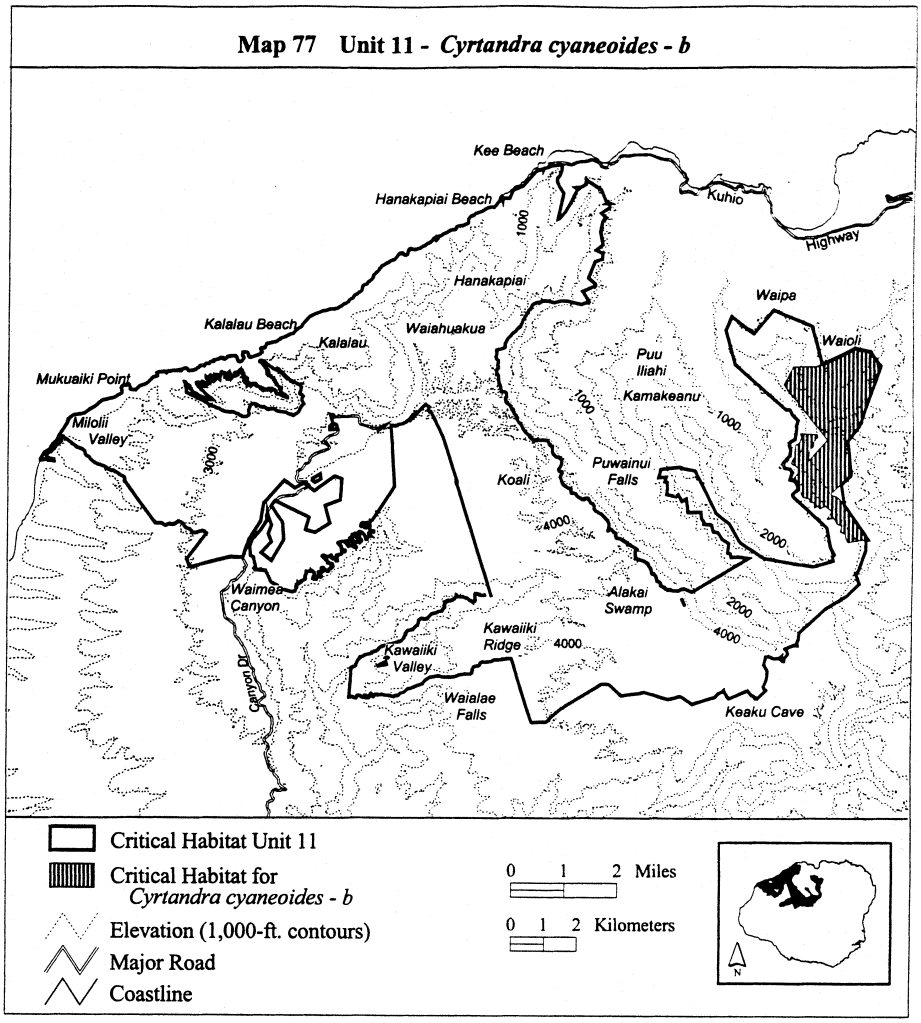
(B) Map 76 follows:



(clix) Kauai 11—*Cyrtandra cyaneoides*—b (848 ha; 2,095 ac)

(A) [Reserved]

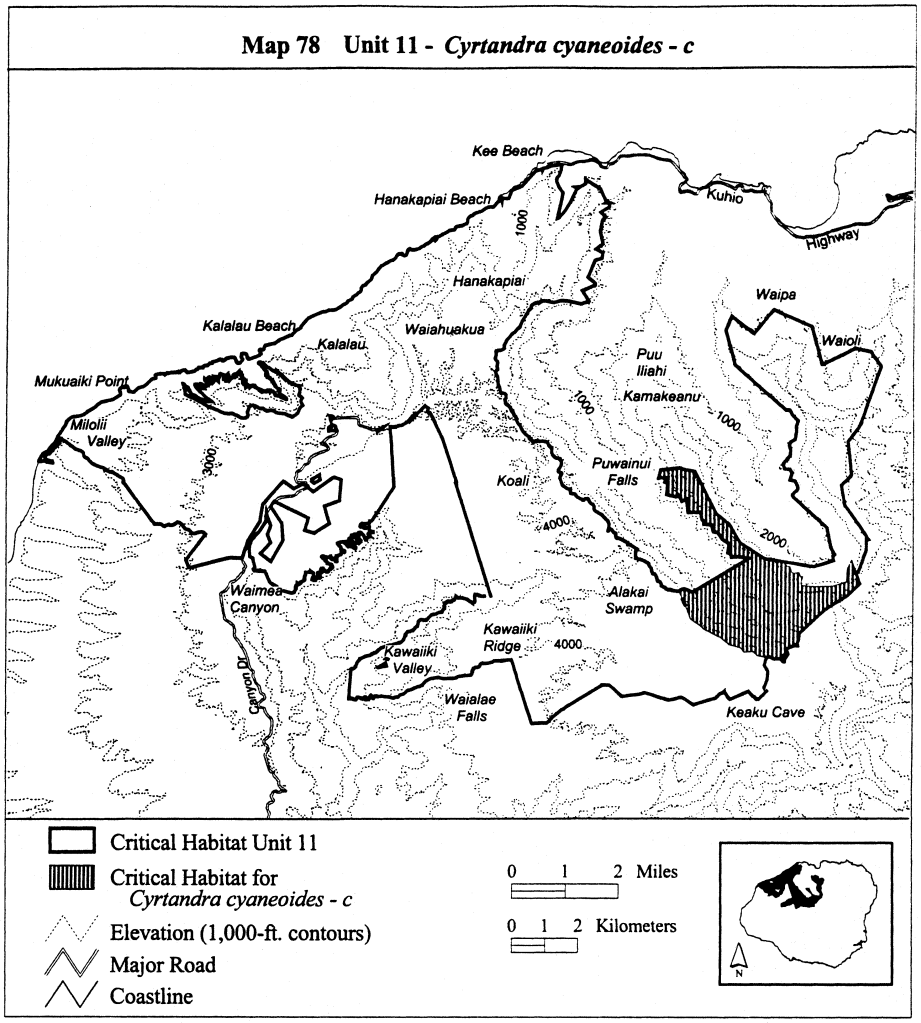
(B) Map 77 follows:



(clx) Kauai 11—*Cyrtandra cyaneoides*—c (1,118 ha; 2,763 ac)

(A) [Reserved]

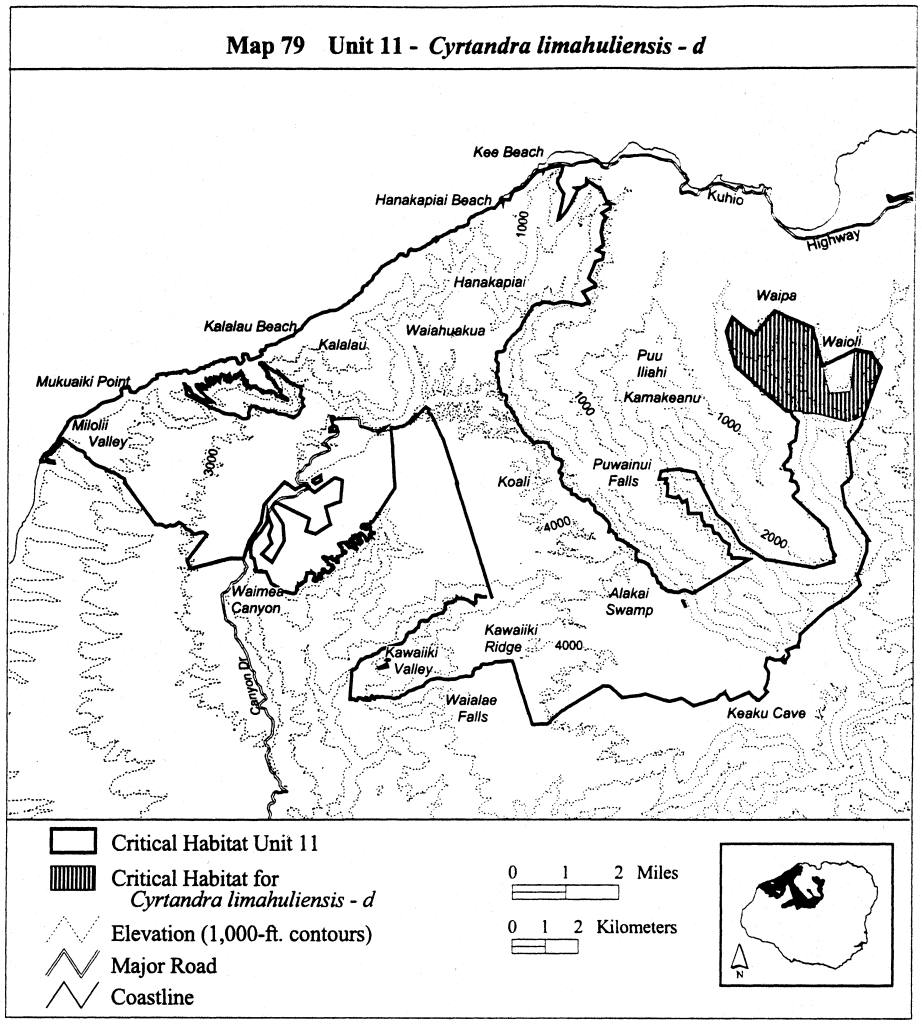
(B) Map 78 follows:



(clxi) Kauai 11—*Cyrtandra limahuliensis*—d (816 ha; 2,016 ac)

(A) [Reserved]

(B) Map 79 follows:

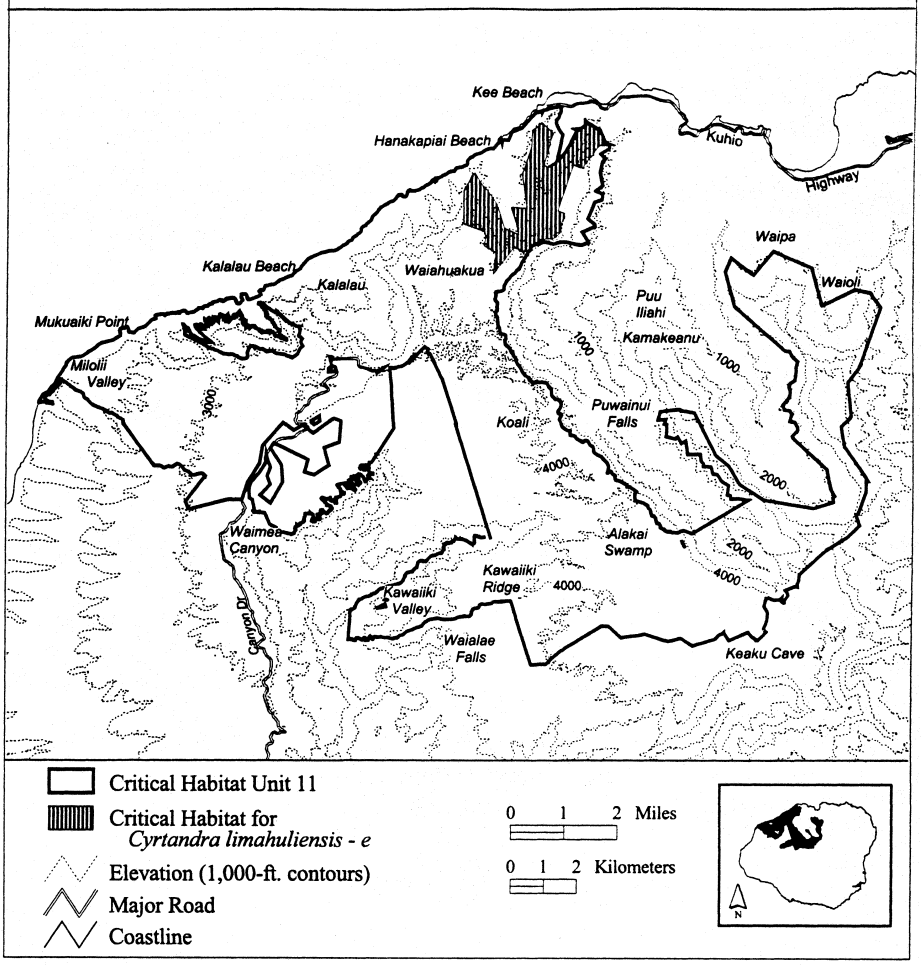


(clxii) Kauai 11—*Cyrtandra limahuliensis*—e (693 ha; 1,712 ac)

(A) [Reserved]

(B) Map 80 follows:

Map 80 Unit 11 - *Cyrtandra limahuliensis - e*



(clxiii) Kauai 11–*Cyrtandra oenobarba*–d

(A) [Reserved]

(B) See paragraph (a)(1)(cxl)(B) of this section for the map of this unit.

(clxiv) Kauai 11–*Cyrtandra oenobarba*–e

(A) [Reserved]

(B) See paragraph (a)(1)(cxli)(B) of this section for the map of this unit.

(clxv) Kauai 11–*Cyrtandra paliku*–c

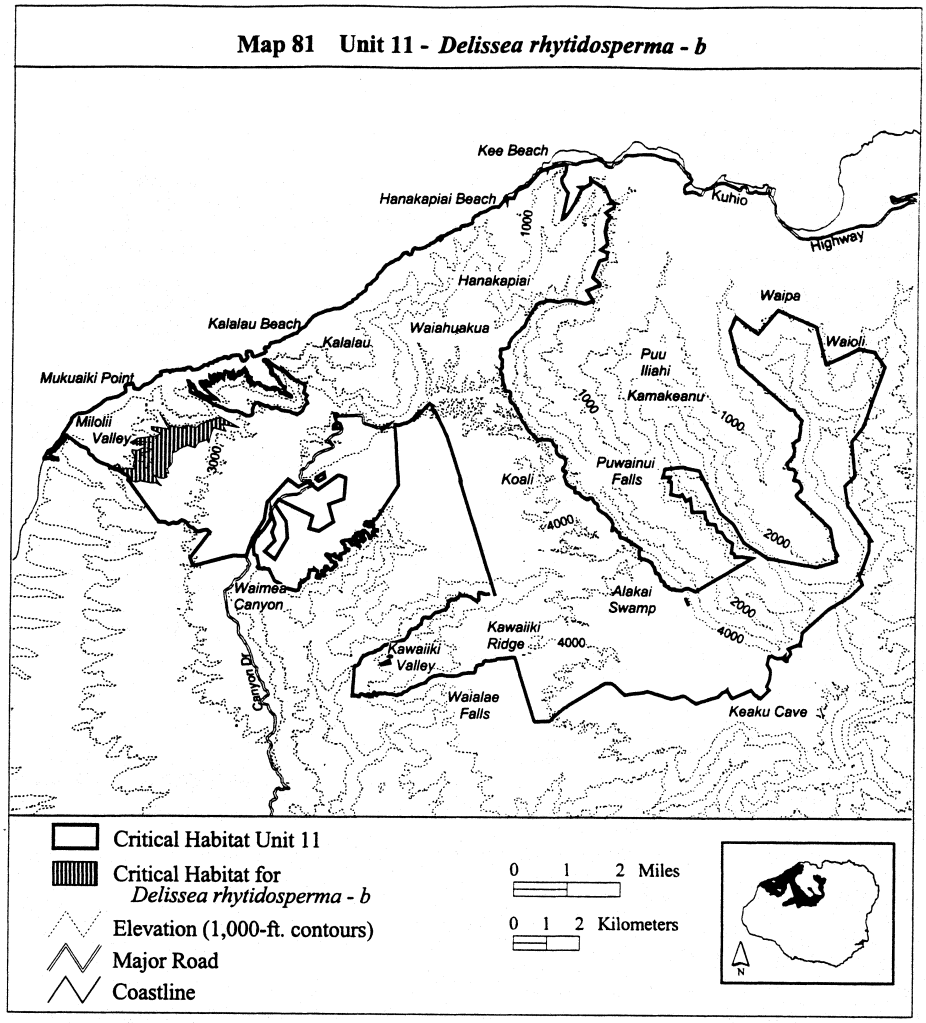
(A) [Reserved]

(B) See paragraph (a)(1)(cxli)(B) of this section for the map of this unit.

(clxvi) Kauai 11—*Delissea rhytidosperma*—b (258 ha; 638 ac)

(A) [Reserved]

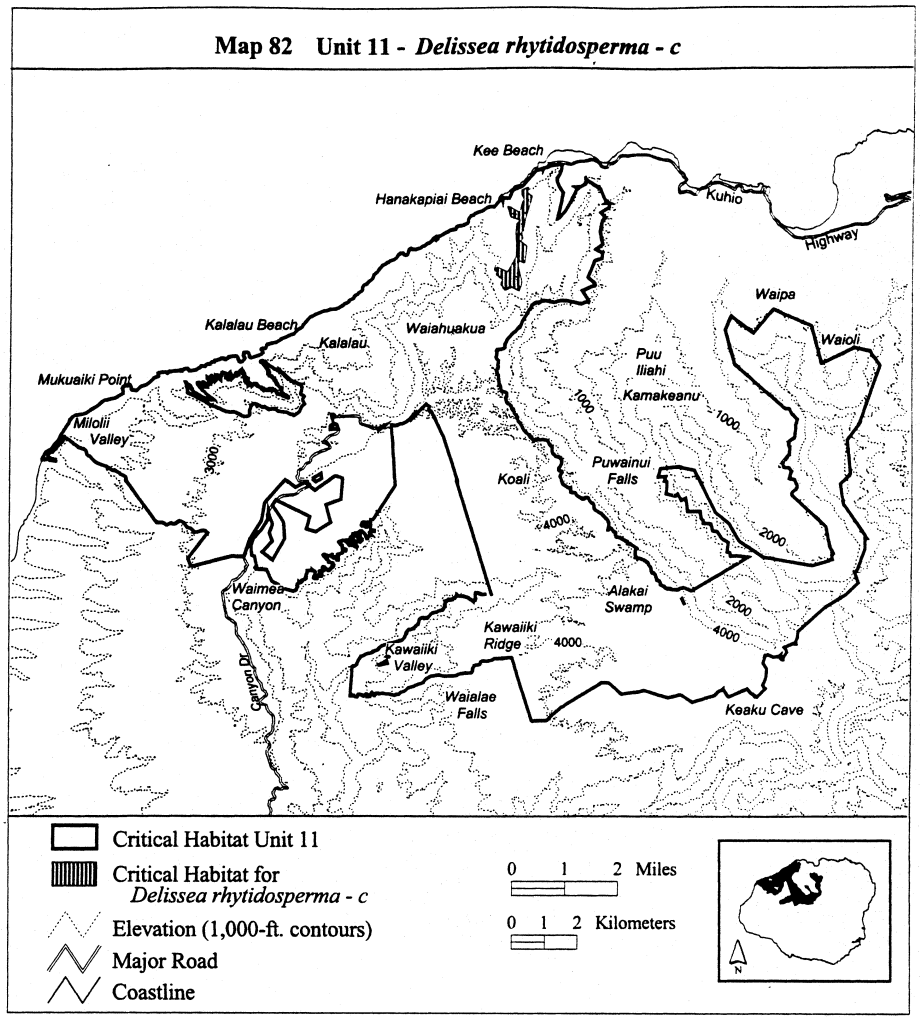
(B) Map 81 follows:



(clxvii) Kauai 11—*Delissea rhytidosperma*—c (103 ha; 254 ac)

(A) [Reserved]

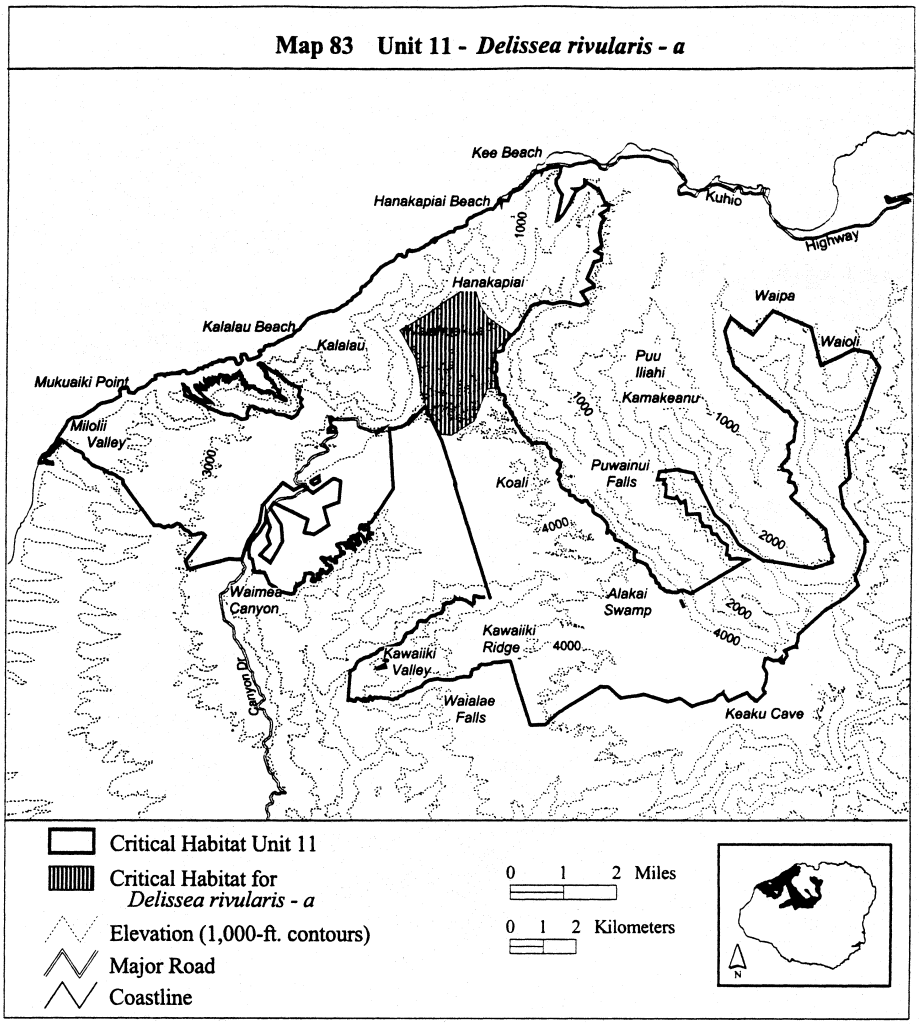
(B) Map 82 follows:



(clxviii) Kauai 11—*Delissea rivularis*—a (850 ha; 2,100 ac)

(A) [Reserved]

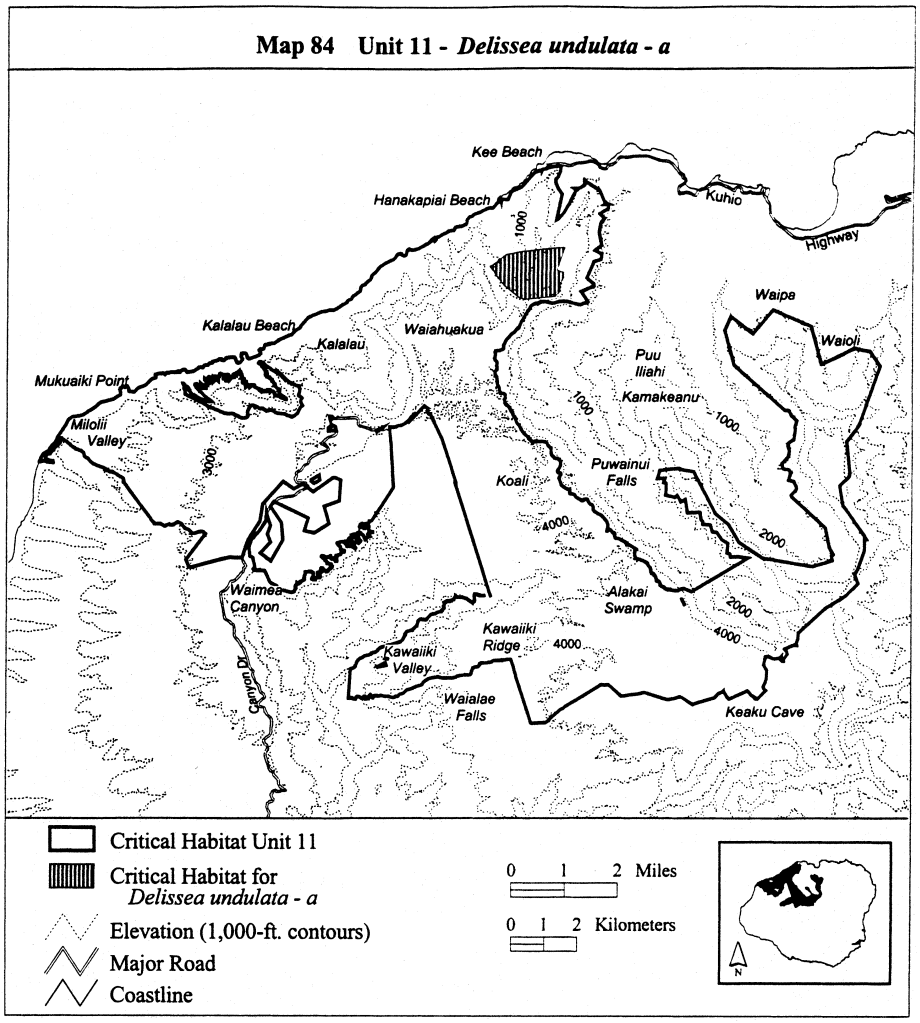
(B) Map 83 follows:



(clxix) Kauai 11—*Delissea undulata*—a (257 ha; 635 ac)

(A) [Reserved]

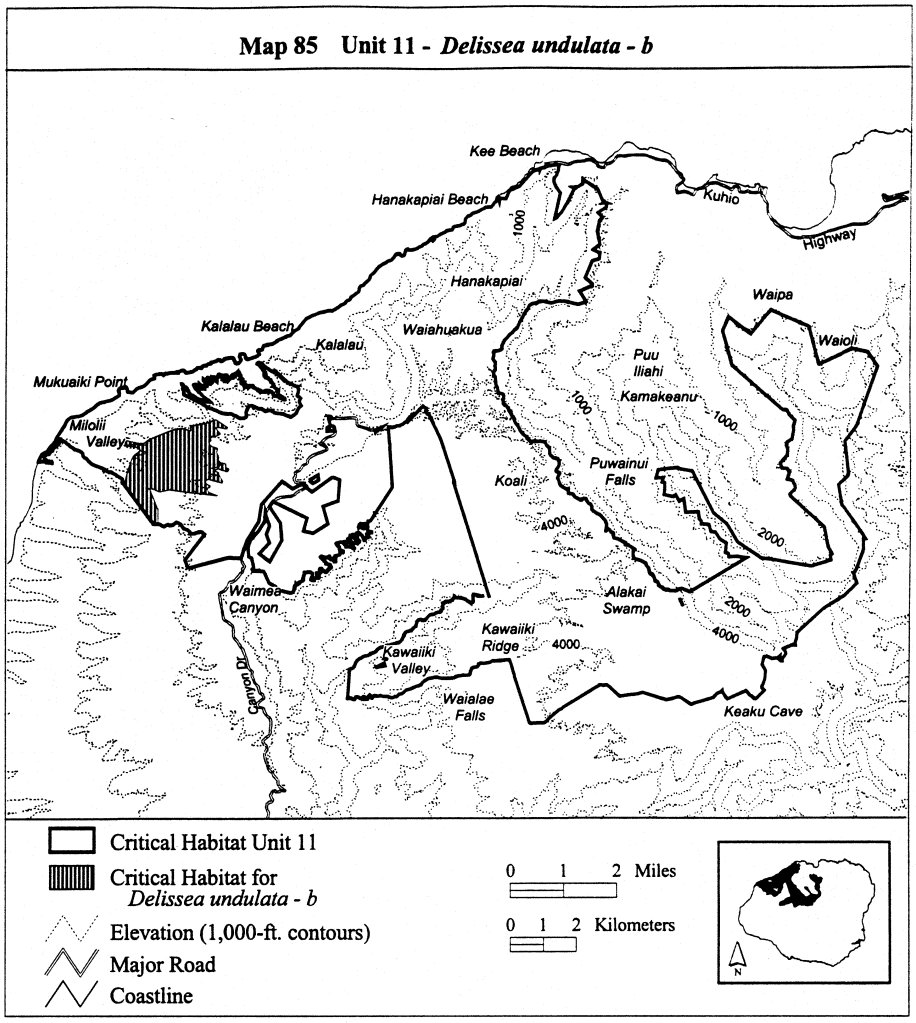
(B) Map 84 follows:



(clxx) Kauai 11—*Delissea undulata*—b (532 ha; 1,314 ac)

(A) [Reserved]

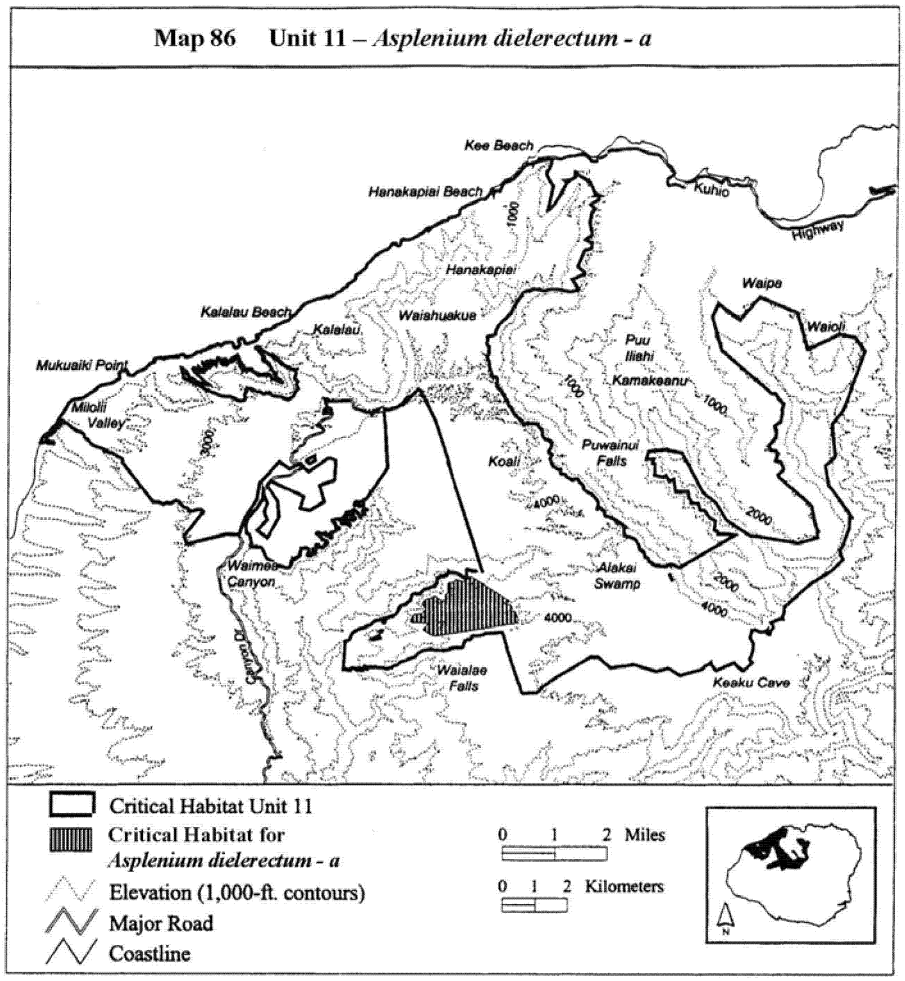
(B) Map 85 follows:



(clxxi) Kauai 11—*Asplenium dielerectum*—a (364 ha; 901 ac)

(A) [Reserved]

(B) Map 86 follows:



(clxxii) Kauai 11–*Diellia mannii*–a

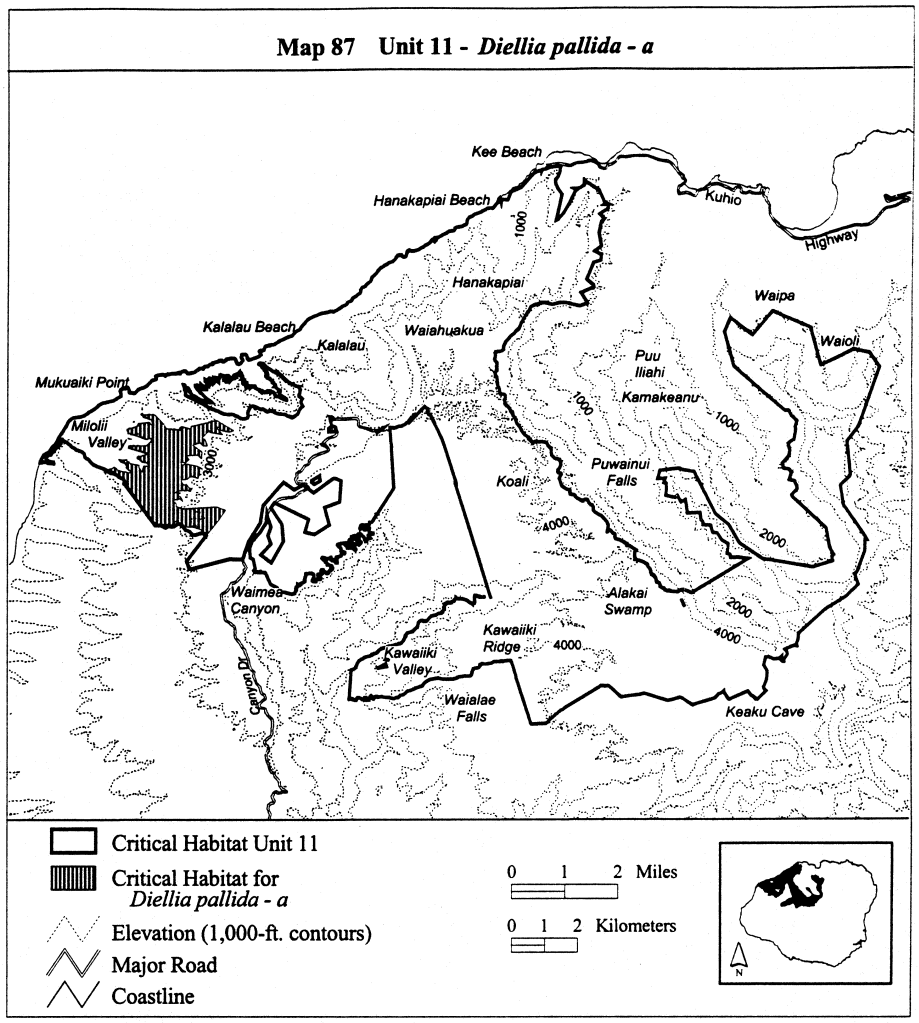
(A) [Reserved]

(B) See paragraph (a)(1)(cxlvi)(B) of this section for the map of this unit.

(clxxiii) Kauai 11—*Diellia pallida*—a (601 ha; 1,485 ac)

(A) [Reserved]

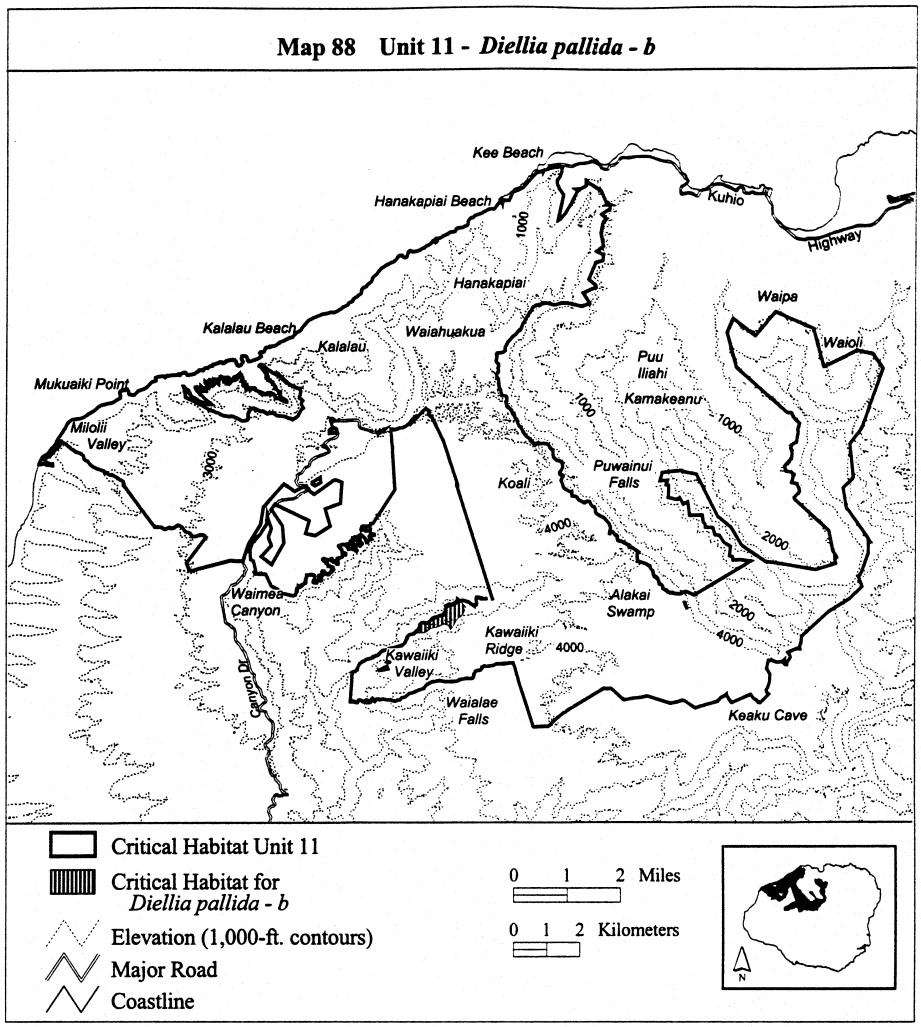
(B) Map 87 follows:



(clxxiv) Kauai 11—*Diellia pallida*—b (55 ha; 136 ac)

(A) [Reserved]

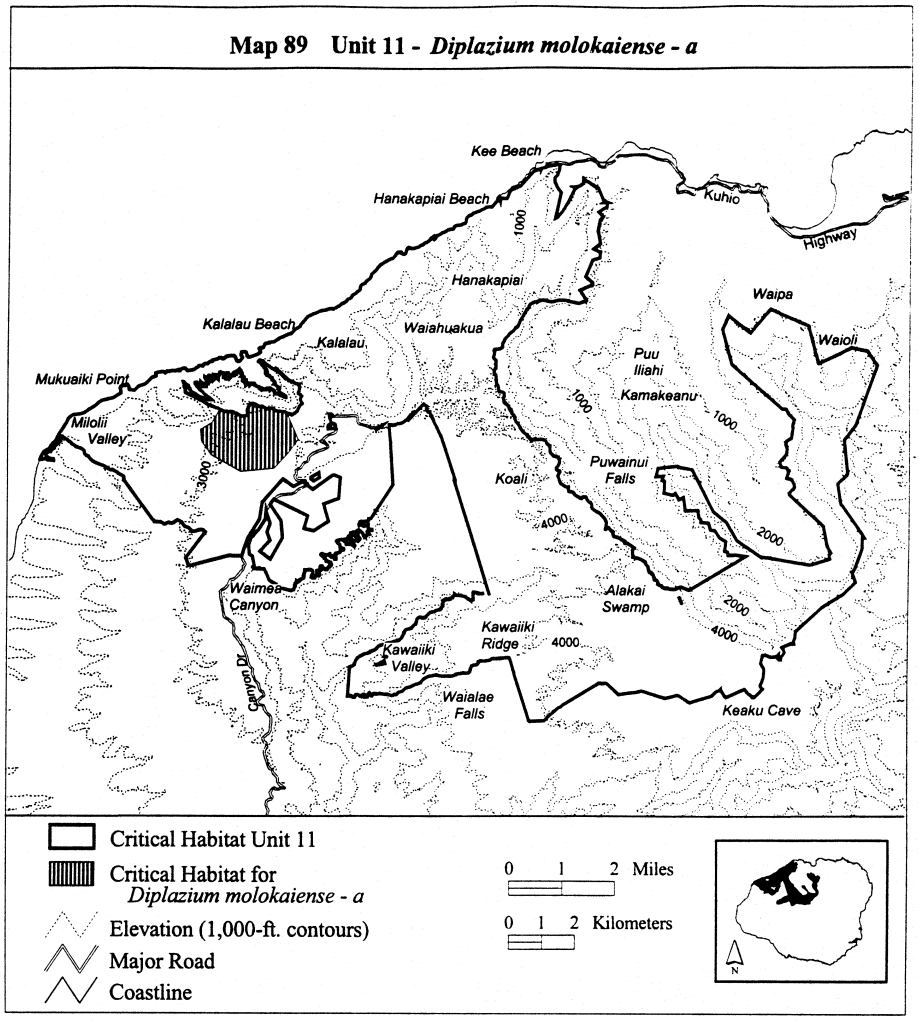
(B) Map 88 follows:



(clxxv) Kauai 11—*Diplazium molokaiense*—a (430 ha; 1,062 ac)

(A) [Reserved]

(B) Map 89 follows:



(clxxvi) Kauai 11–*Doryopteris angelica*–b

(A) [Reserved]

(B) See paragraph (a)(1)(cxxxiii)(B) of this section for the map of this unit.

(clxxvii) Kauai 11–*Dryopteris crinalis* var. *podosorus*–b

(A) [Reserved]

(B) See paragraph (a)(1)(cxxx)(B) of this section for the map of this unit.

(clxxviii) Kauai 11–*Dubautia imbricata* ssp. *imbricata*–b

(A) [Reserved]

(B) See paragraph (a)(1)(cxl)(B) of this section for the map of this unit.

(clxxix) Kauai 11–*Dubautia kalalauensis*–b

(A) [Reserved]

(B) See paragraph (a)(1)(cxxx)(B) of this section for the map of this unit.

(clxxx) Kauai 11–*Dubautia kenwoodii*–b

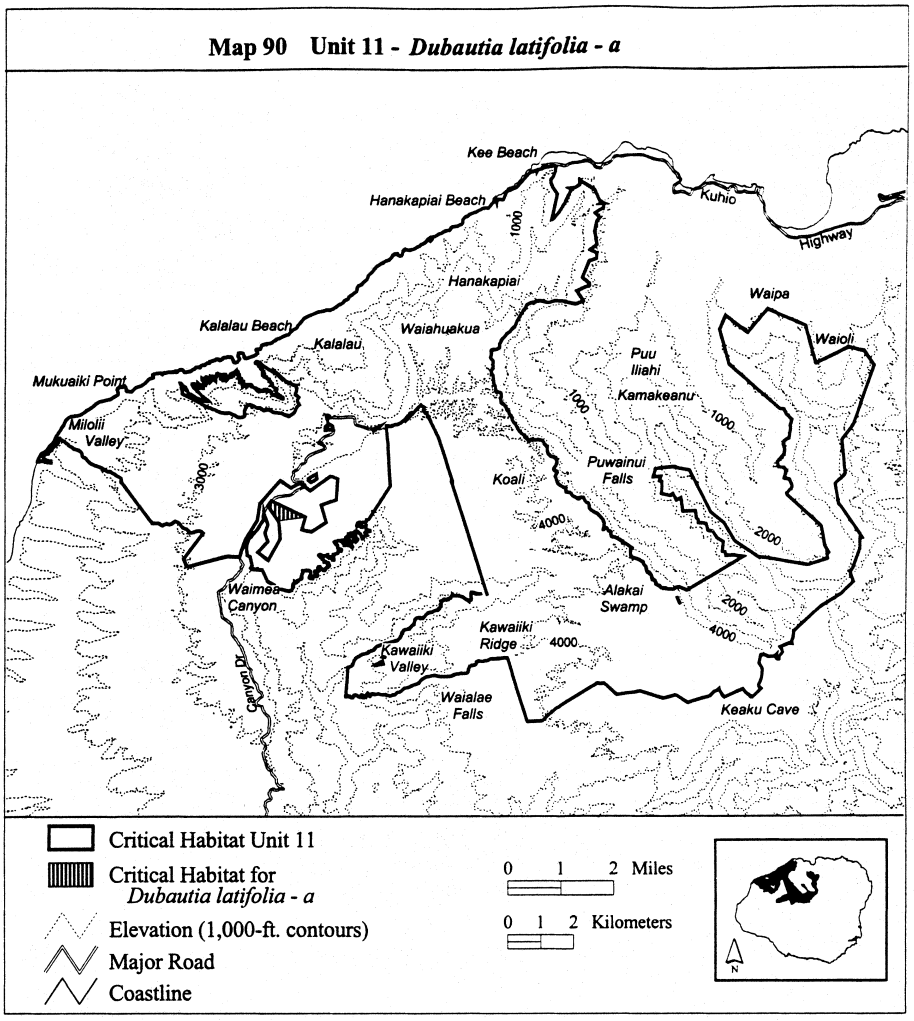
(A) [Reserved]

(B) See paragraph (a)(1)(cxxxiii)(B) of this section for the map of this unit.

(clxxxi) Kauai 11—*Dubautia latifolia*—a (31 ha; 76 ac)

(A) [Reserved]

(B) Map 90 follows:

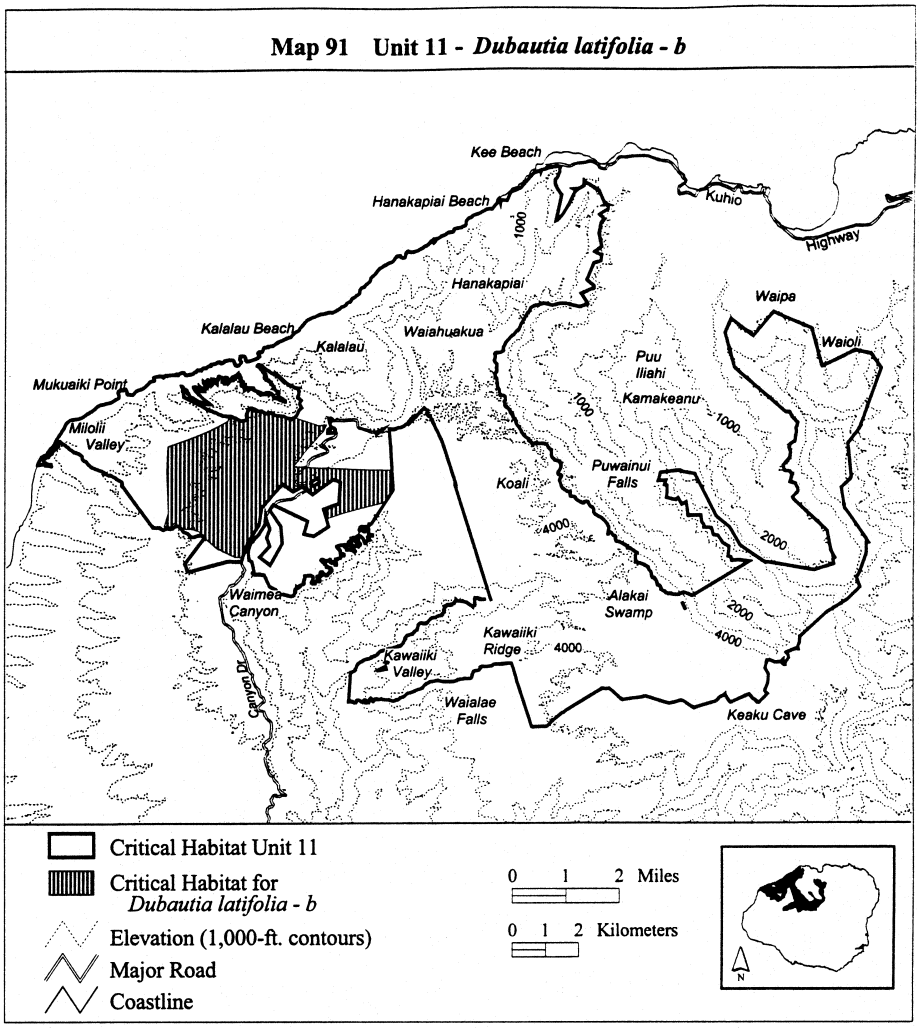


(clxxxii) Kauai 11—*Dubautia latifolia*—b (1,522 ha; 3,761 ac)

(A) [Reserved]

(B) Excluding 1 area bounded by the following 4 points (3 ha, 8 ac): Start at 433109, 2447775; 432932, 2447668; 432827, 2447751; 433094, 2447922; return to starting point.

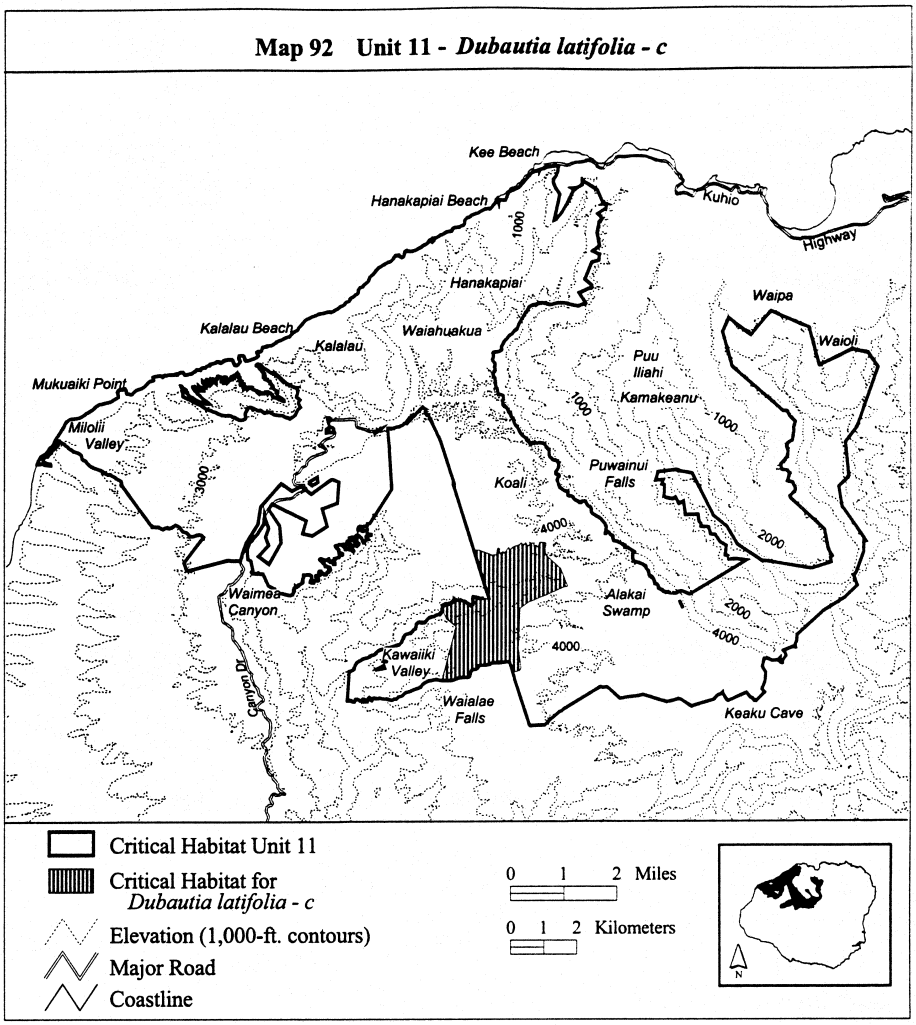
(C) Map 91 follows:



(clxxxiii) Kauai 11—*Dubautia latifolia*—c (809 ha; 1,999 ac)

(A) [Reserved]

(B) Map 92 follows:



(clxxxiv) Kauai 11–*Dubautia plantaginea* ssp. *magnifolia*–c

(A) [Reserved]

(B) See paragraph (a)(1)(cxli)(B) of this section for the map of this unit.

(clxxxv) Kauai 11–*Dubautia waialealae*–b

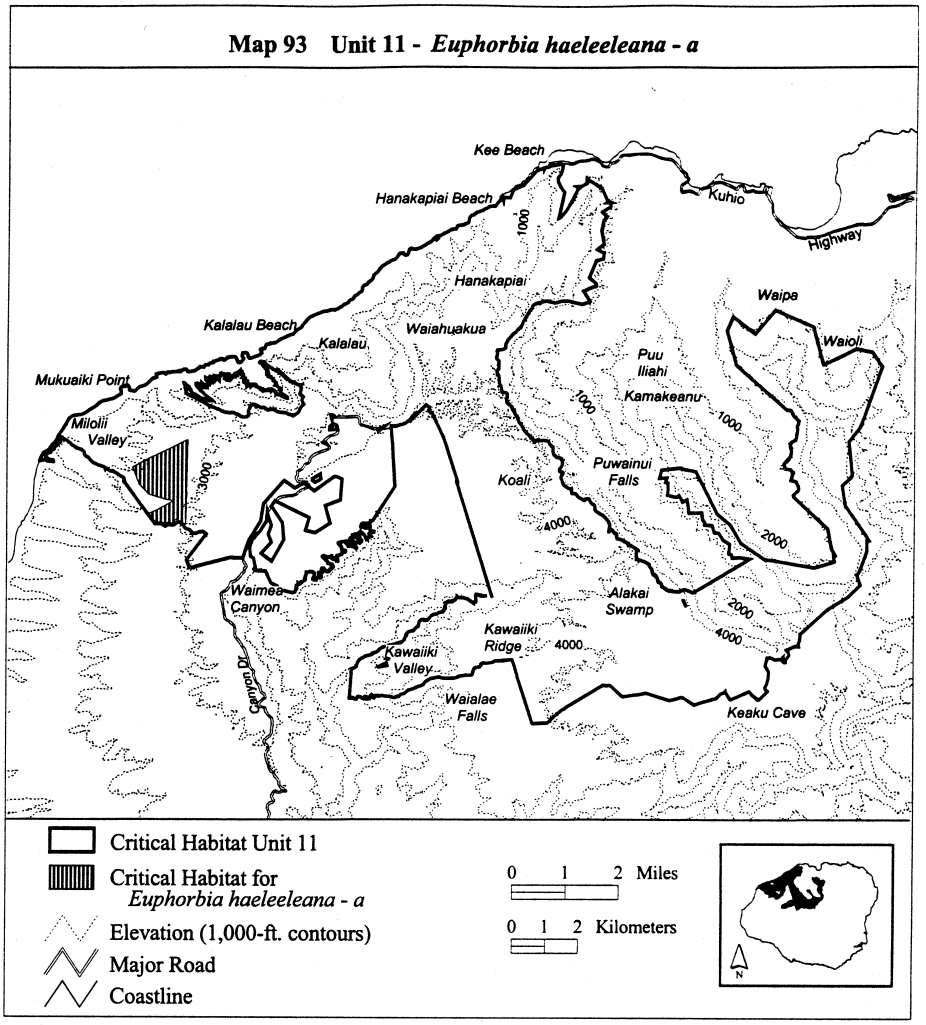
(A) [Reserved]

(B) See paragraph (a)(1)(cxxx)(B) of this section for the map of this unit.

(clxxxvi) Kauai 11—*Euphorbia haeleeleana*—a (263 ha; 649 ac)

(A) [Reserved]

(B) Map 93 follows:

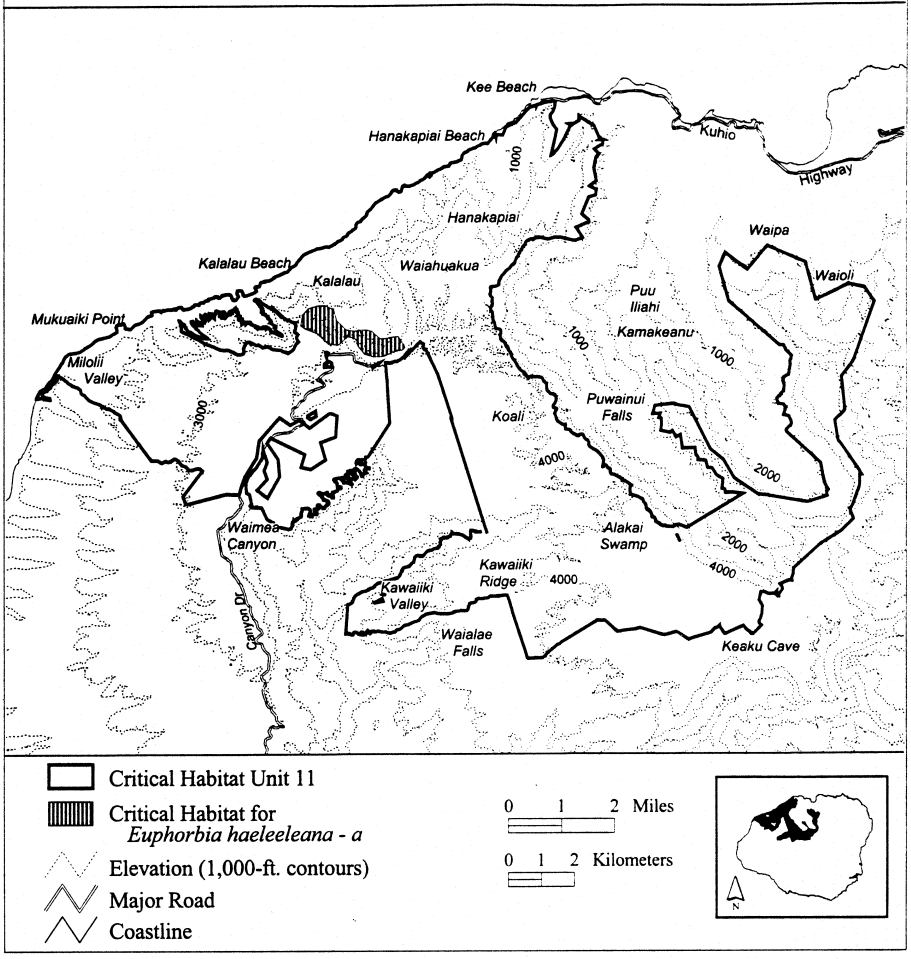


(clxxxvii) Kauai 11—*Euphorbia haeleeleana*—b (192 ha; 476 ac)

(A) [Reserved]

(B) Map 94 follows:

Map 94 Unit 11 - *Euphorbia haeleeleana - b*

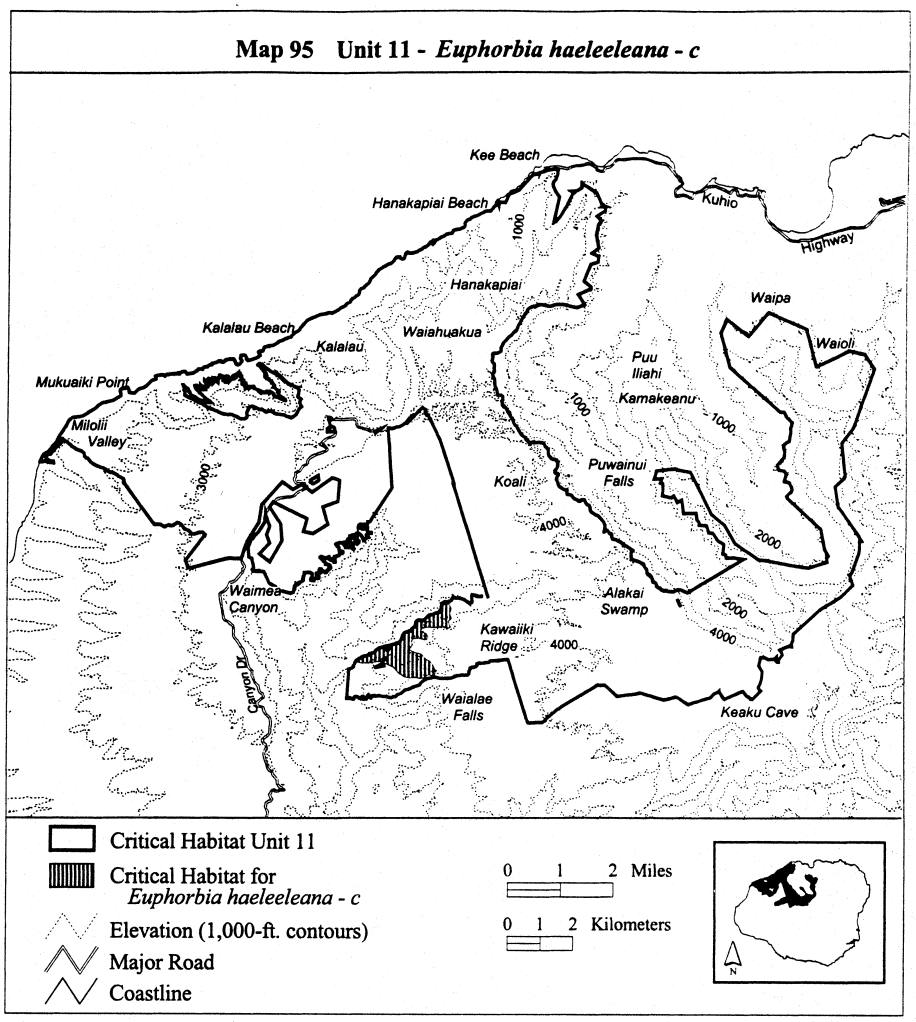


(clxxxviii) Kauai 11—*Euphorbia haeleeleana*—c (204 ha; 505 ac)

(A) [Reserved]

(B) Excluding 1 area bounded by the following 4 points (0 ha, 1 ac): Start at 435151, 2442425; 435215, 2442393; 435195, 2442353; 435128, 2442379; return to starting point.

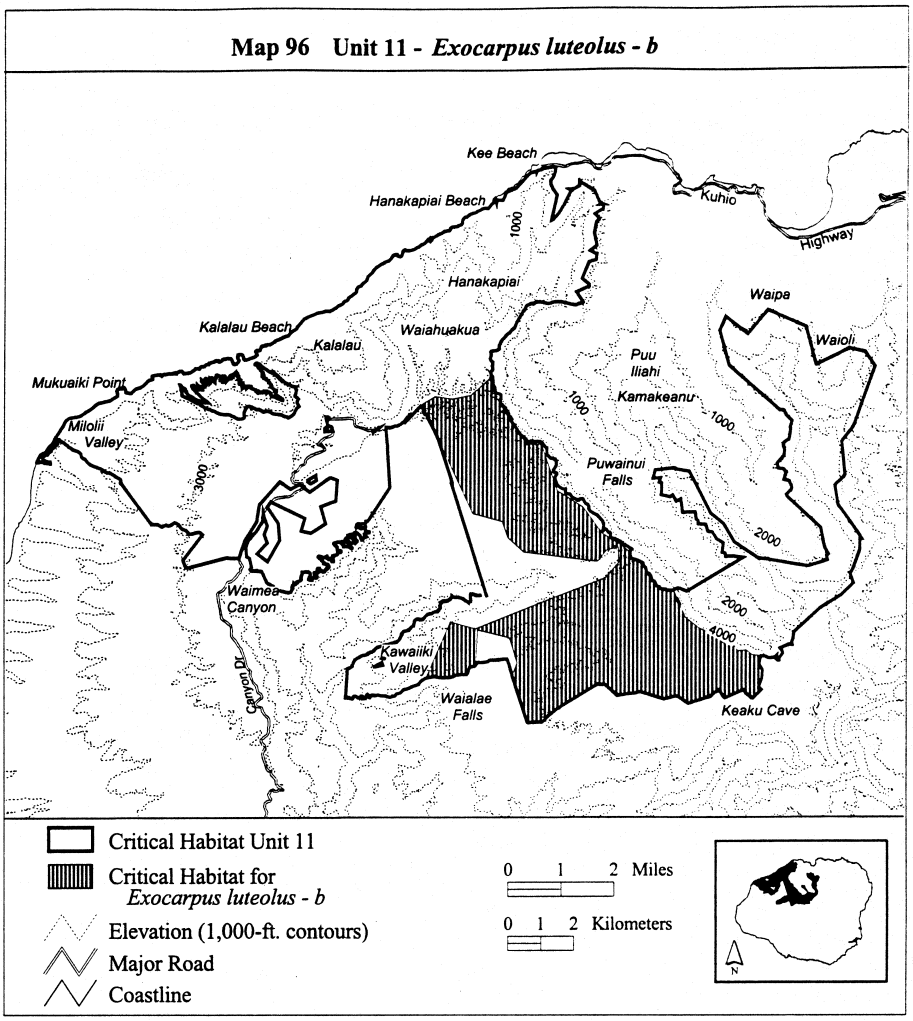
(C) Map 95 follows:



(clxxxix) Kauai 11—*Exocarpos luteolus*—b (3,799 ha; 9,387 ac)

(A) [Reserved]

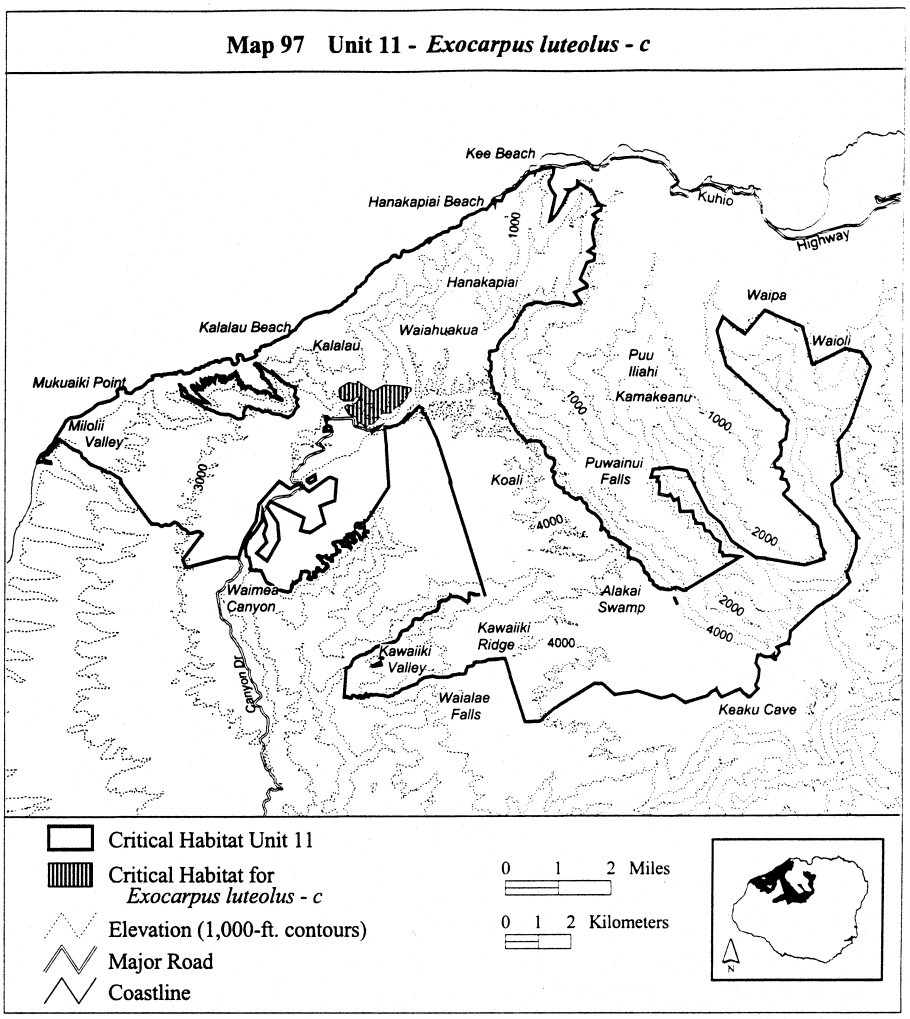
(B) Map 96 follows:



(cxc) Kauai 11—*Exocarpos luteolus*—c (177 ha; 438 ac)

(A) [Reserved]

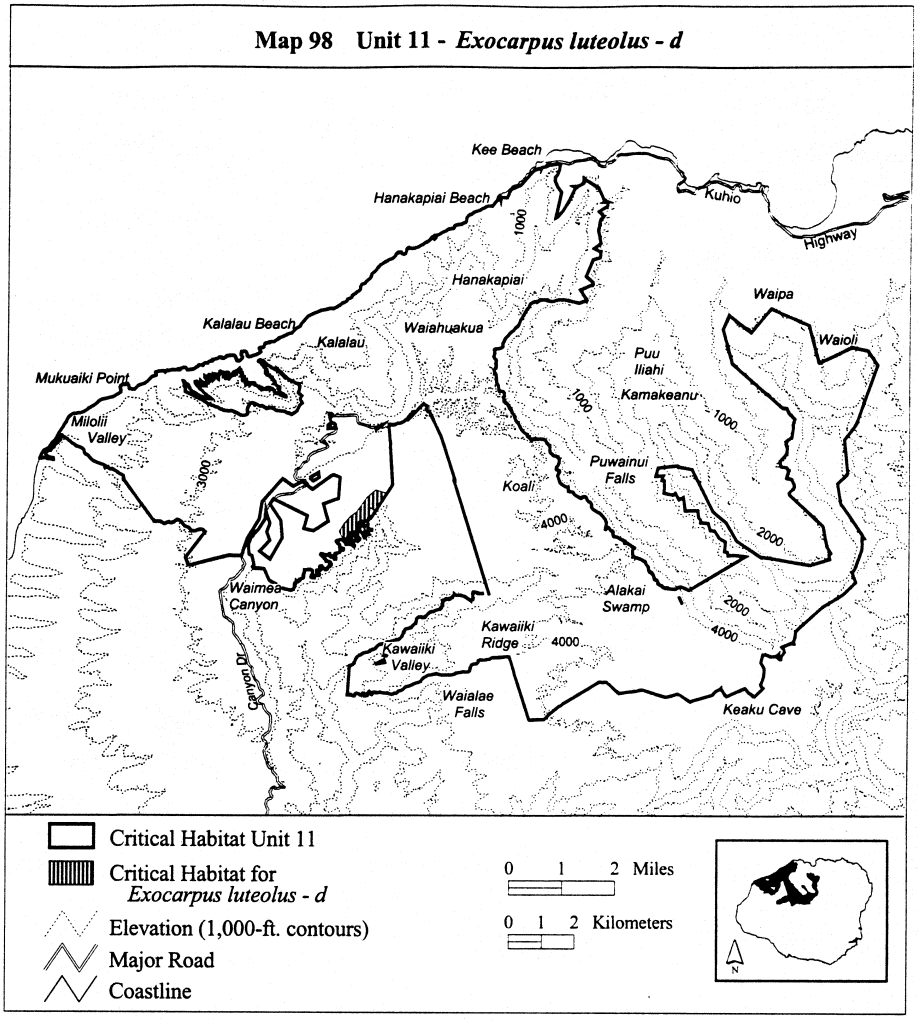
(B) Map 97 follows:



(cxci) Kauai 11—*Exocarpos luteolus*—d (83 ha; 206 ac)

(A) [Reserved]

(B) Map 98 follows:

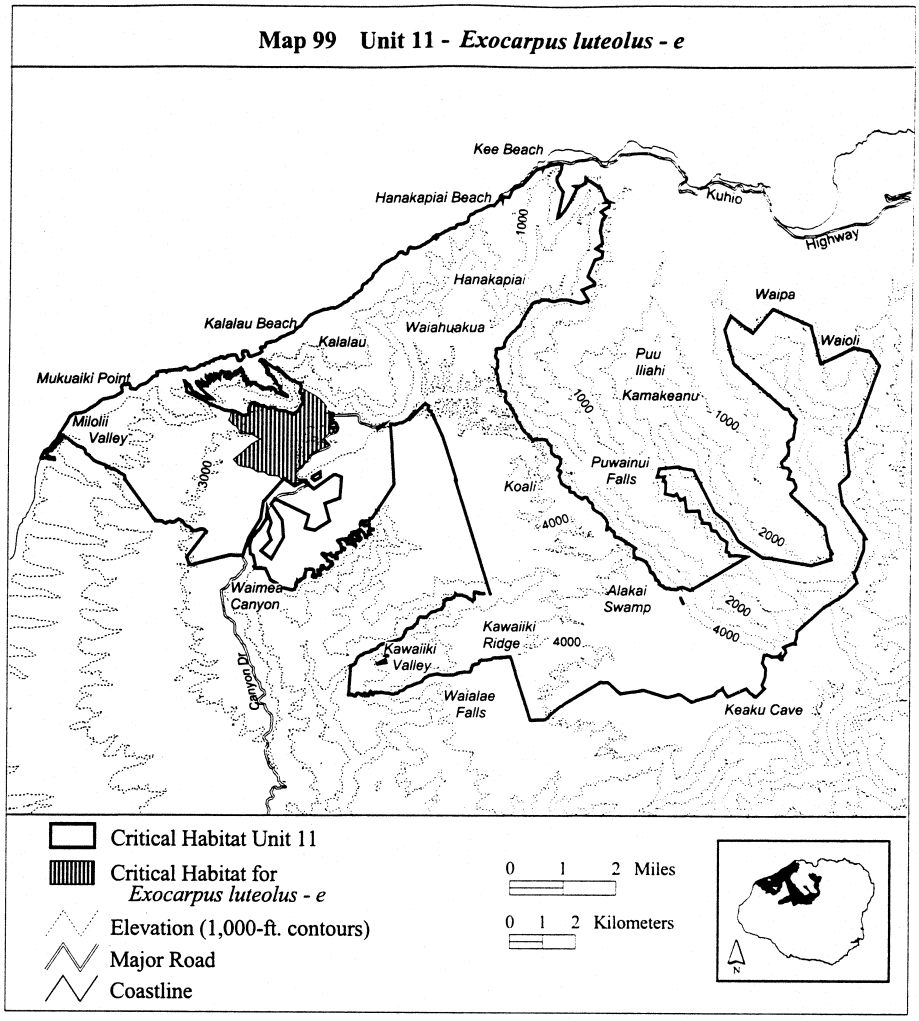


(cxcii) Kauai 11—*Exocarpos luteolus*—e (523 ha; 1,290 ac)

(A) [Reserved]

(B) Excluding 1 area bounded by the following 10 points (3 ha, 8 ac): Start at 433368, 2449292; 433367, 2449352; 433448, 2449426; 433546, 2449412; 433567, 2449398; 433589, 2449323; 433612, 2449262; 433588, 2449244; 433567, 2449260; 433369, 2449255; return to starting point.

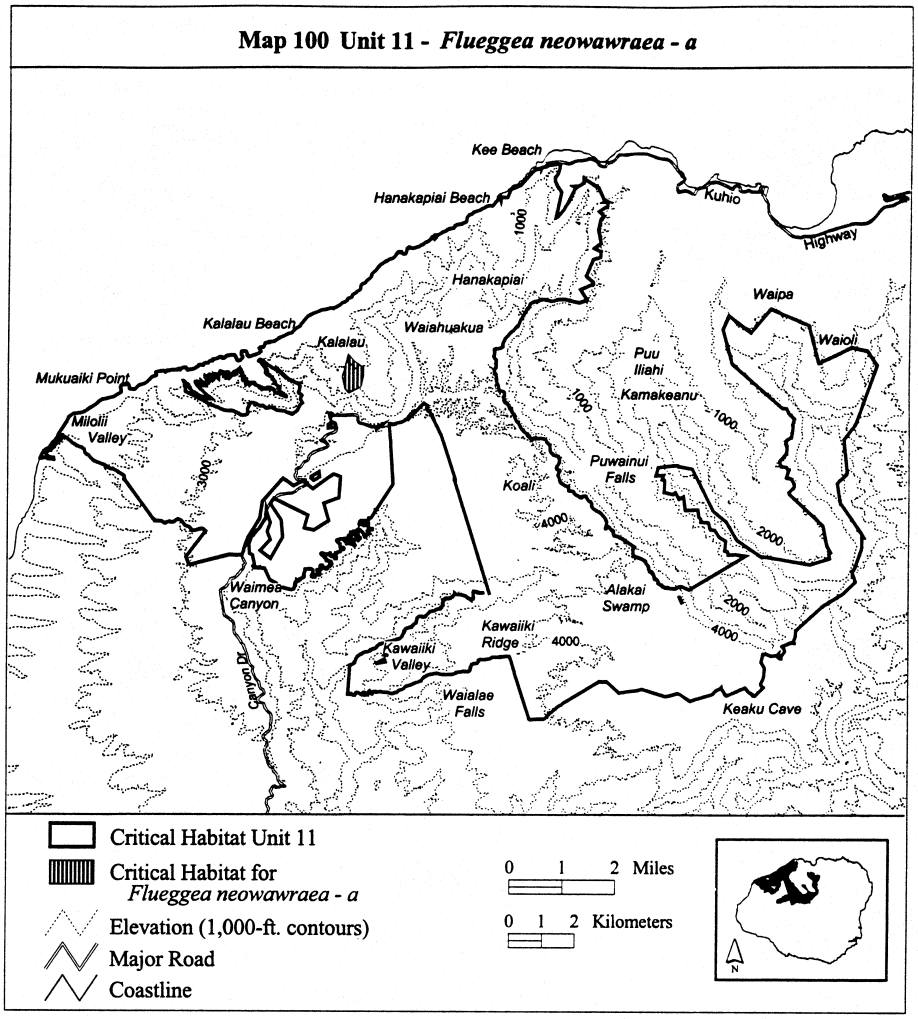
(C) Map 99 follows:



(cxciii) Kauai 11—*Flueggea neowawraea*—a (51 ha; 126 ac)

(A) [Reserved]

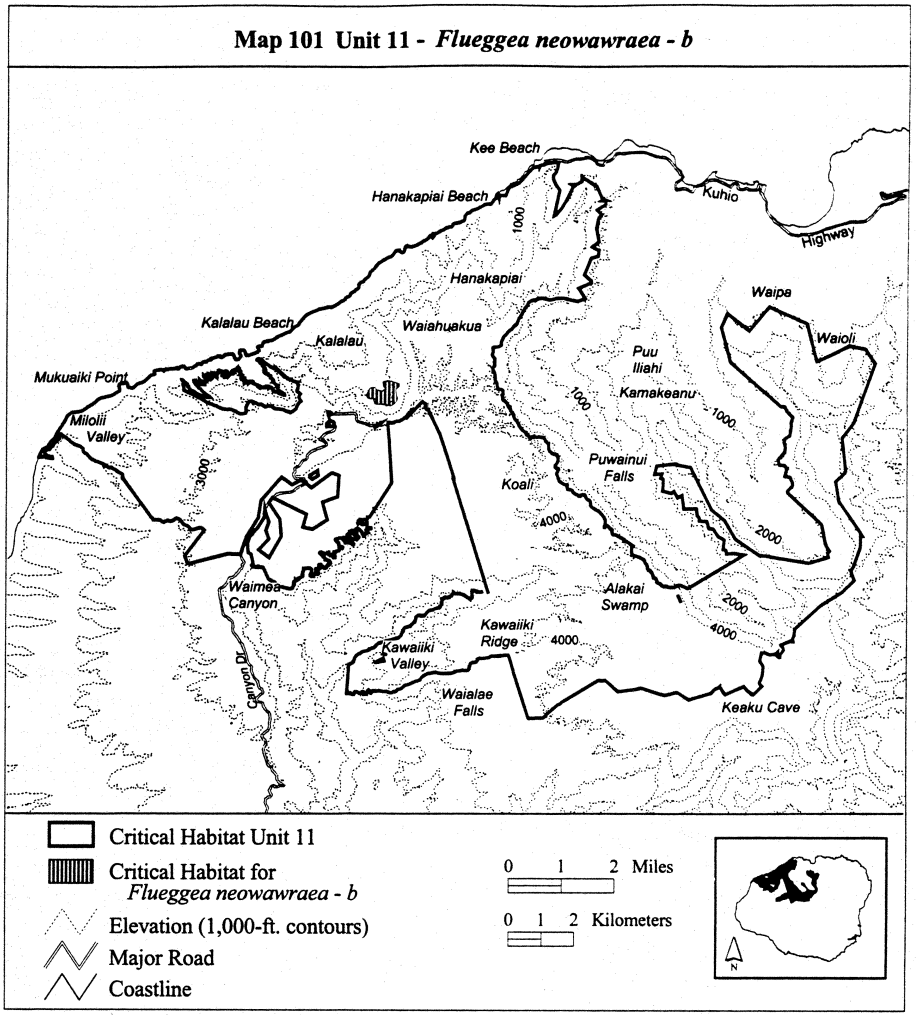
(B) Map 100 follows:



(cxciv) Kauai 11—*Flueggea neowawraea*—b (47 ha; 117 ac)

(A) [Reserved]

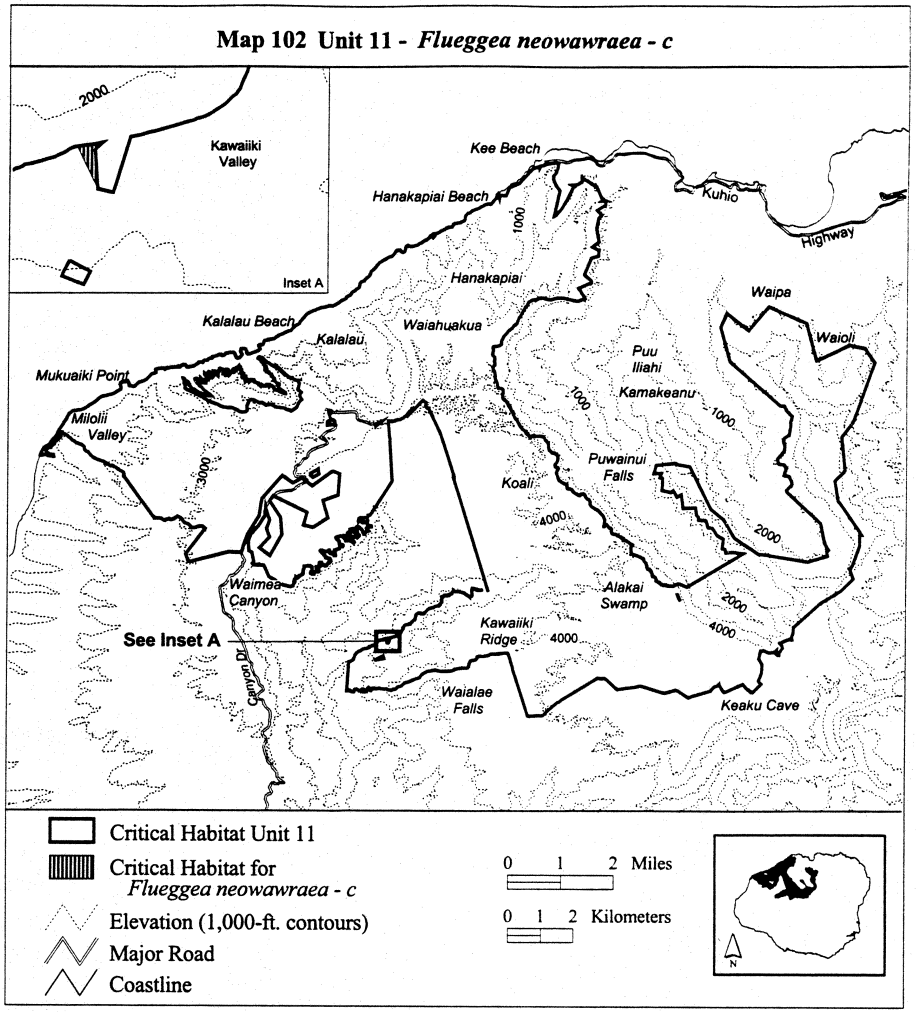
(B) Map 101 follows:



(cxcv) Kauai 11—*Flueggea neowawraea*—c (152 ha; 376 ac)

(A) [Reserved]

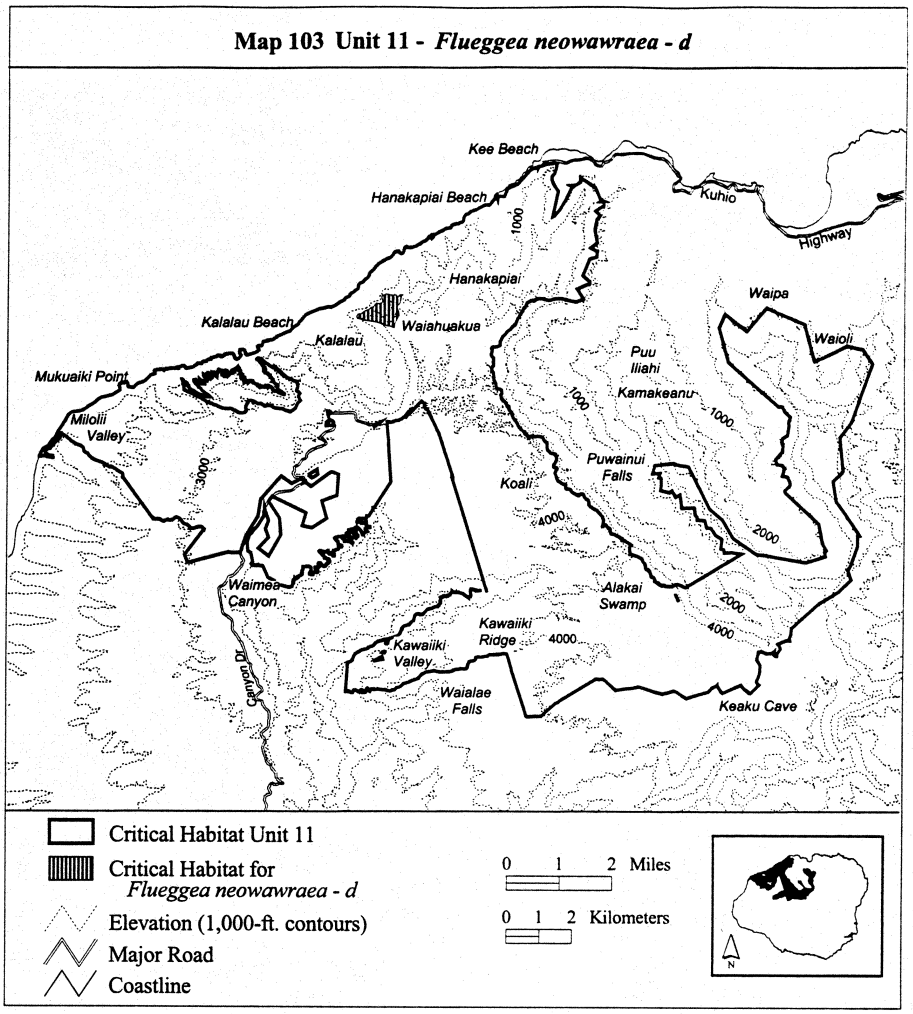
(B) Map 102 follows:



(cxcvi) Kauai 11—*Flueggea neowawraea*—d (77 ha; 191 ac)

(A) [Reserved]

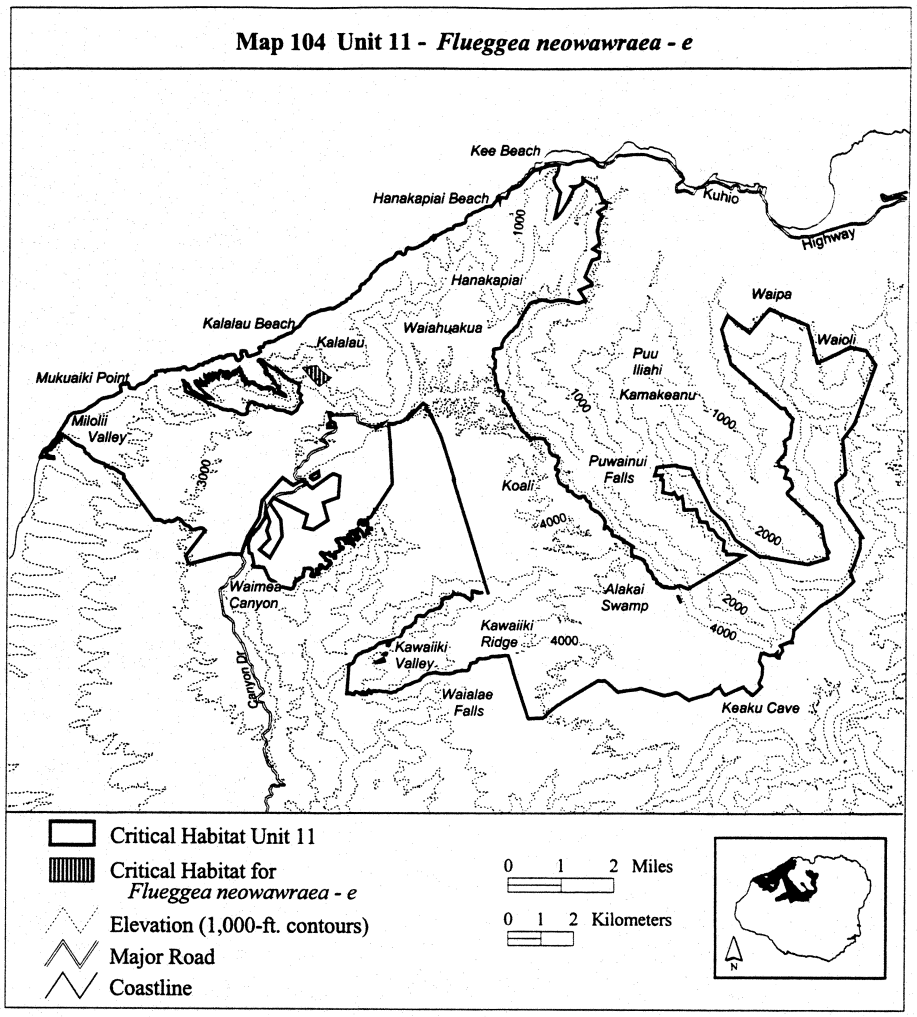
(B) Map 103 follows:



(cxcvii) Kauai 11—*Flueggea neowawraea*—e (27 ha; 67 ac)

(A) [Reserved]

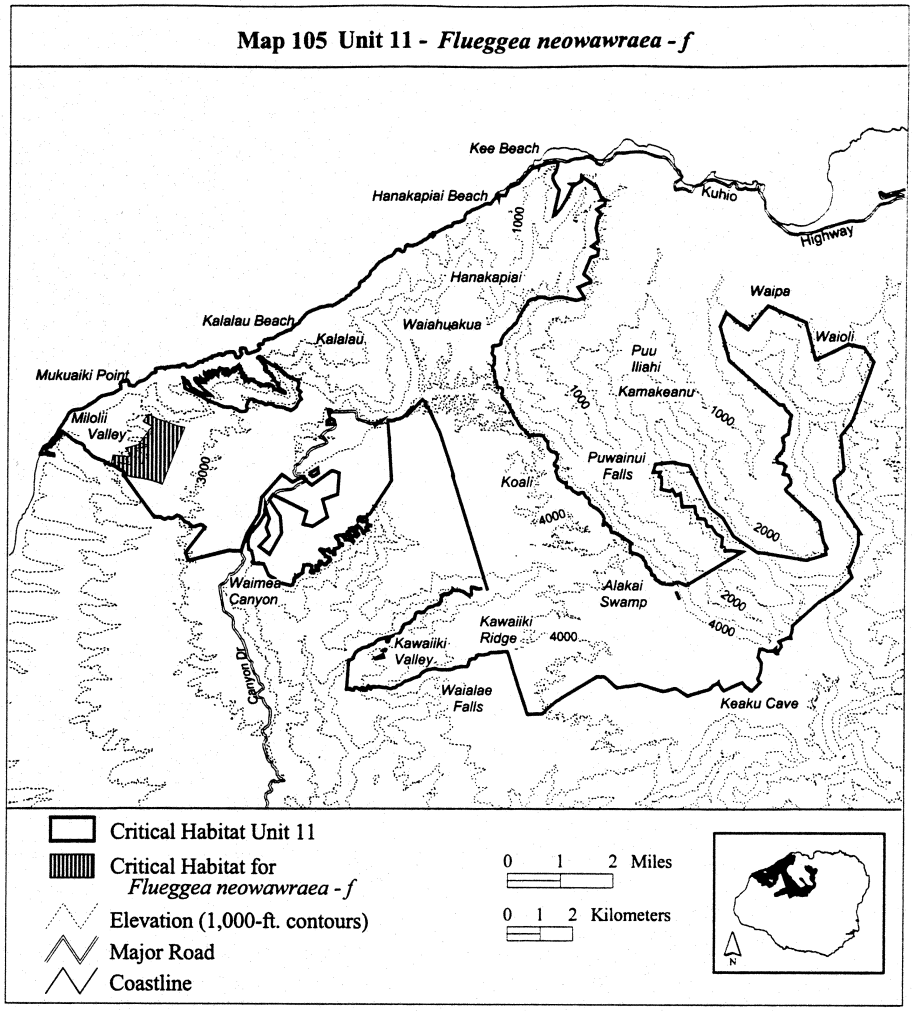
(B) Map 104 follows:



(cxcviii) Kauai 11—*Flueggea neowawraea*—f (240 ha; 594 ac)

(A) [Reserved]

(B) Map 105 follows:



(cxcix) Kauai 11–*Geranium kauaiense*–b

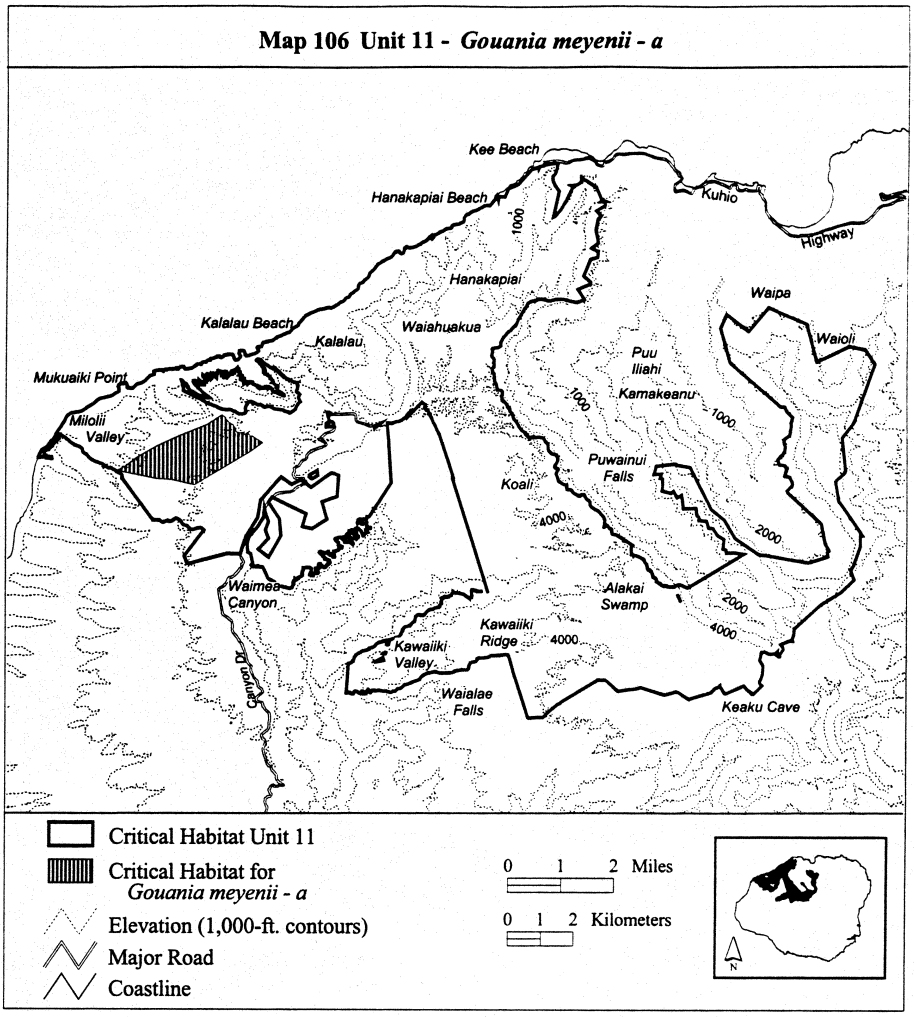
(A) [Reserved]

(B) See paragraph (a)(1)(cxxx)(B) of this section for the map of this unit.

(cc) Kauai 11—*Gouania meyenii*—a (443 ha; 1,094 ac)

(A) [Reserved]

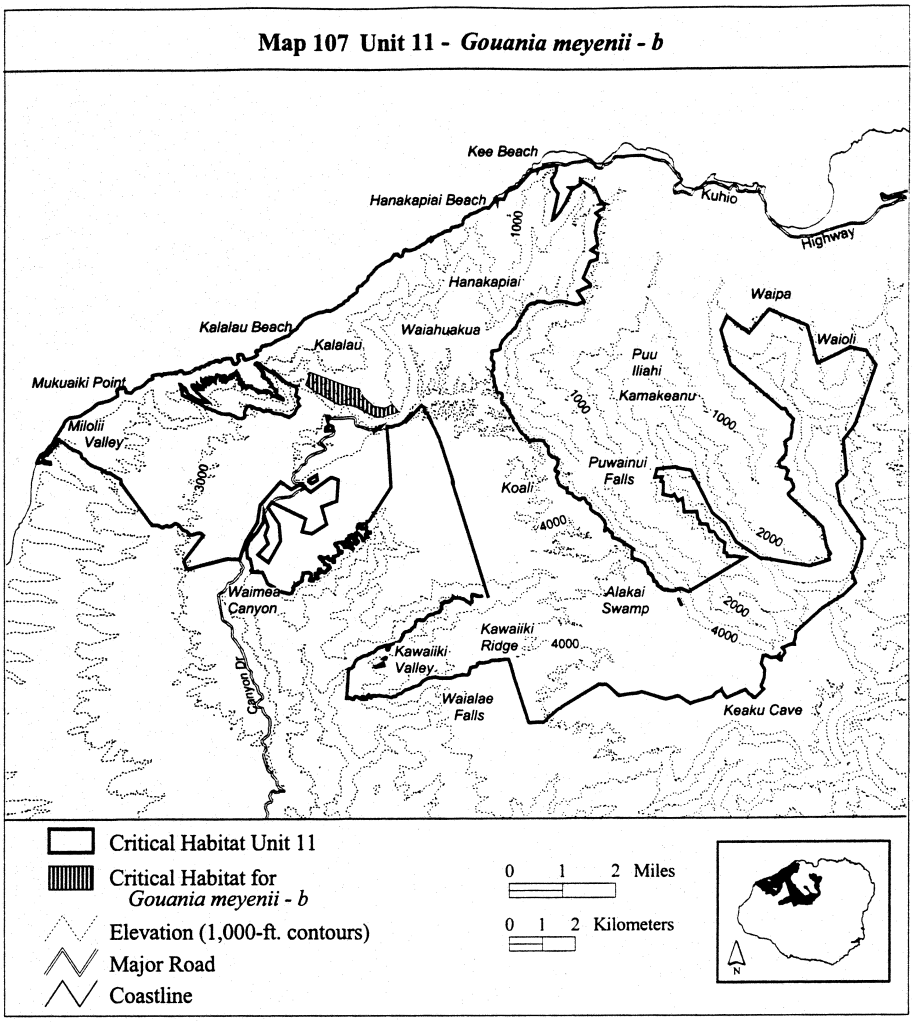
(B) Map 106 follows:



(cci) Kauai 11—*Gouania meyenii*—b (128 ha; 316 ac)

(A) [Reserved]

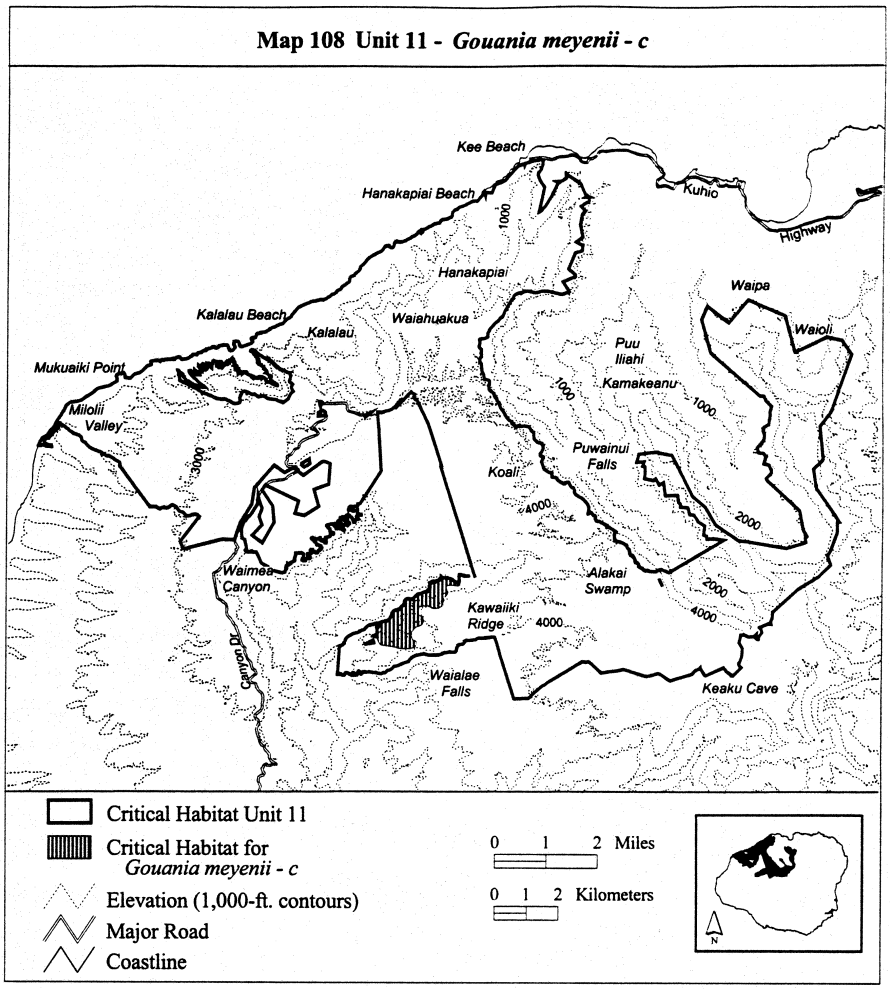
(B) Map 107 follows:



(ccii) Kauai 11—*Gouania meyenii*—c (215 ha; 532 ac)

(A) [Reserved]

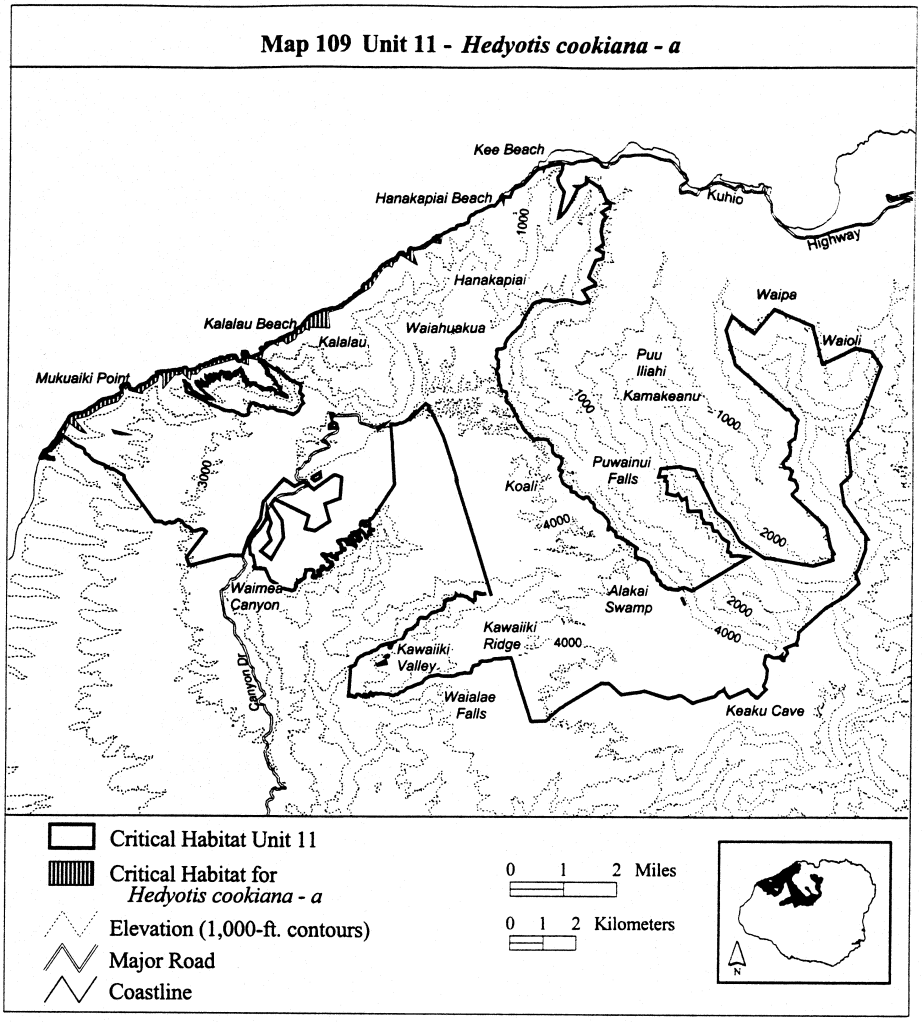
(B) Map 108 follows:



(cciii) Kauai 11—*Hedyotis cookiana*—a (771 ha; 1,905 ac)

(A) [Reserved]

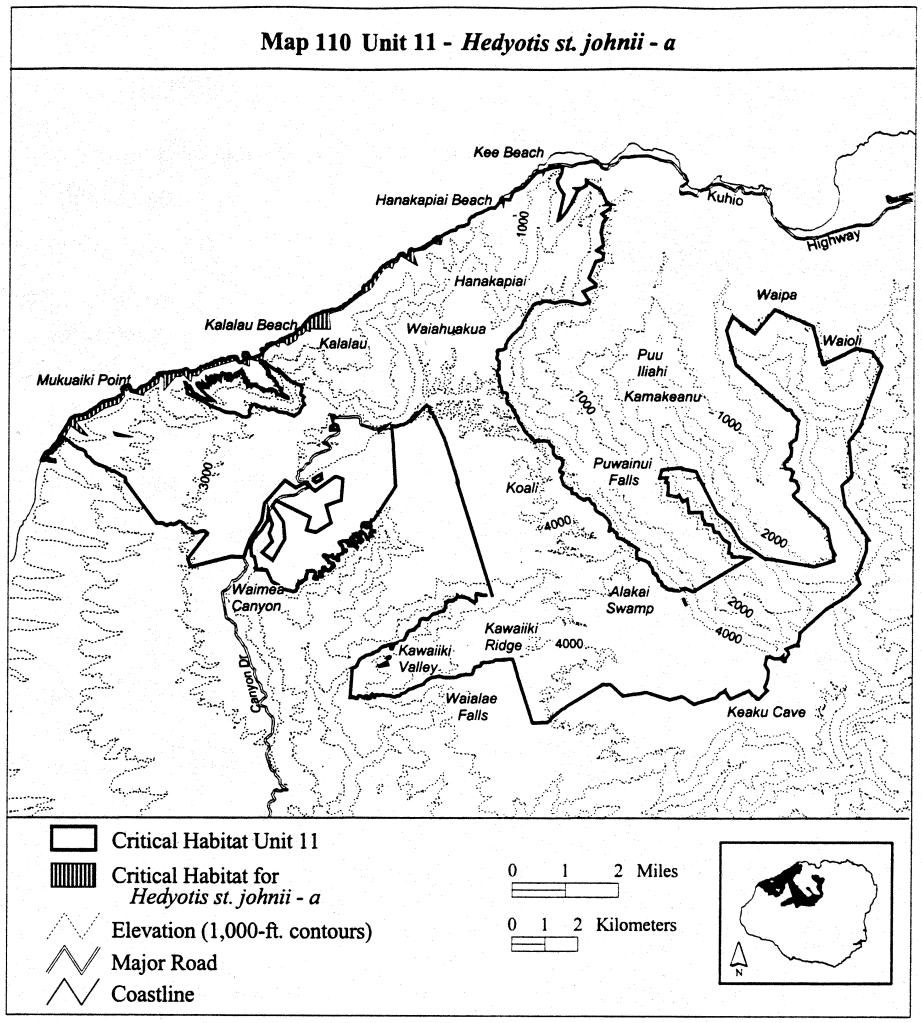
(B) Map 109 follows:



(cciv) Kauai 11—*Hedyotis st. johnii*—a (240 ha; 593 ac)

(A) [Reserved]

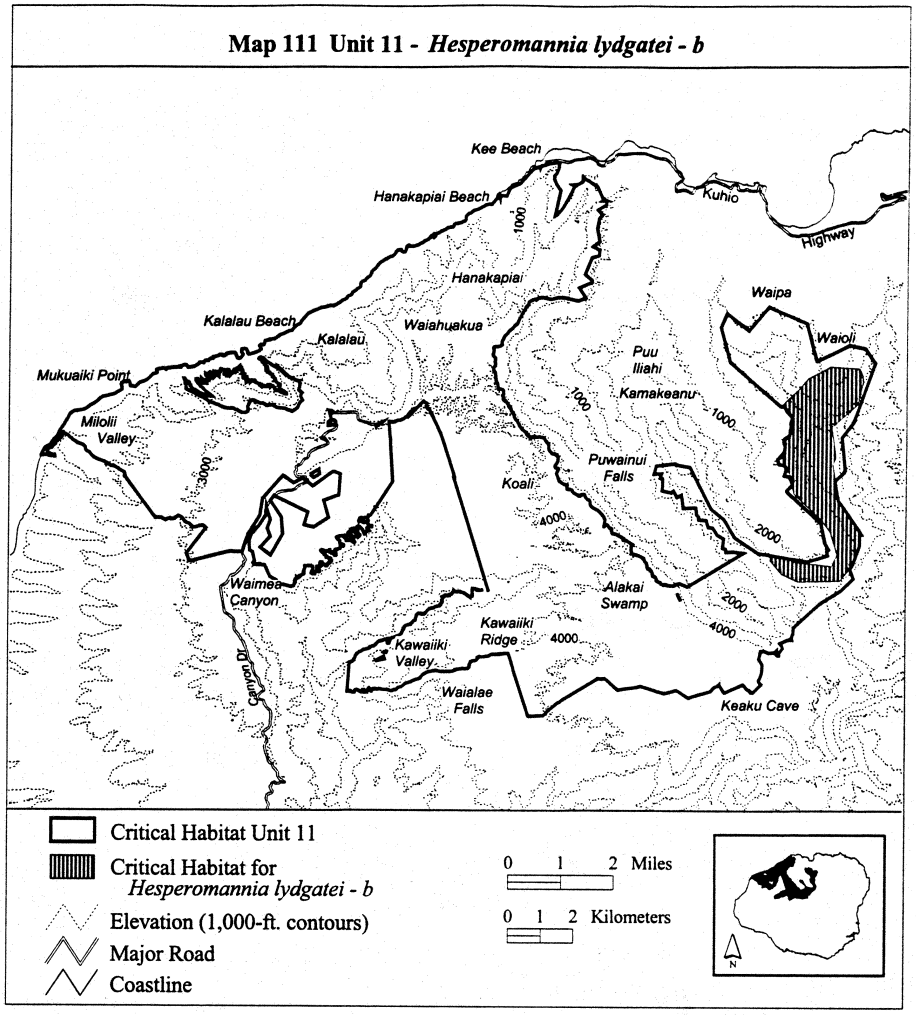
(B) Map 110 follows:



(ccv) Kauai 11—*Hesperomannia lydgatei*—b (913 ha; 2,257 ac)

(A) [Reserved]

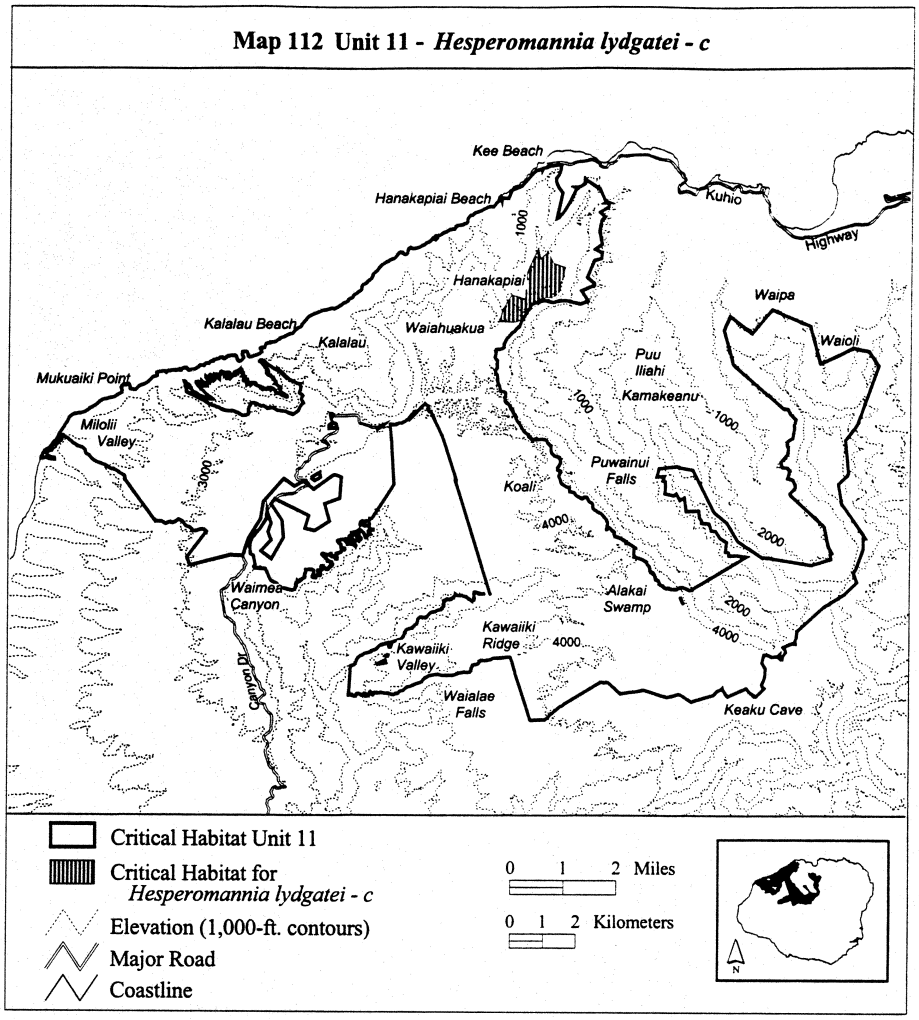
(B) Map 111 follows:



(ccvi) Kauai 11—*Hesperomannia lydgatei*—c (180 ha; 444 ac)

(A) [Reserved]

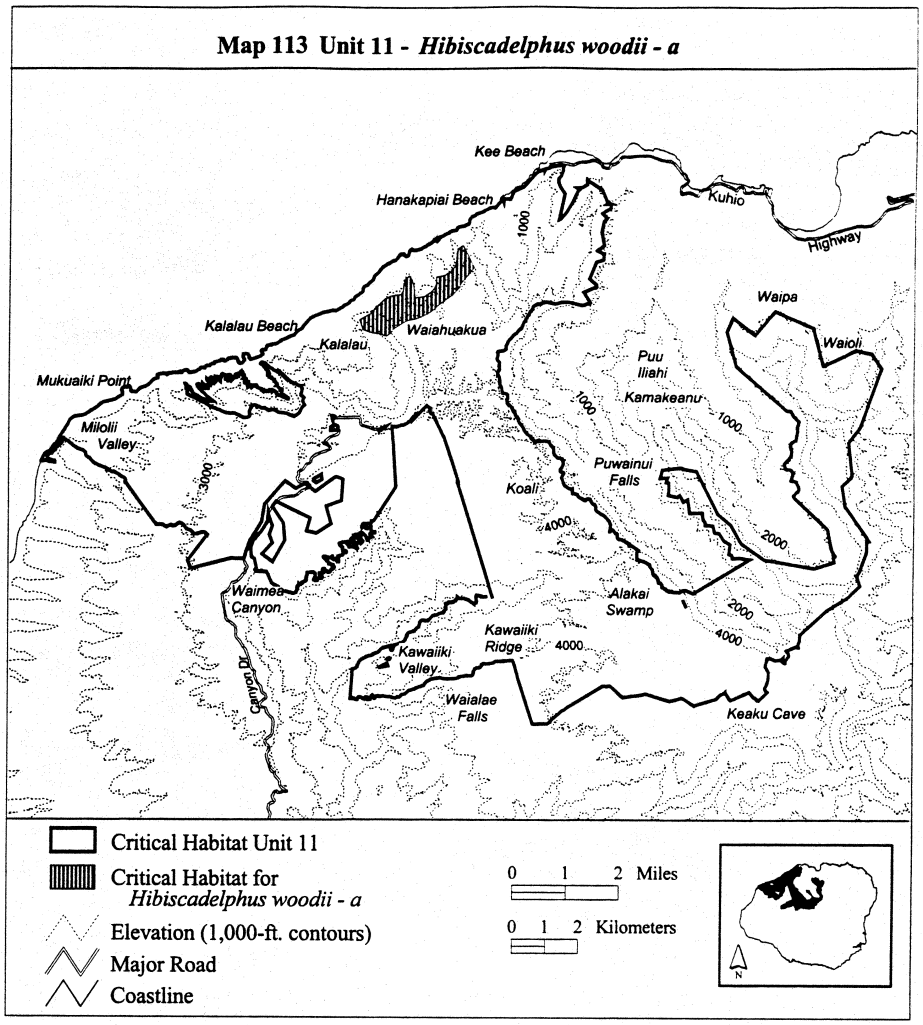
(B) Map 112 follows:



(ccvii) Kauai 11—*Hibiscadelphus woodii*—a (278 ha; 686 ac)

(A) [Reserved]

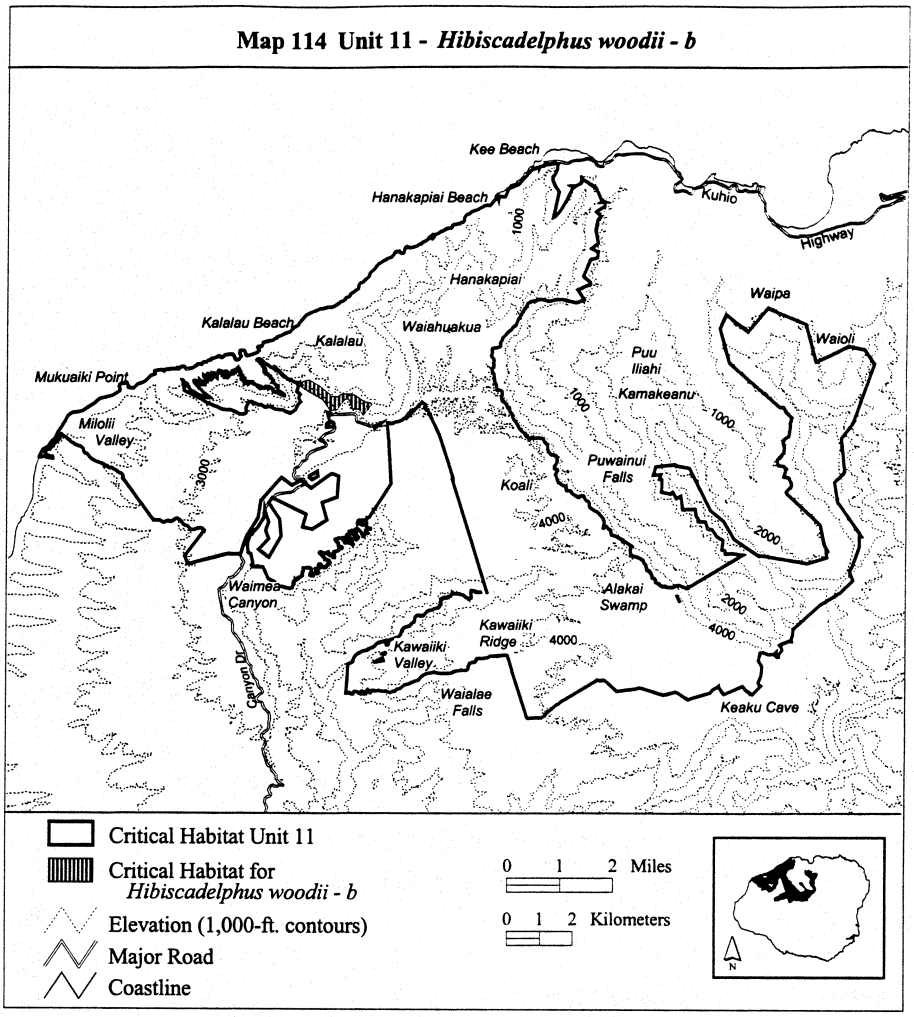
(B) Map 113 follows:



(ccviii) Kauai 11—*Hibiscadelphus woodii*—b (72 ha; 177 ac)

(A) [Reserved]

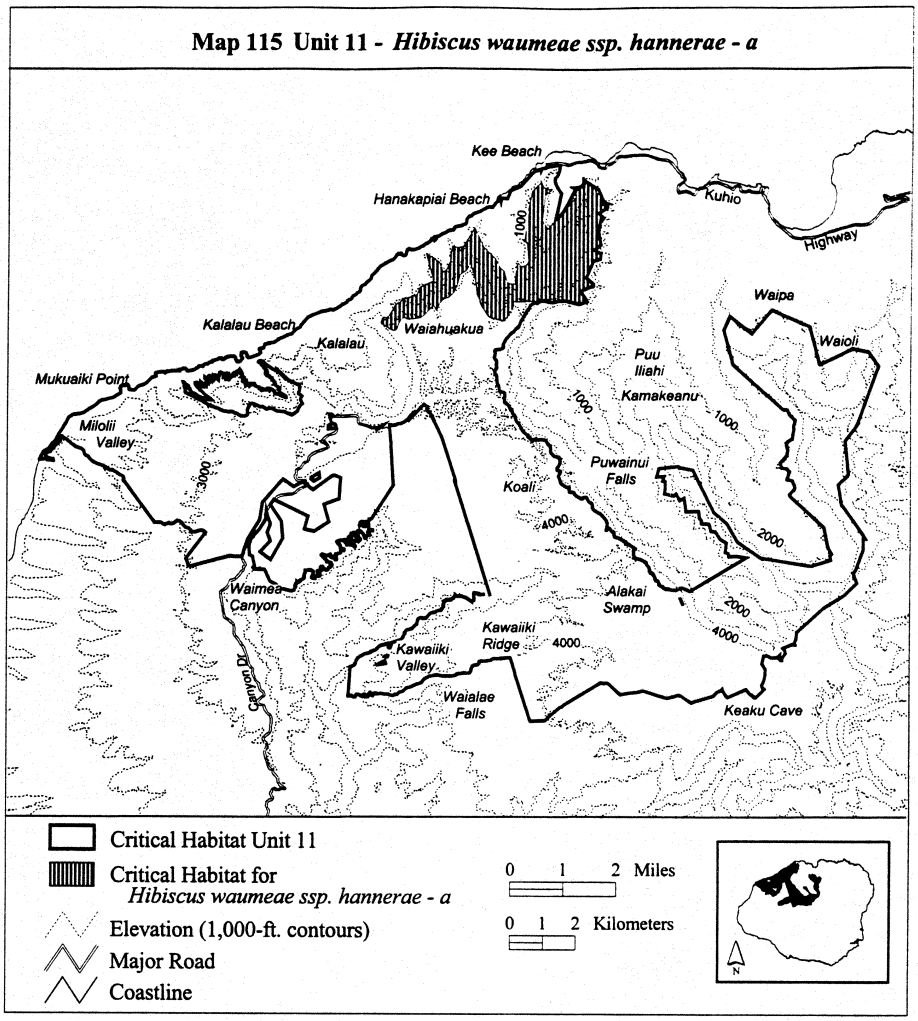
(B) Map 114 follows:



(ccix) Kauai 11—*Hibiscus waimeae ssp. hannerae*—a (1,119 ha; 2,765 ac)

(A) [Reserved]

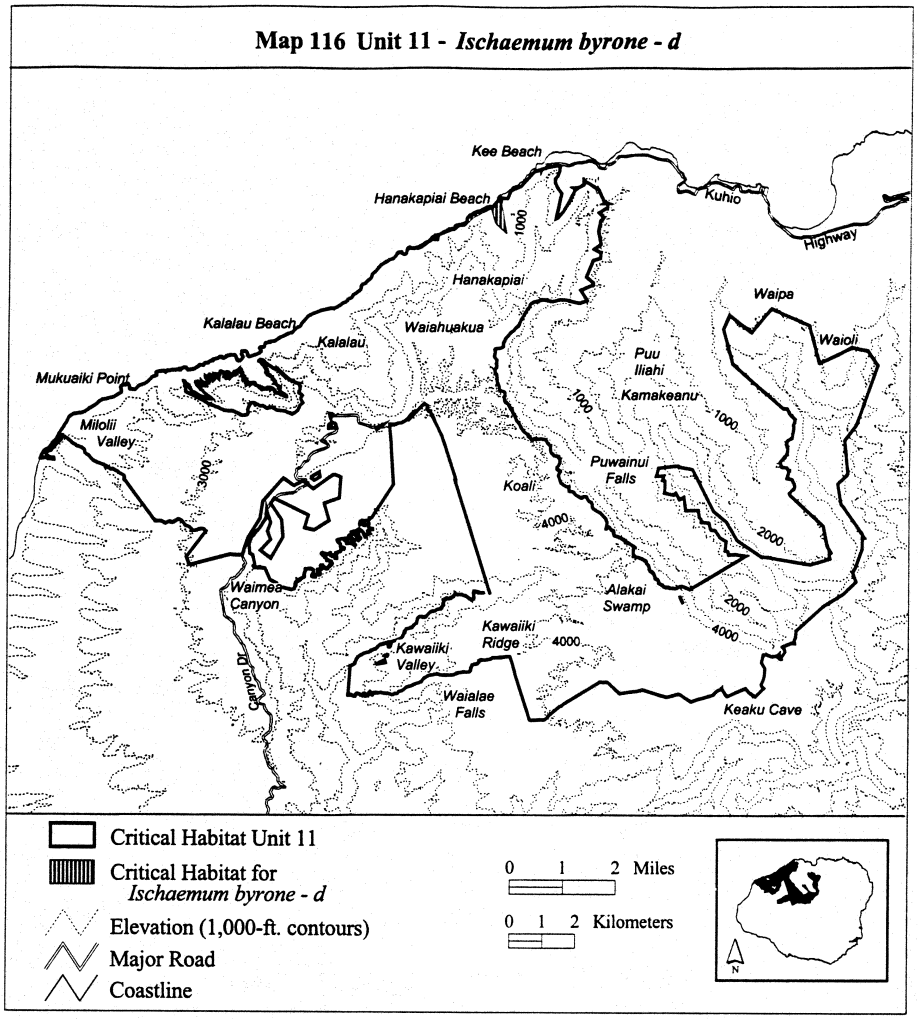
(B) Map 115 follows:



(ccx) Kauai 11—*Ischaemum byrone*—d (45 ha; 111 ac)

(A) [Reserved]

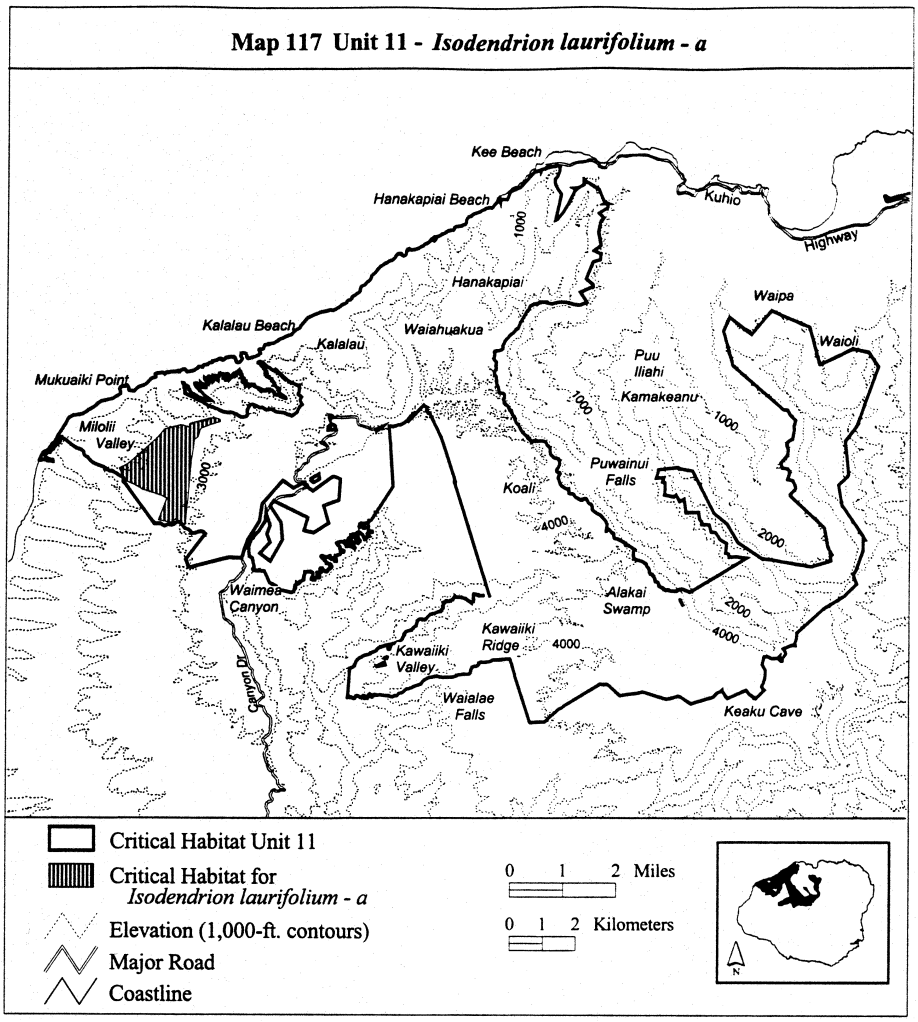
(B) Map 116 follows:



(ccxi) Kauai 11—*Isodendrion laurifolium*—a (401 ha; 991 ac)

(A) [Reserved]

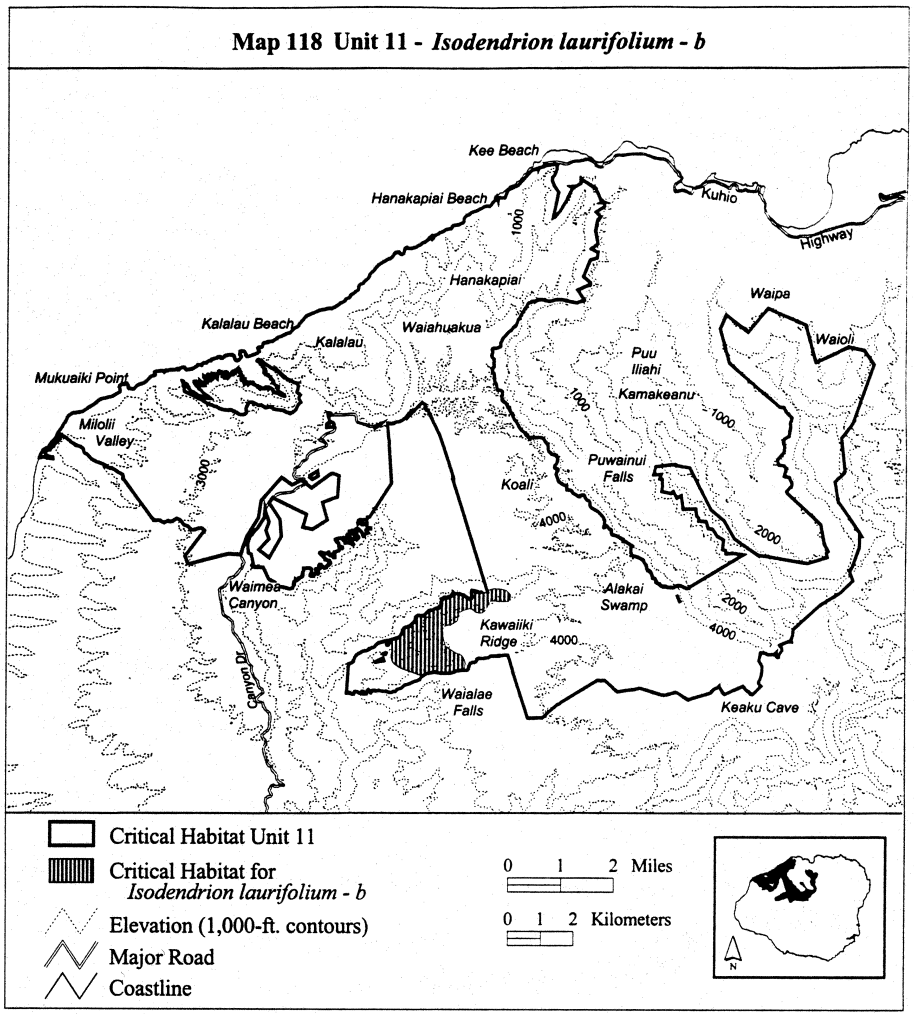
(B) Map 117 follows:



(ccxii) Kauai 11—*Isodendrion laurifolium*—b (400 ha; 988 ac)

(A) [Reserved]

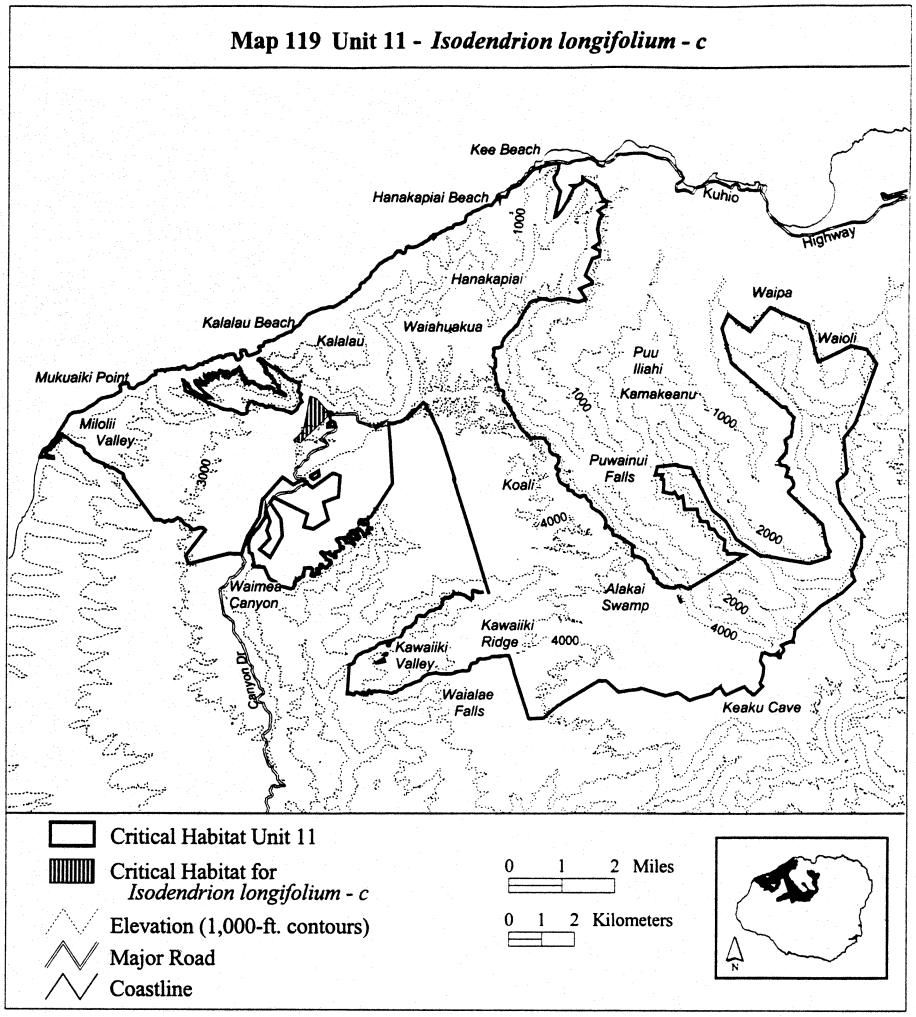
(B) Map 118 follows:



(ccxiii) Kauai 11—*Isodendrion longifolium*—c (59 ha; 146 ac)

(A) [Reserved]

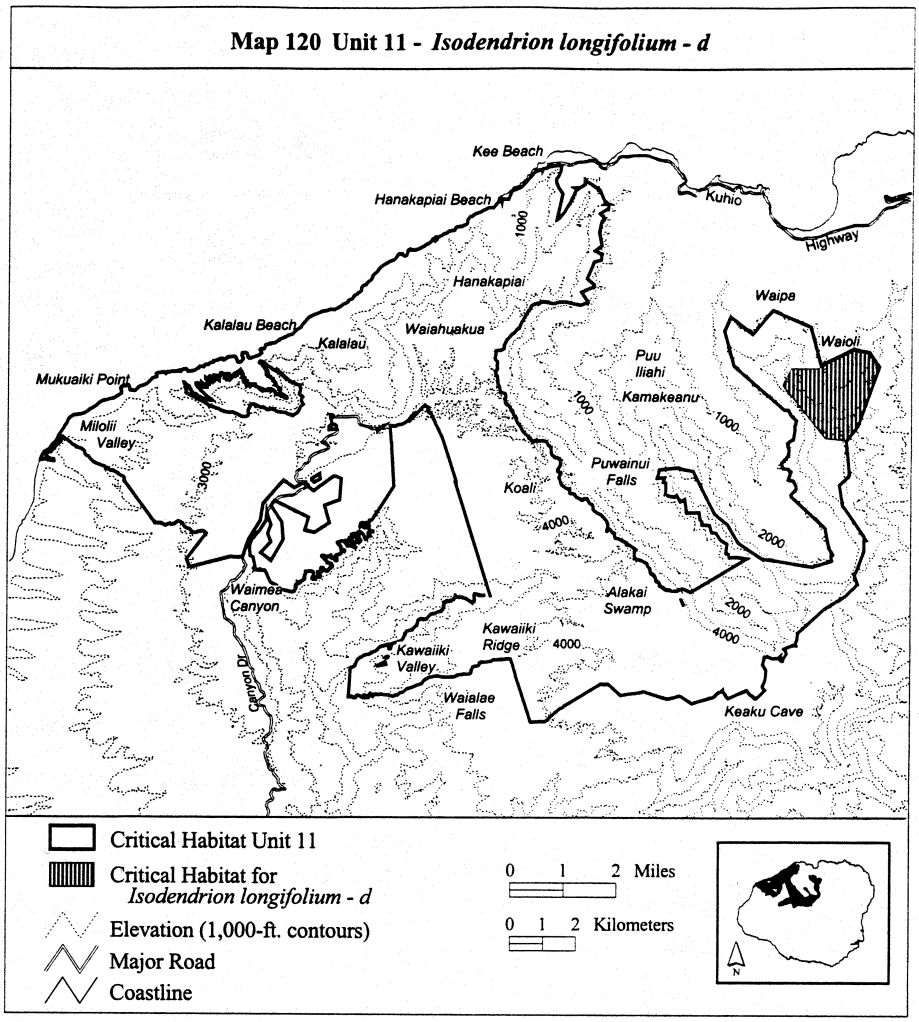
(B) Map 119 follows:



(ccxiv) Kauai 11—*Isodendrion longifolium*—d (493 ha; 1,218 ac)

(A) [Reserved]

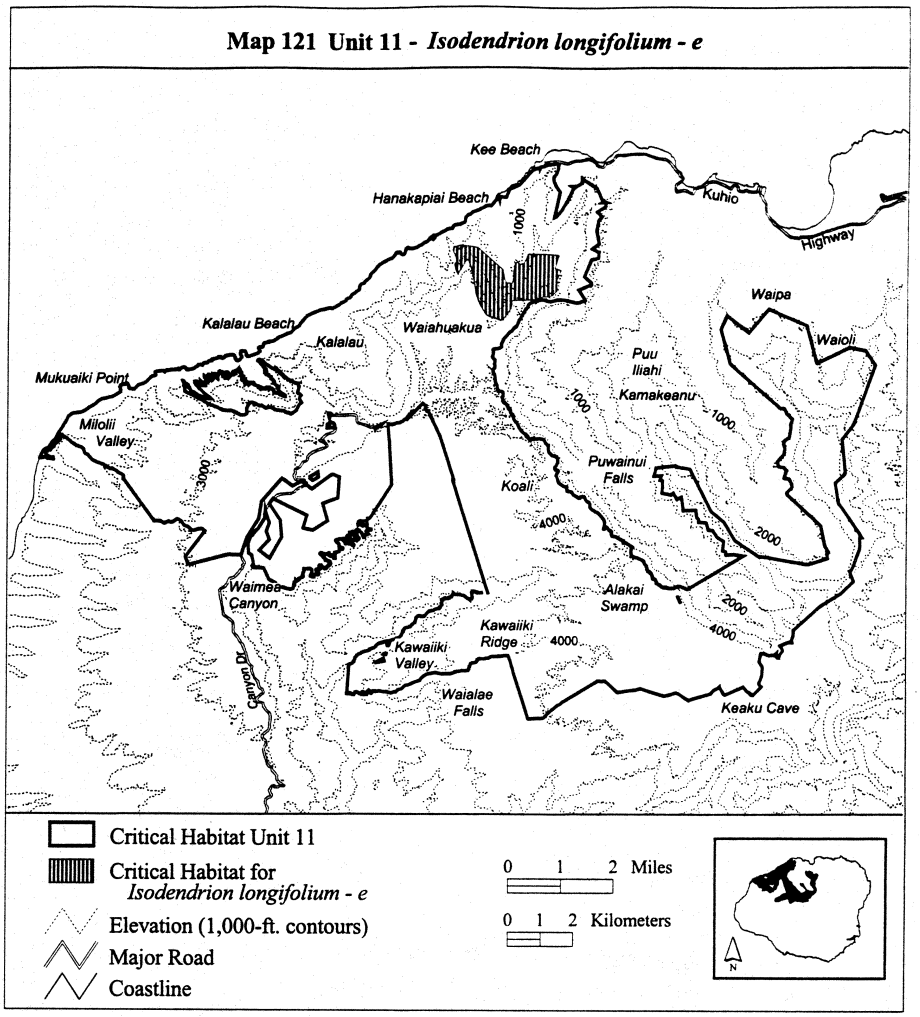
(B) Map 120 follows:



(ccxv) Kauai 11—*Isodendrion longifolium*—e (381 ha; 941 ac)

(A) [Reserved]

(B) Map 121 follows:



(ccxvi) Kauai 11–*Keysseria erici*–b

(A) [Reserved]

(B) See paragraph (a)(1)(cxxx)(B) of this section for the map of this unit.

(ccxvii) Kauai 11–*Keysseria helenae*–b

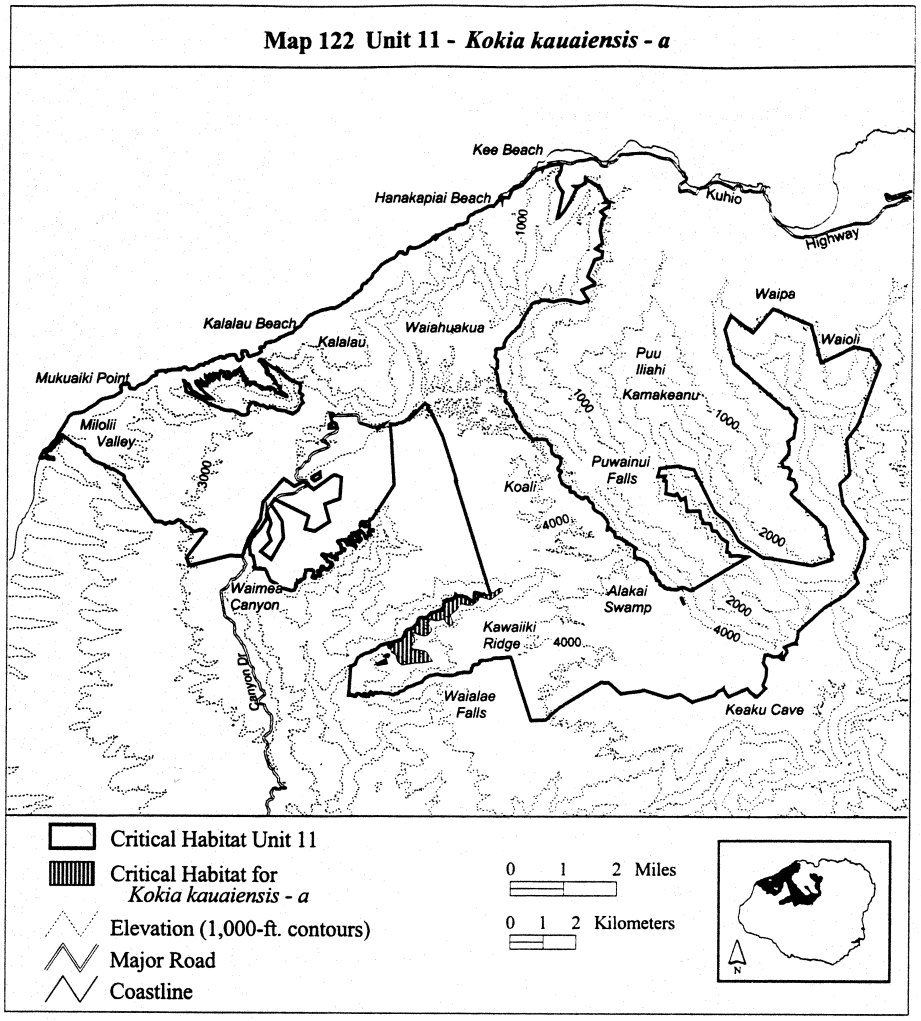
(A) [Reserved]

(B) See paragraph (a)(1)(cxxx)(B) of this section for the map of this unit.

(ccxviii) Kauai 11—*Kokia kauaiensis*—a (155 ha; 384 ac)

(A) [Reserved]

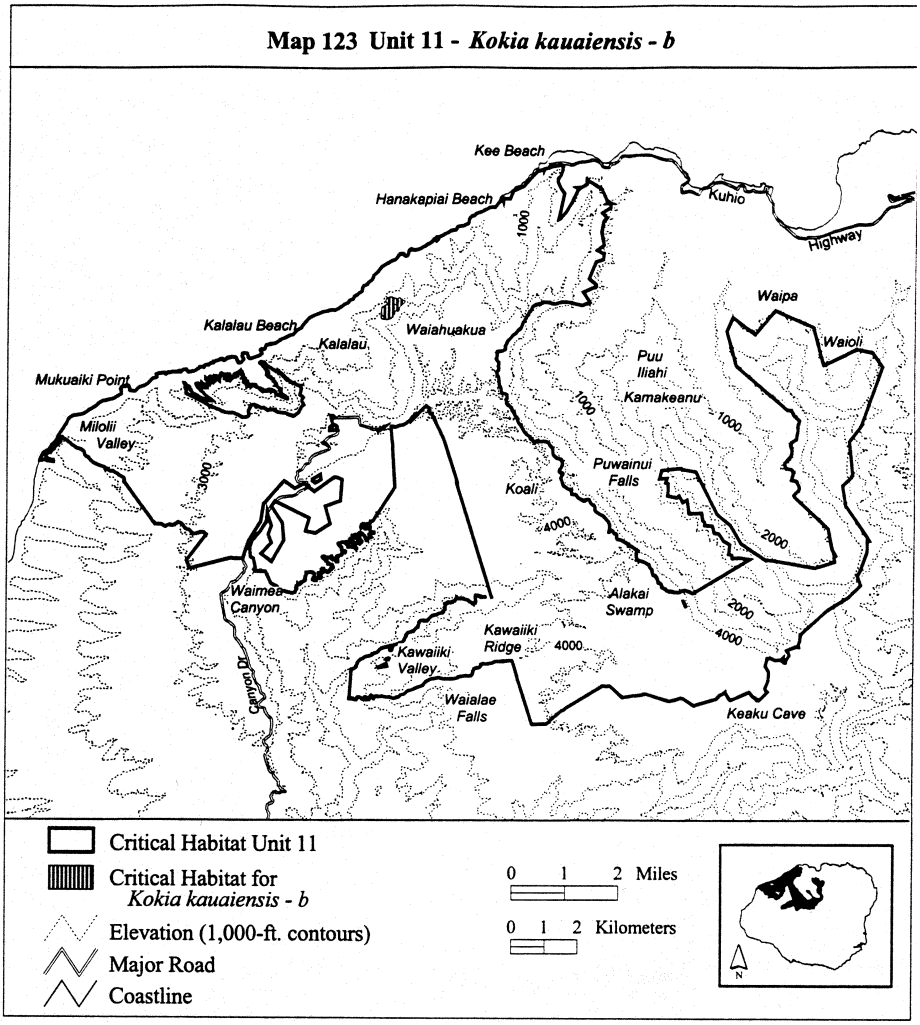
(B) Map 122 follows:



(ccxix) Kauai 11—*Kokia kauaiensis*—b (30 ha; 74 ac)

(A) [Reserved]

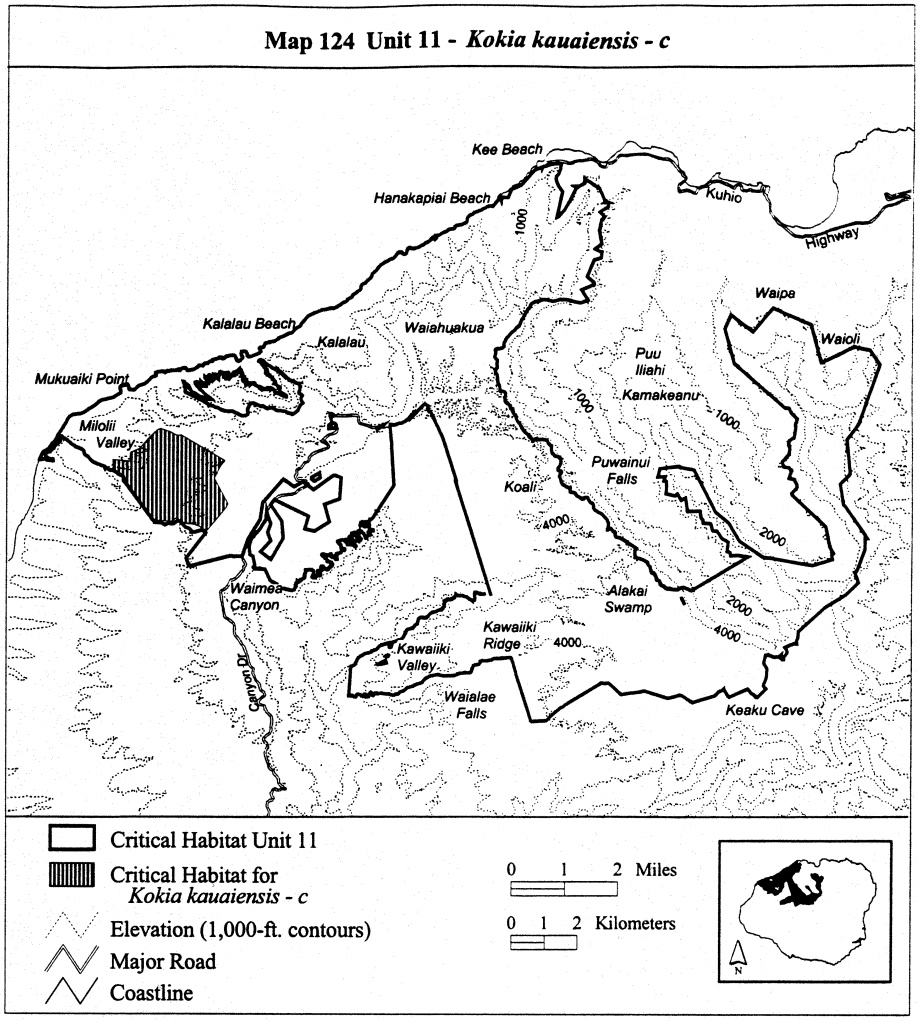
(B) Map 123 follows:



(ccxx) Kauai 11—*Kokia kauaiensis*—c (667 ha; 1,647 ac)

(A) [Reserved]

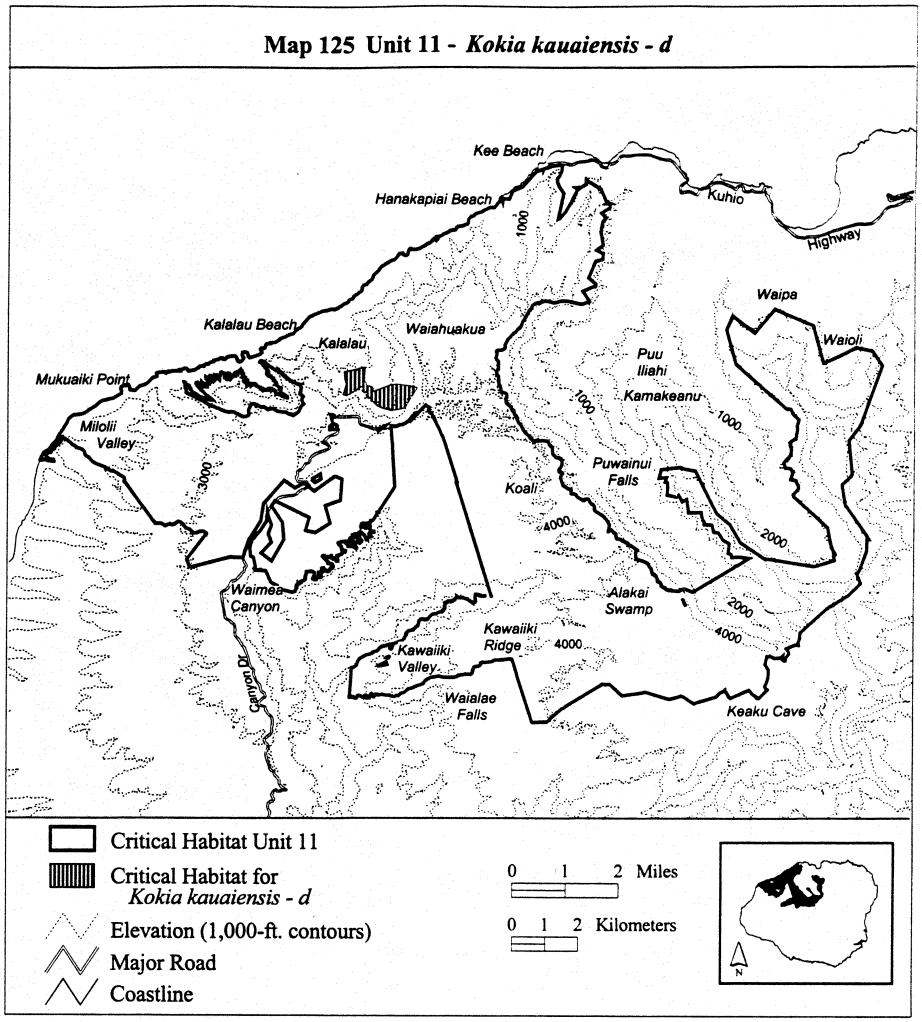
(B) Map 124 follows:



(ccxxi) Kauai 11—*Kokia kauaiensis*—d (126 ha; 312 ac)

(A) [Reserved]

(B) Map 125 follows:



(ccxxii) Kauai 11–*Labordia helleri*–d

(A) [Reserved]

(B) See paragraph (a)(1)(cxxx)(B) of this section for the map of this unit.

(ccxxiii) Kauai 11–*Labordia helleri*–e

(A) [Reserved]

(B) See paragraph (a)(1)(cxxxiii)(B) of this section for the map of this unit.

(ccxxiv) Kauai 11–*Labordia helleri*–f

(A) [Reserved]

(B) See paragraph (a)(1)(cxl)(B) of this section for the map of this unit.

(ccxxv) Kauai 11–*Labordia helleri*–g

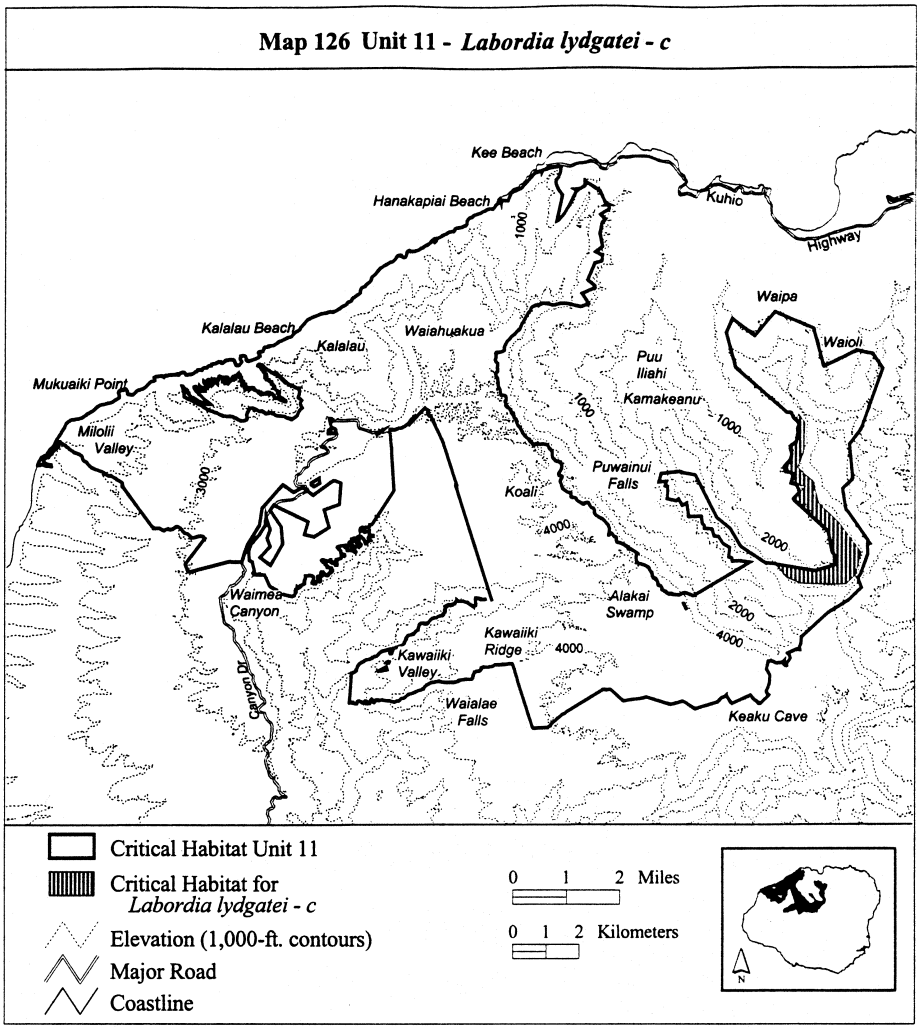
(A) [Reserved]

(B) See paragraph (a)(1)(cxlvi)(B) of this section for the map of this unit.

(ccxxvi) Kauai 11—*Labordia lydgatei*—c (325 ha; 803 ac)

(A) [Reserved]

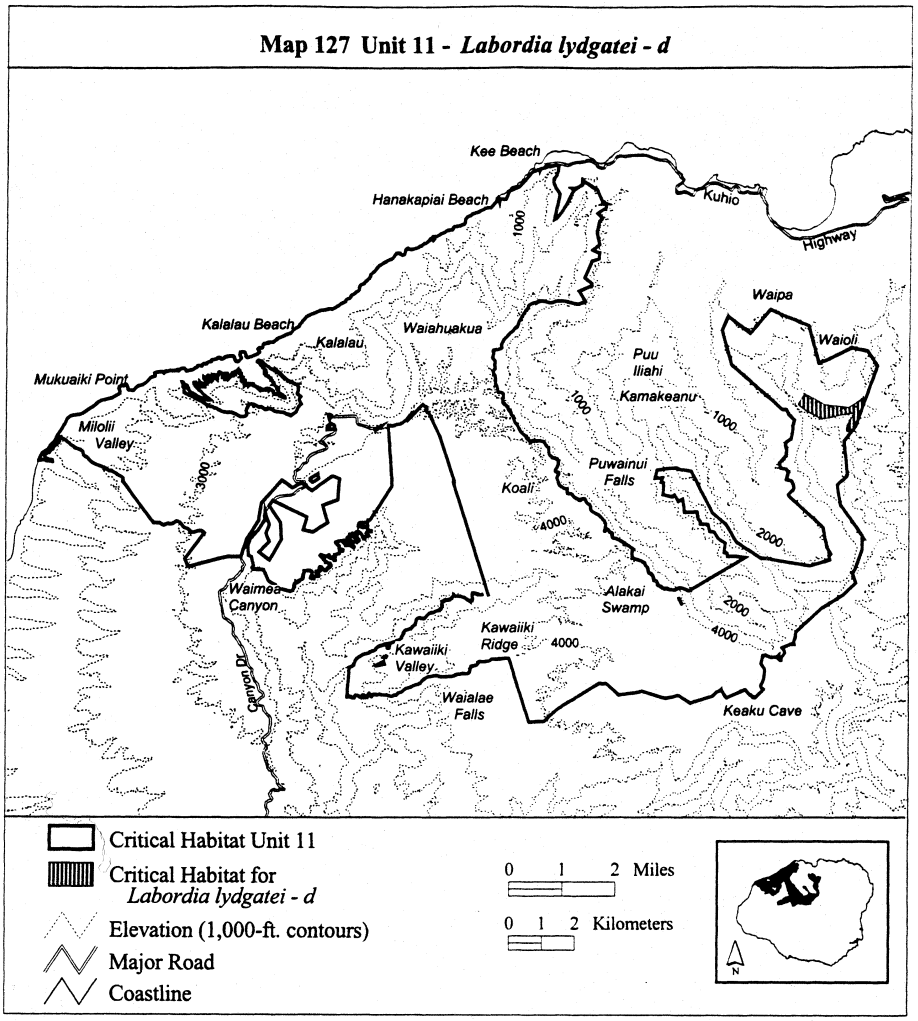
(B) Map 126 follows:



(ccxxvii) Kauai 11—*Labordia lydgatei*—d (82 ha; 203 ac)

(A) [Reserved]

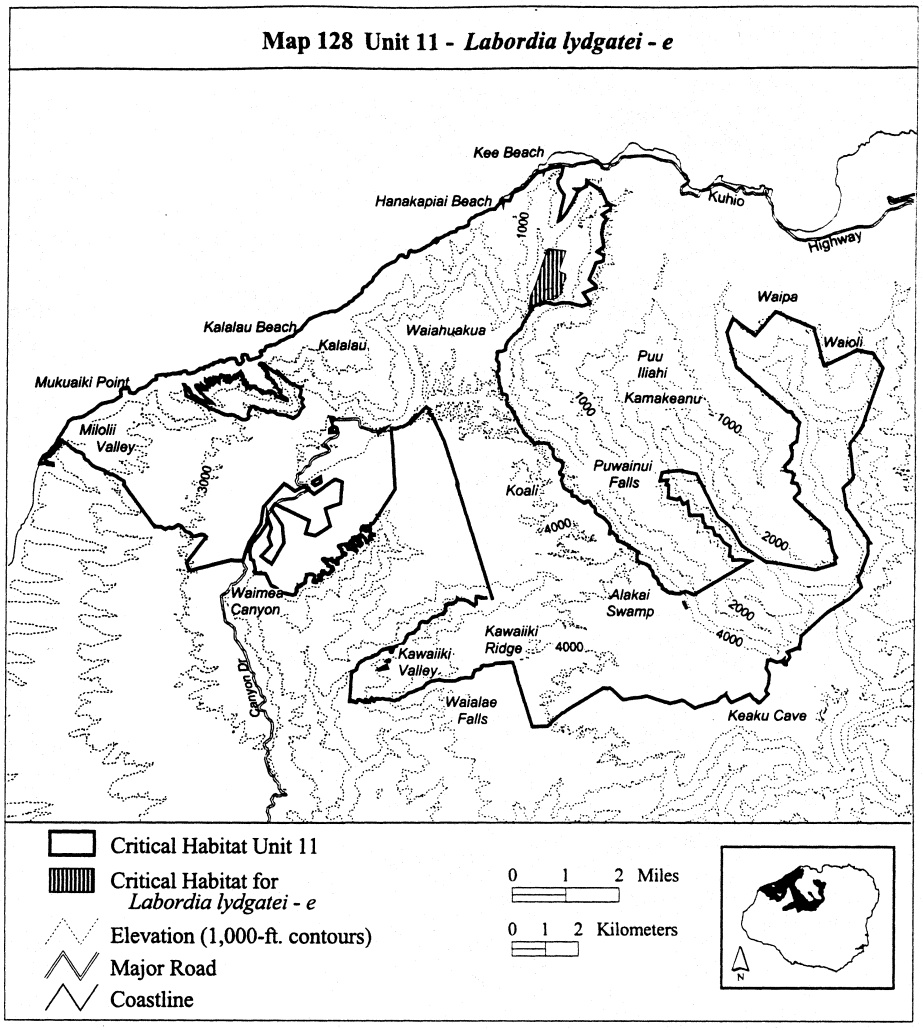
(B) Map 127 follows:



(ccxxviii) Kauai 11—*Labordia lydgatei*—e (117 ha; 290 ac)

(A) [Reserved]

(B) Map 128 follows:



(ccxxix) Kauai 11–*Labordia pumila*–b

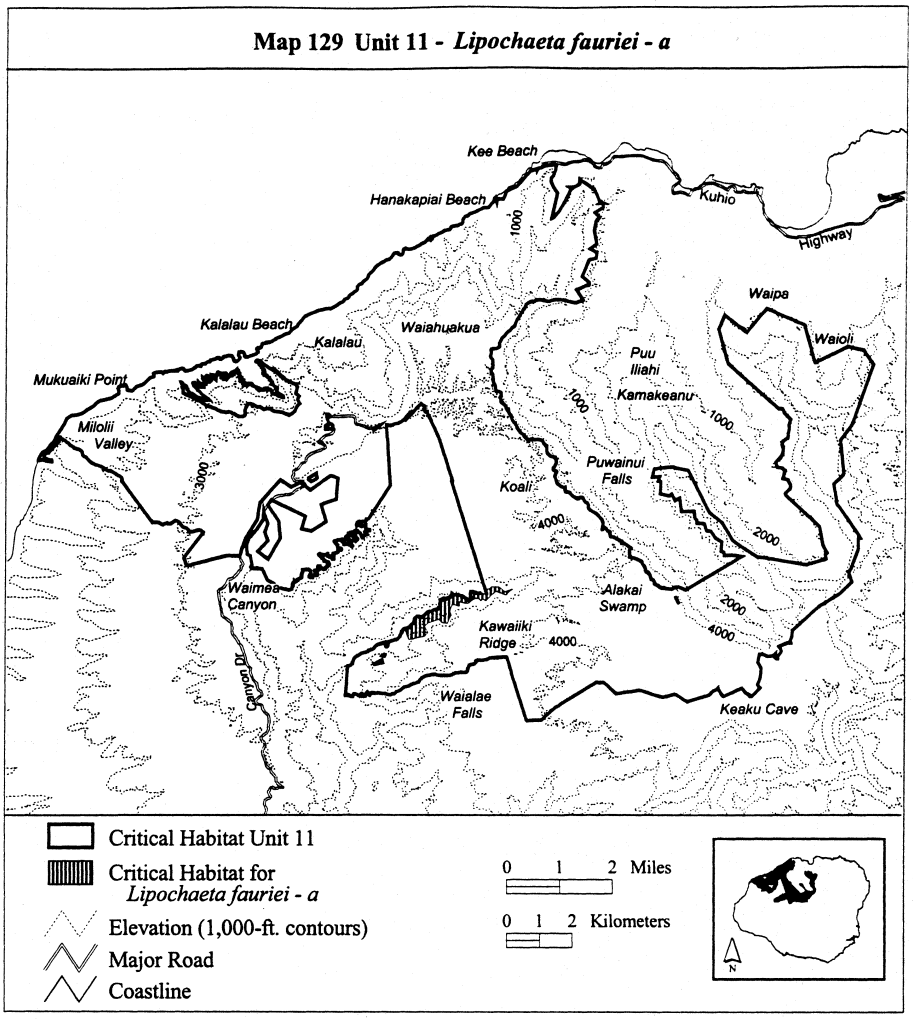
(A) [Reserved]

(B) See paragraph (a)(1)(cxxx)(B) of this section for the map of this unit.

(ccxxx) Kauai 11—*Lipochaeta fauriei*—a (106 ha; 262 ac)

(A) [Reserved]

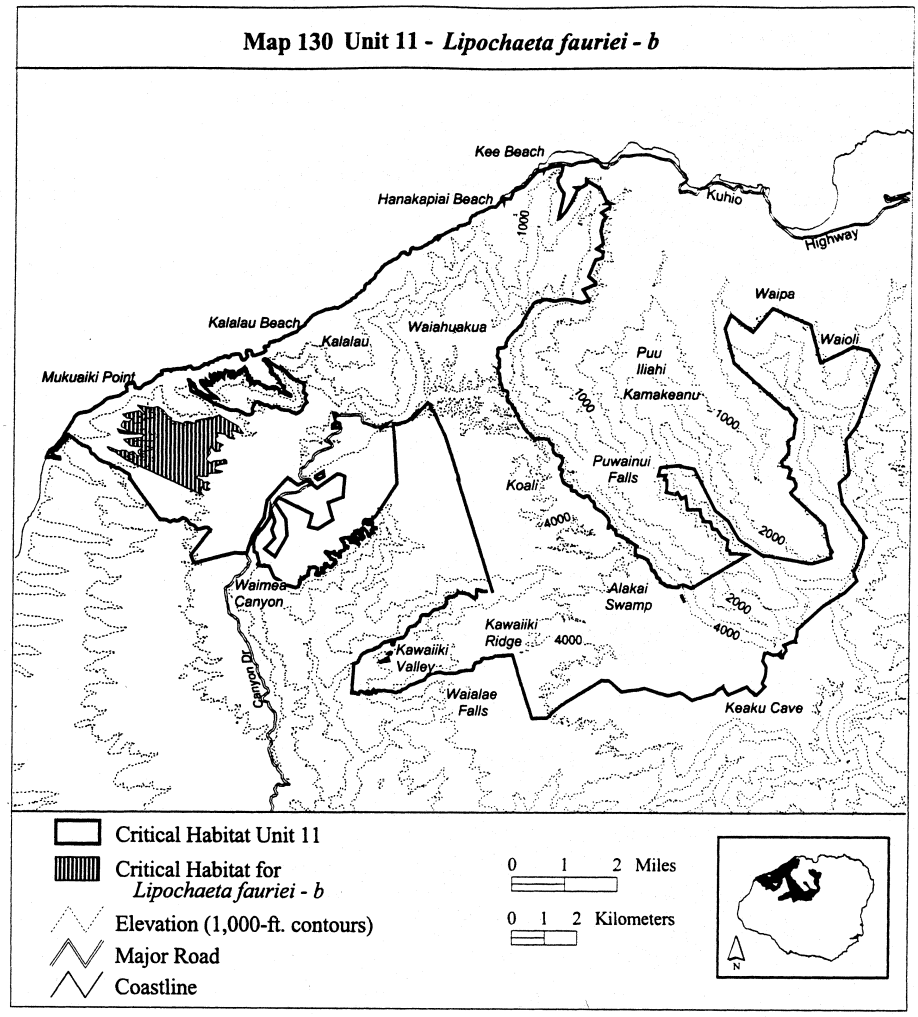
(B) Map 129 follows:



(ccxxxi) Kauai 11—*Lipochaeta fauriei—b* (545 ha; 1,347 ac)

(A) [Reserved]

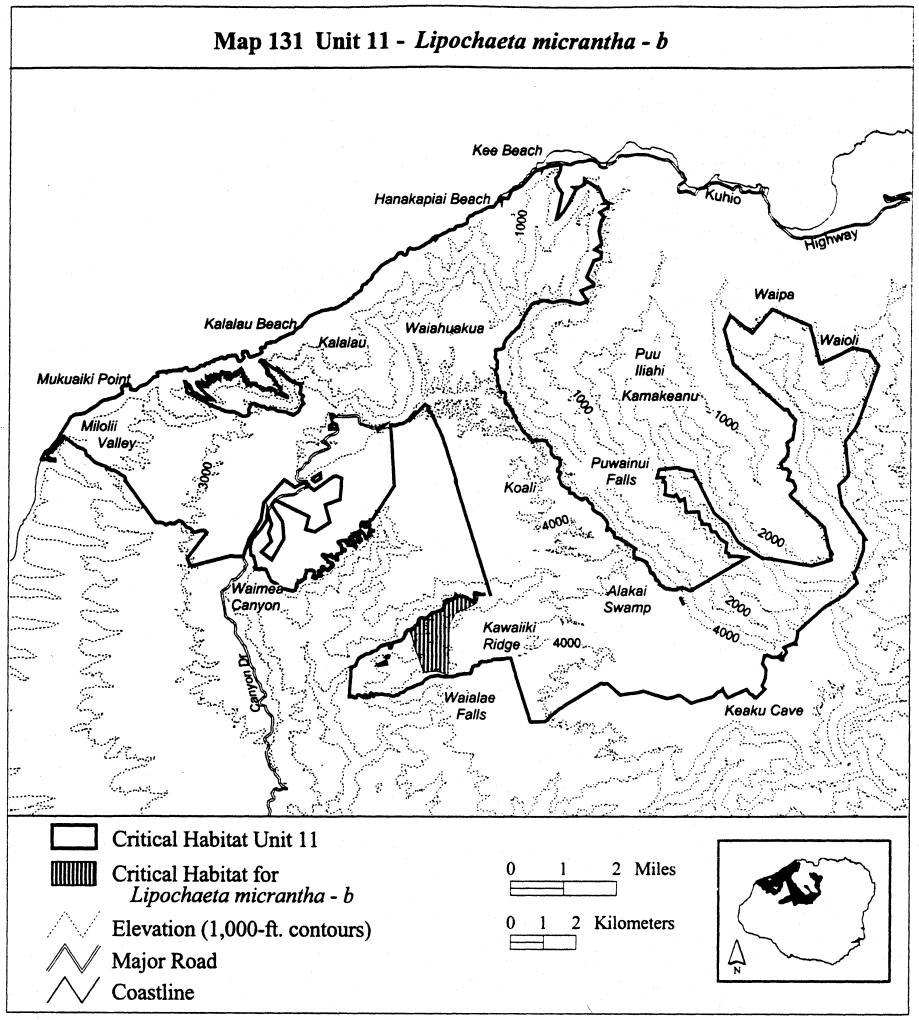
(B) Map 130 follows:



(ccxxxii) Kauai 11—*Lipochaeta micrantha*—b (212 ha; 523 ac)

(A) [Reserved]

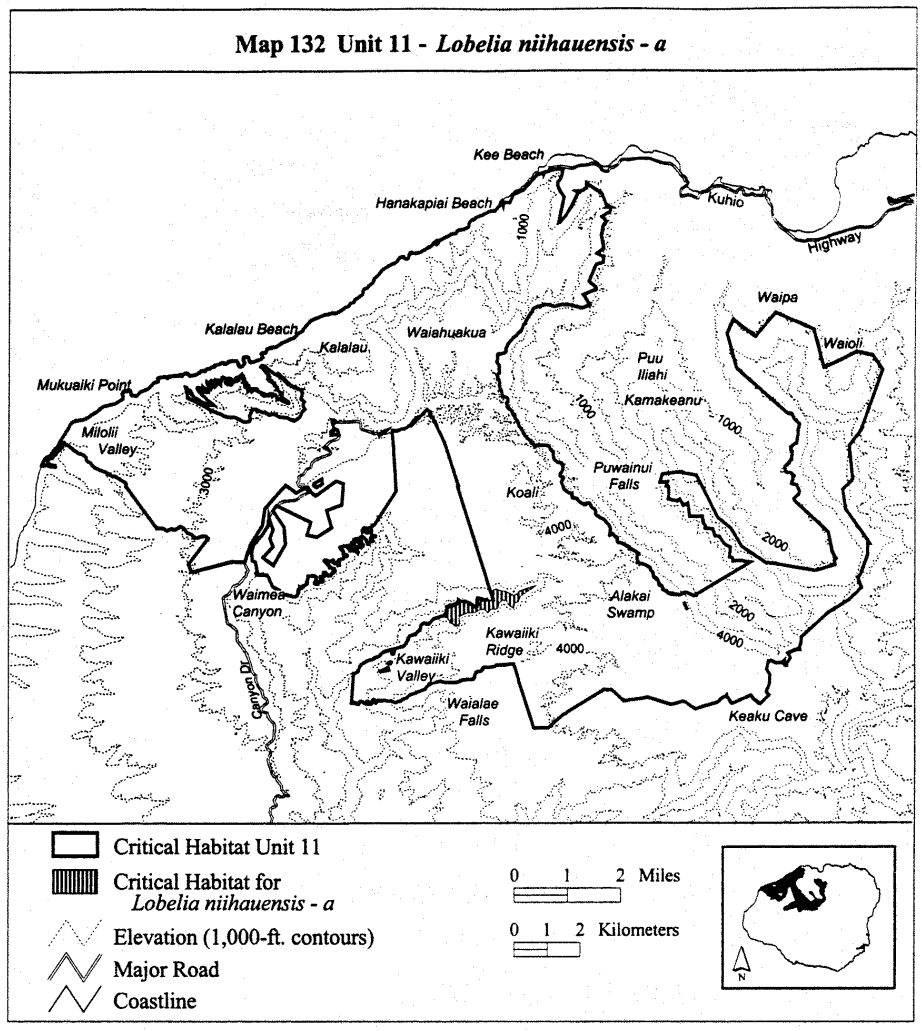
(B) Map 131 follows:



(ccxxxiii) Kauai 11—*Lobelia niihauensis*—a (89 ha; 220 ac)

(A) [Reserved]

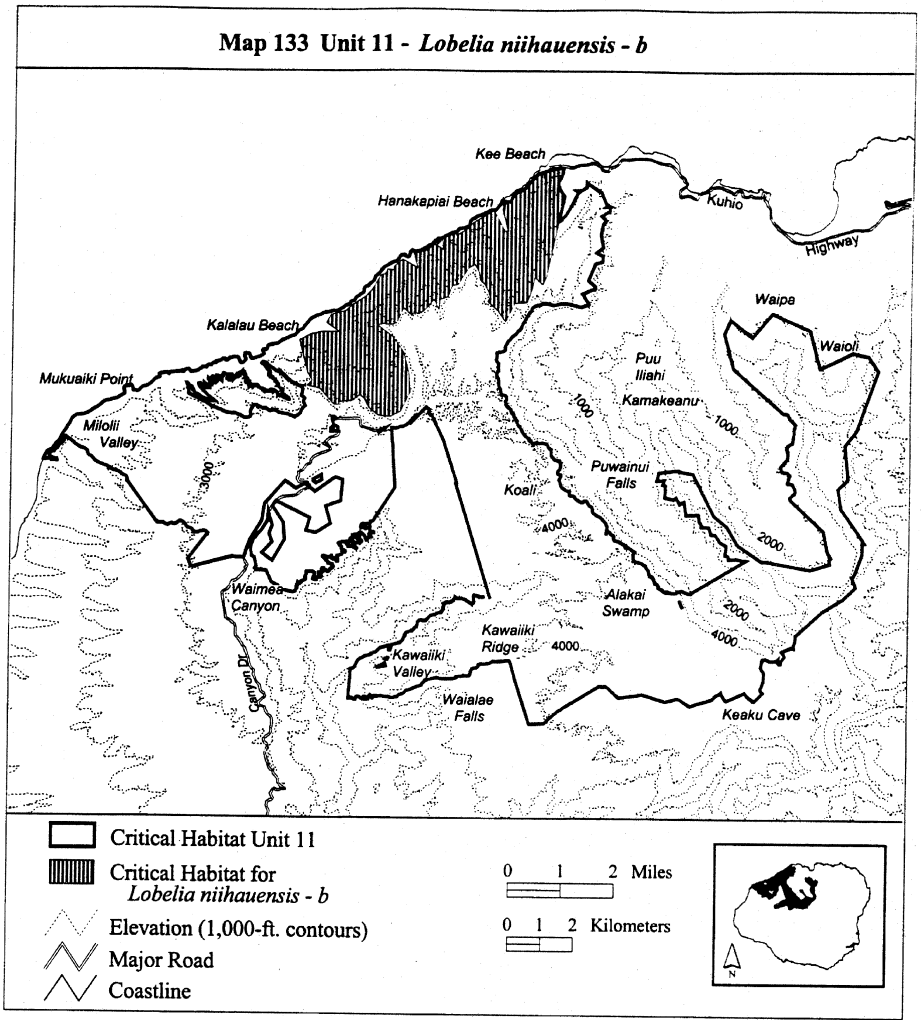
(B) Map 132 follows:



(ccxxxiv) Kauai 11—*Lobelia niihauensis*—b (2,001 ha; 4,945 ac)

(A) [Reserved]

(B) Map 133 follows:



(ccxxxv) Kauai 11–*Lysimachia daphnoides*–b

(A) [Reserved]

(B) See paragraph (a)(1)(cxxx)(B) of this section for the map of this unit.

(ccxxxvi) Kauai 11–*Lysimachia iniki*–c

(A) [Reserved]

(B) See paragraph (a)(1)(cxli)(B) of this section for the map of this unit.

(ccxxxvii) Kauai 11–*Lysimachia pendens*–c

(A) [Reserved]

(B) See paragraph (a)(1)(cxli)(B) of this section for the map of this unit.

(ccxxxviii) Kauai 11–*Lysimachia scopulensis*–a

(A) [Reserved]

(B) See paragraph (a)(1)(cxxxvi)(B) of this section for the map of this unit.

(ccxxxix) Kauai 11–*Lysimachia venosa*–c

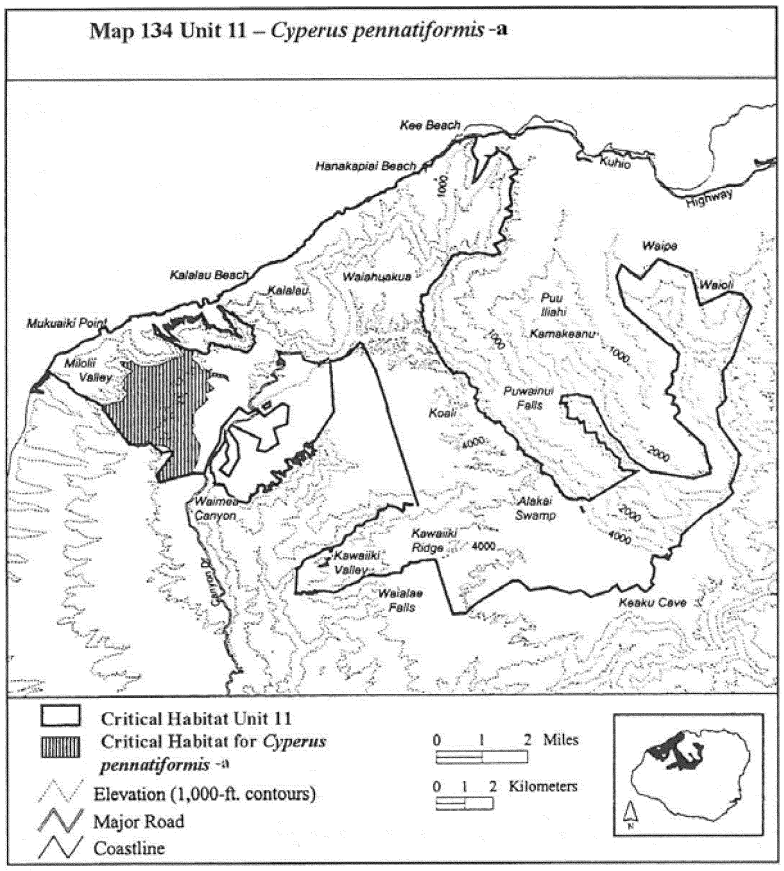
(A) [Reserved]

(B) See paragraph (a)(1)(cxli)(B) of this section for the map of this unit.

(ccxl) Kauai 11—*Cyperus pennatiformis*—a (1,003 ha; 2,479 ac)

(A) [Reserved]

(B) Map 134 follows:



(ccxli) Kauai 11–*Melicope degeneri*–b

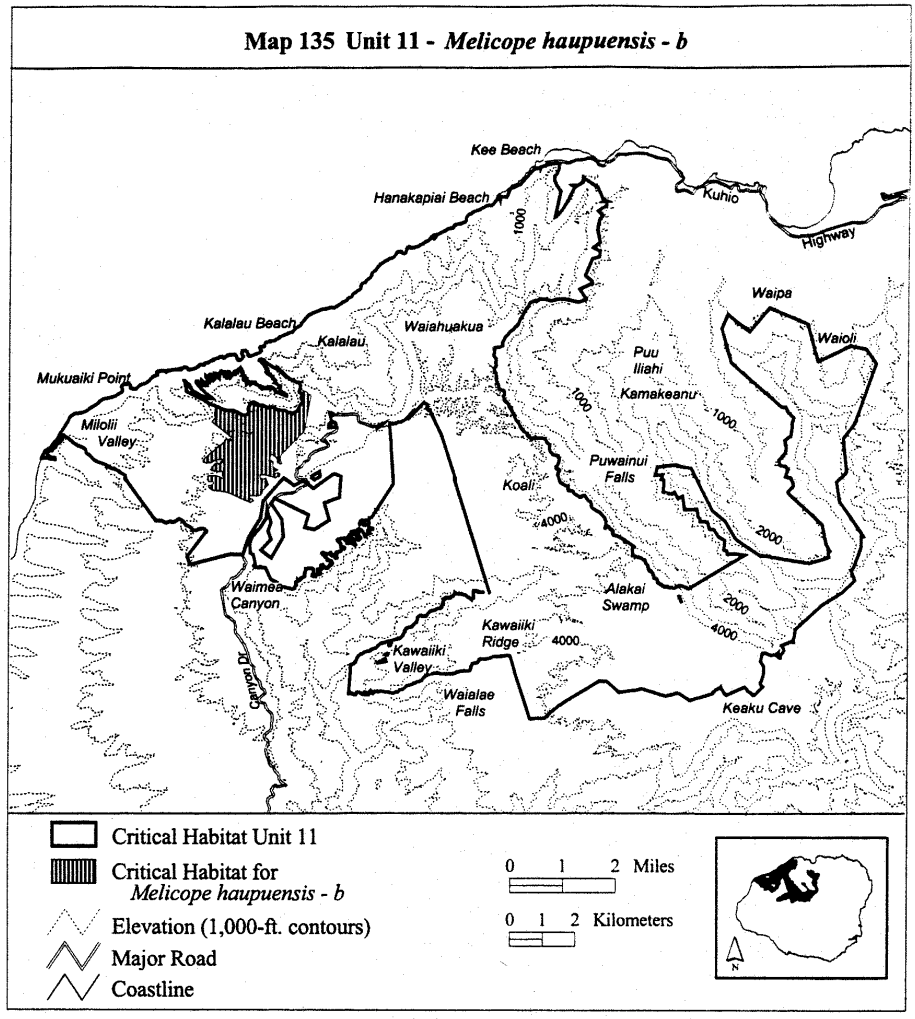
(A) [Reserved]

(B) See paragraph (a)(1)(cxxx)(B) of this section for the map of this unit.

(ccxlii) Kauai 11—*Melicope haupuensis*—b (574 ha; 1,418 ac)

(A) [Reserved]

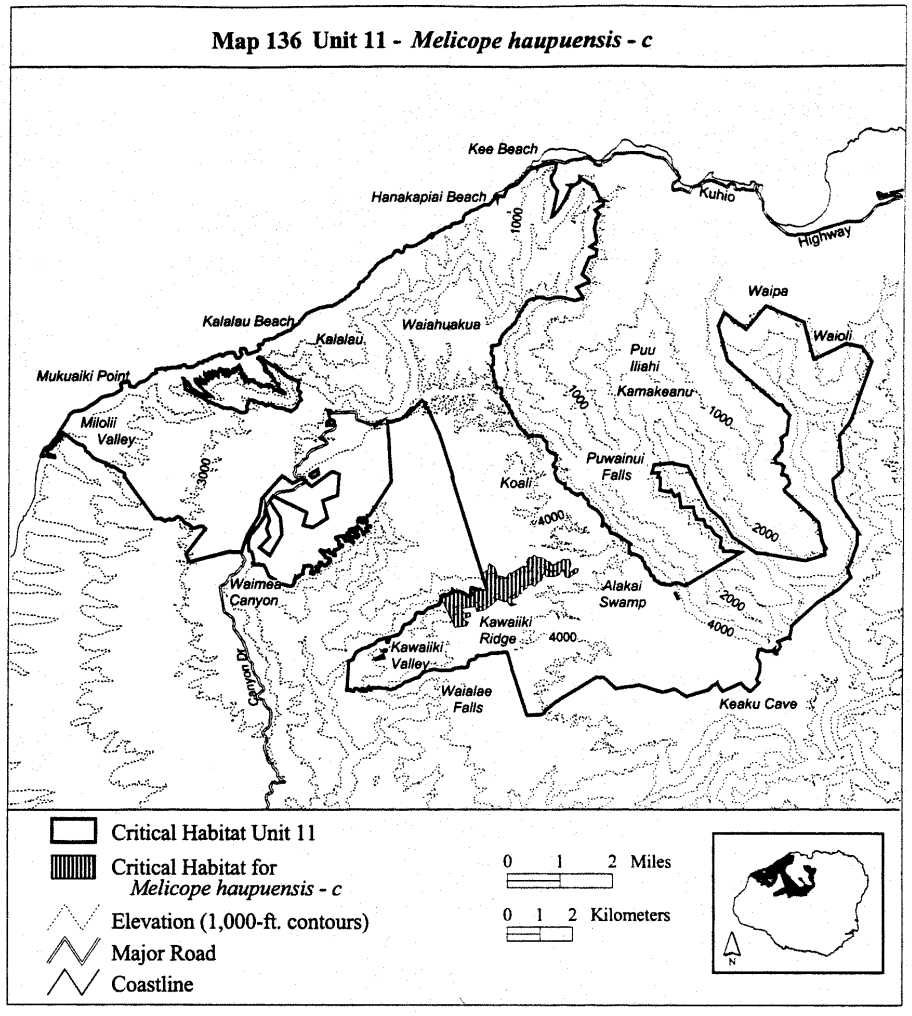
(B) Map 135 follows:



(ccxliii) Kauai 11—*Melicope haupuensis*—c (290 ha; 716 ac)

(A) [Reserved]

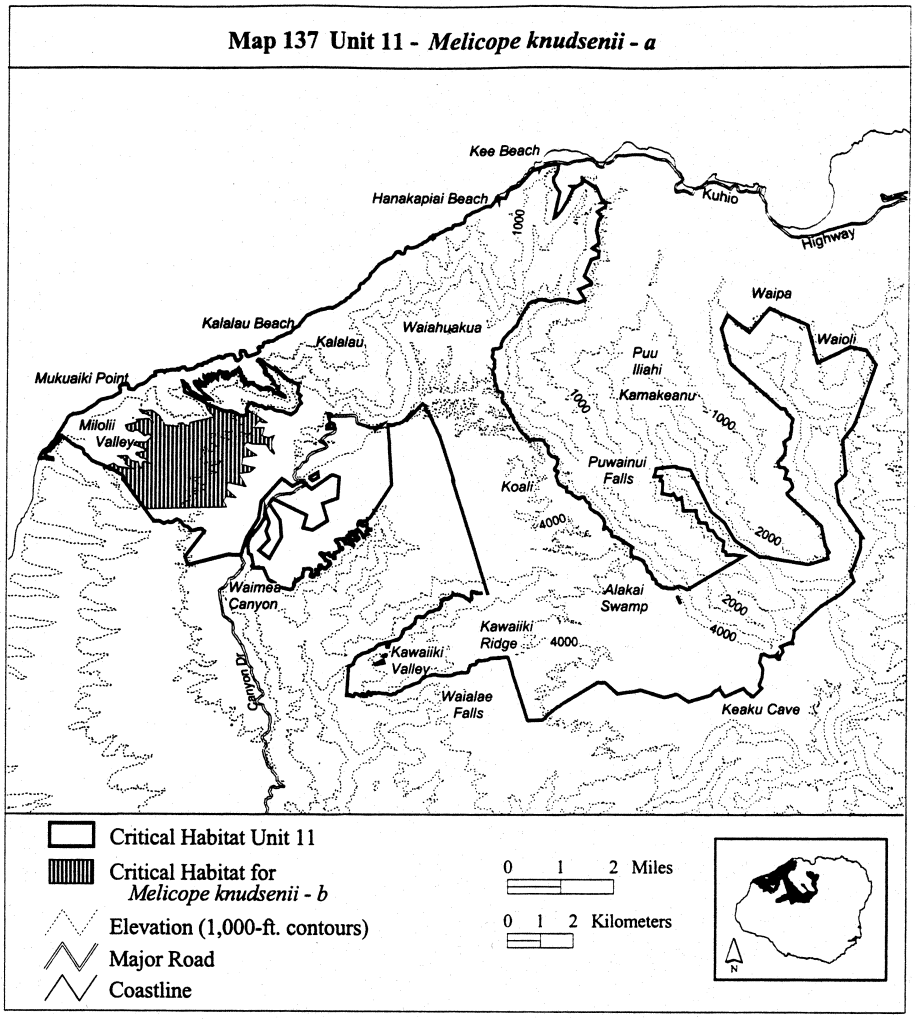
(B) Map 136 follows:



(ccxliv) Kauai 11—*Melicope knudsenii*—a (966 ha; 2,388 ac)

(A) [Resserved]

(B) Map 137 follows:



(ccxlv) Kauai 11—*Melicope knudsenii*—b (374 ha; 922 ac)

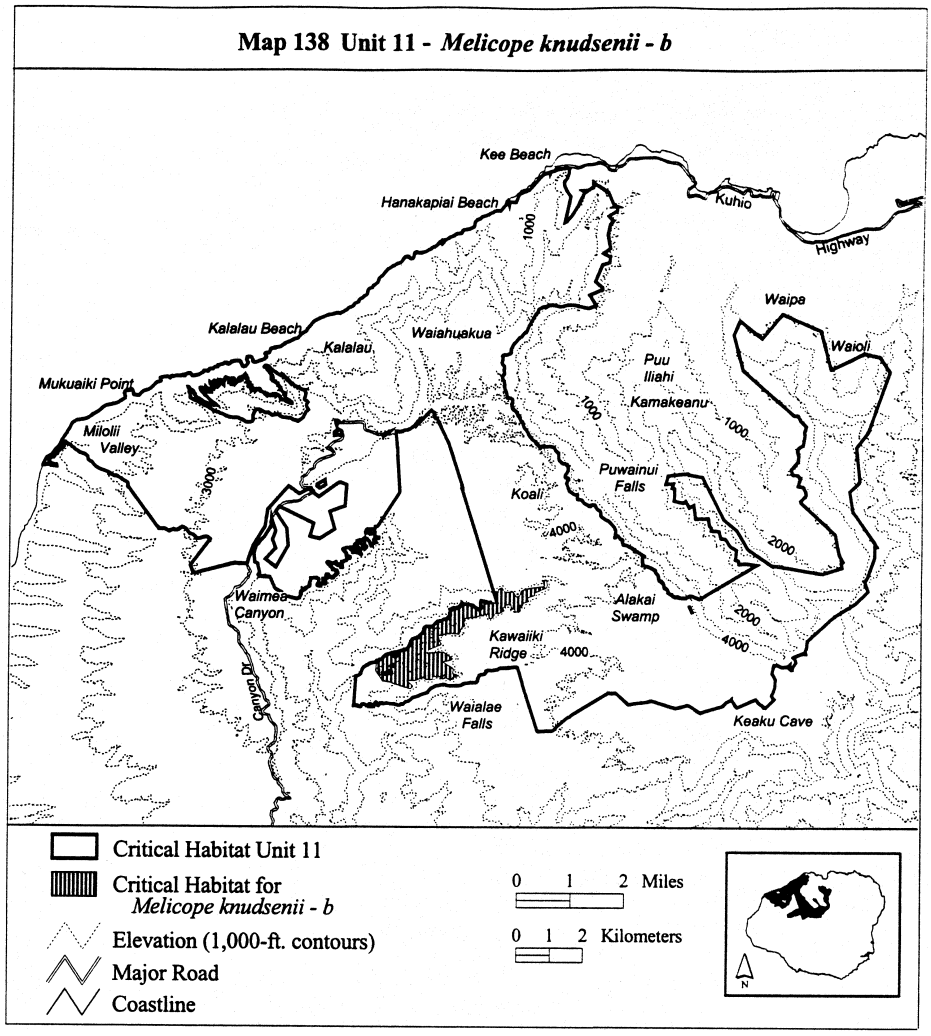
(A) [Reserved]

(B) Excluding 2 areas:

(*1*) Bounded by the following 3 points (1 ha, 3 ac): Start at 435132, 2442248; 435160, 2442164; 434848, 2442098; return to starting point; and

(*2*) Bounded by the following 4 points (0 ha, 1 ac): Start at 435151, 2442425; 435215, 2442393; 435195, 2442353; 435128, 2442379; return to starting point.

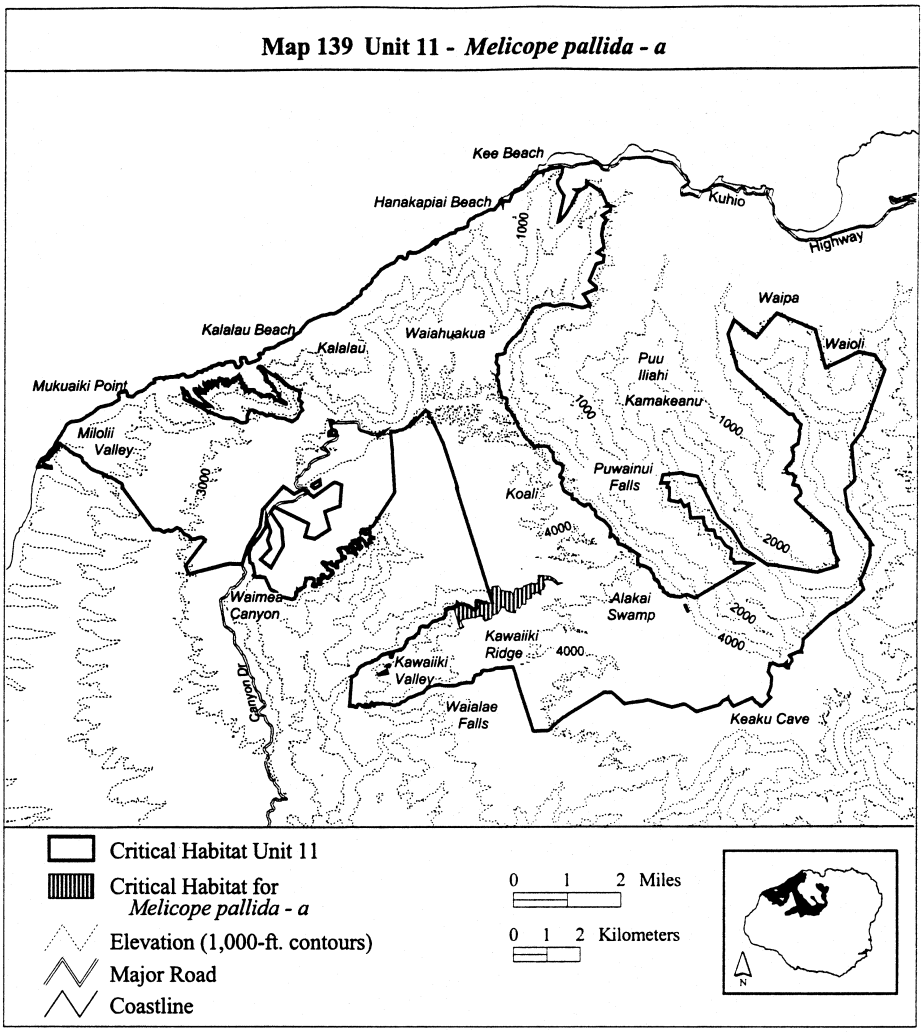
(C) Map 138 follows:



(ccxlvi) Kauai 11—*Melicope pallida*—a (143 ha, 353 ac)

(A) [Reserved]

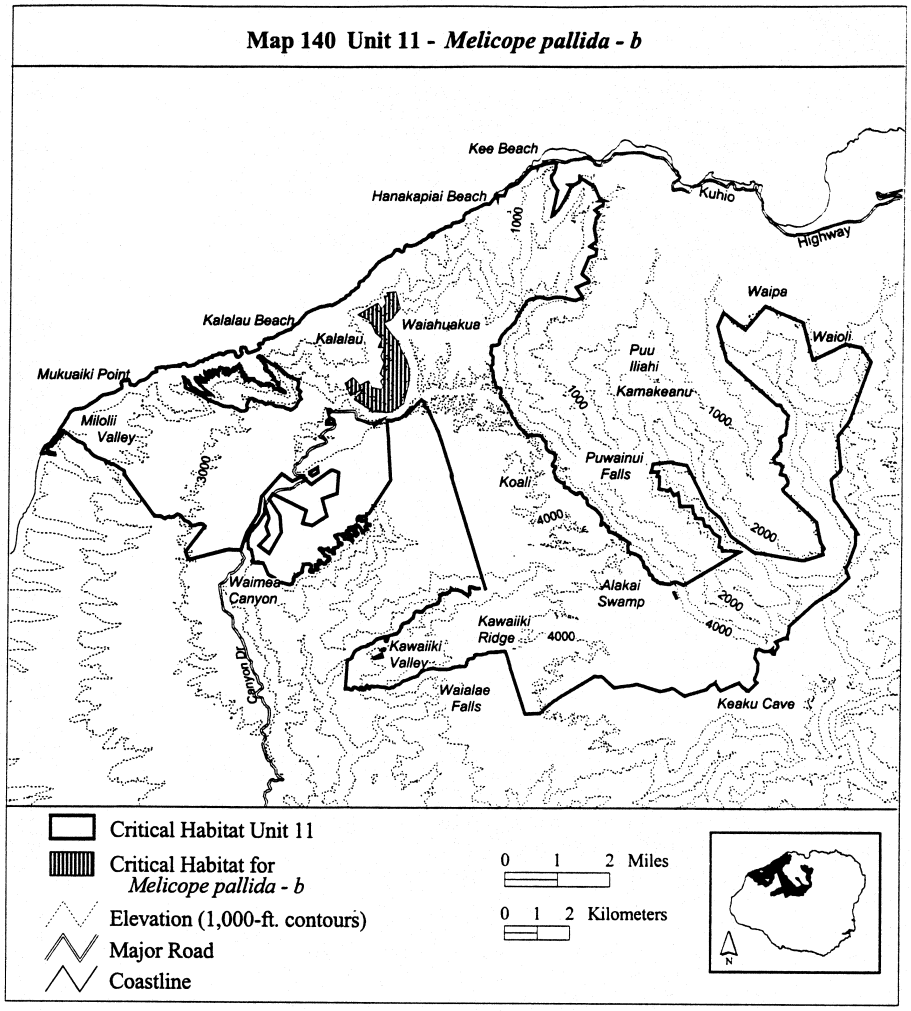
(B) Map 139 follows:



(ccxlvii) Kauai 11—*Melicope pallida*—b (310 ha; 765 ac)

(A) [Reserved]

(B) Map 140 follows:



(ccxlviii) Kauai 11–*Melicope paniculata*–b

(A) [Reserved]

(B) See paragraph (a)(1)(cxl)(B) of this section for the map of this unit.

(ccxlix) Kauai 11–*Melicope puberula*–c

(A) [Reserved]

(B) See paragraph (a)(1)(cxxx)(B) of this section for the map of this unit.

(ccl) Kauai 11–*Melicope puberula*–d

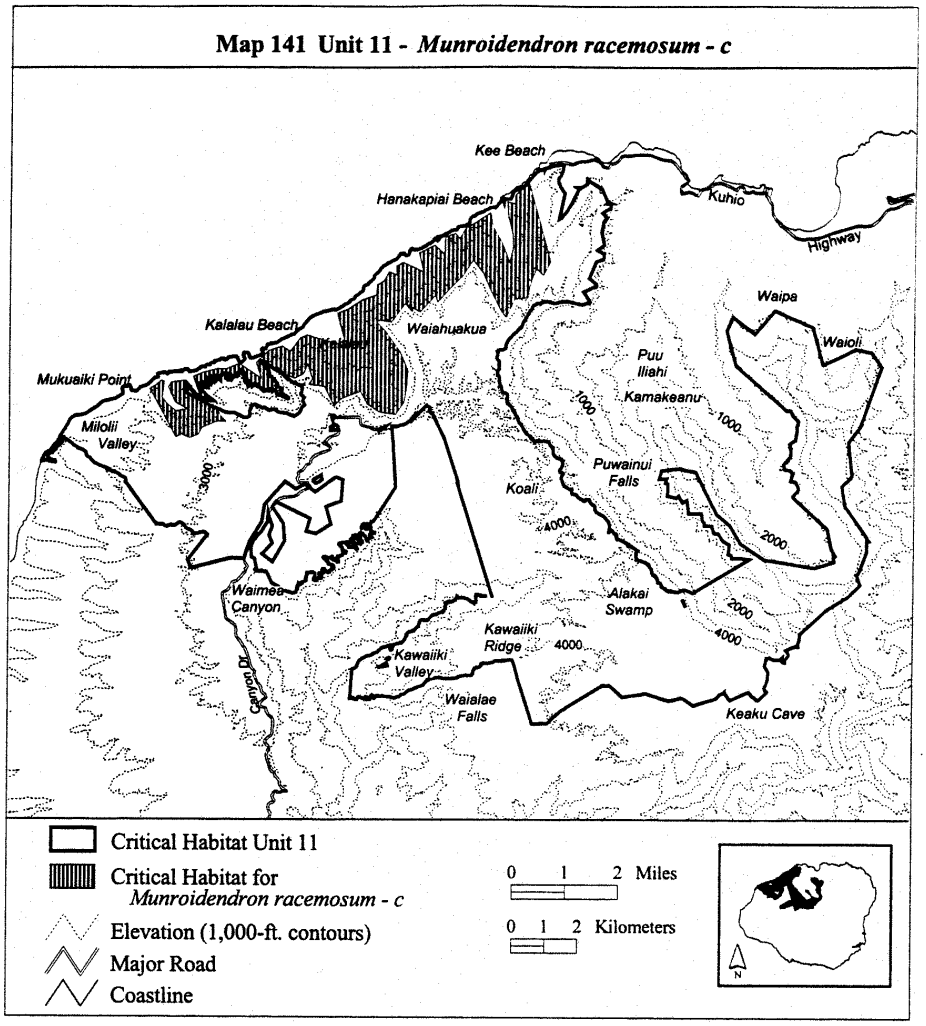
(A) [Reserved]

(B) See paragraph (a)(1)(cxl)(B) of this section for the map of this unit.

(ccli) Kauai 11—*Munroidendron racemosum*—c (1,950 ha; 4,819 ac)

(A) [Reserved]

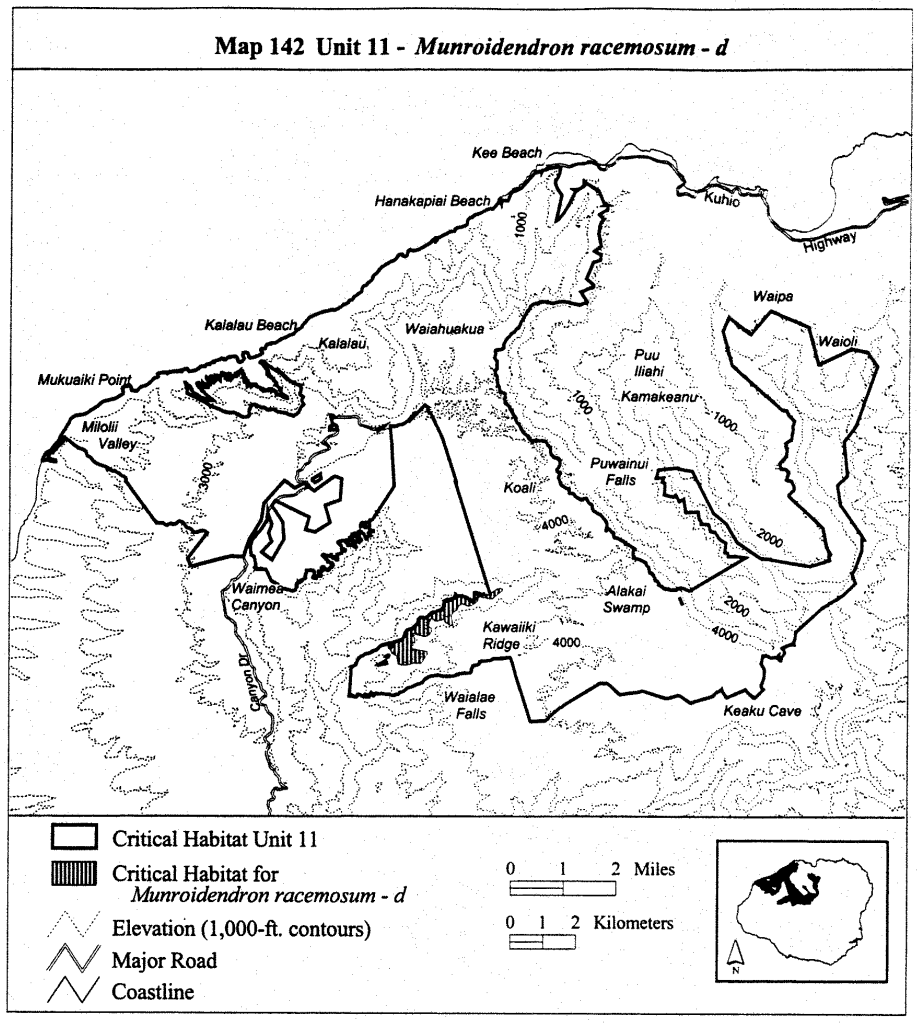
(B) Map 141 follows:



(cclii) Kauai 11—*Munroidendron racemosum*—d (153 ha; 379 ac)

(A) [Reserved]

(B) Map 142 follows:



(ccliii) Kauai 11–*Myrsine knudsenii*–a

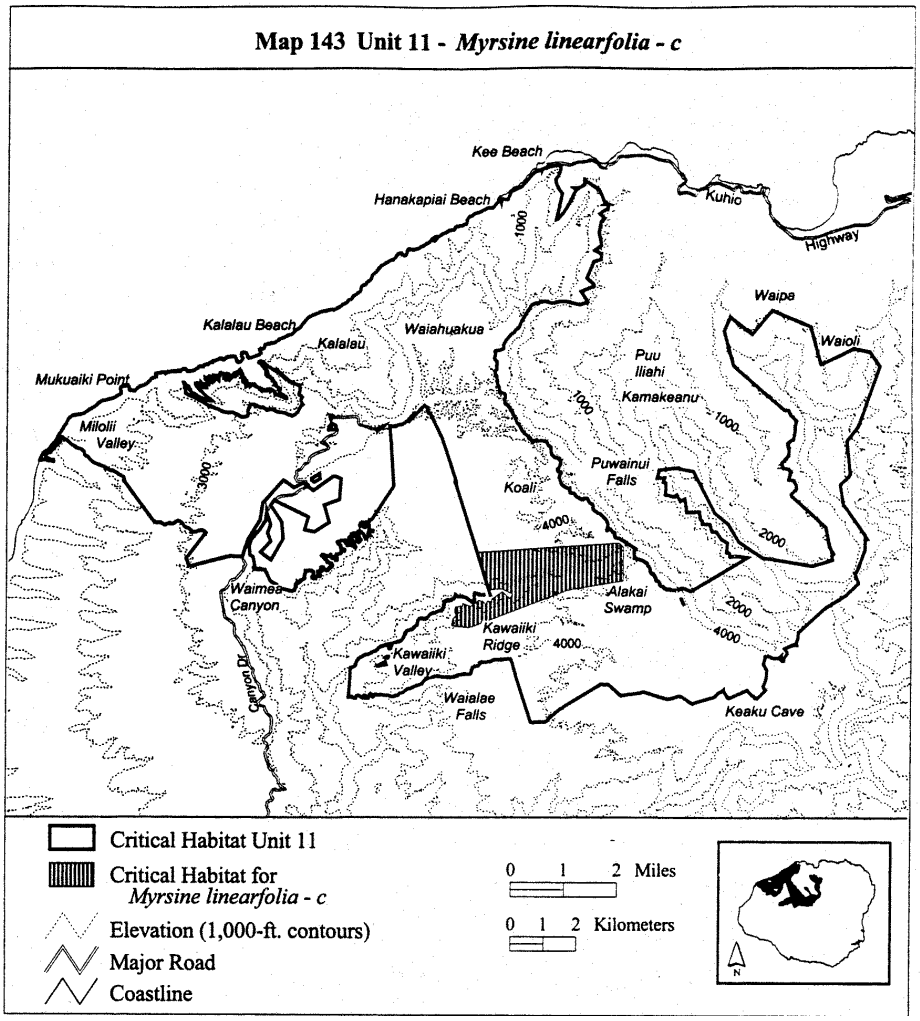
(A) [Reserved]

(B) See paragraph (a)(1)(cxlvi)(B) of this section for the map of this unit.

(ccliv) Kauai 11—*Myrsine linearifolia*—c (684 ha; 1,691 ac)

(A) [Reserved]

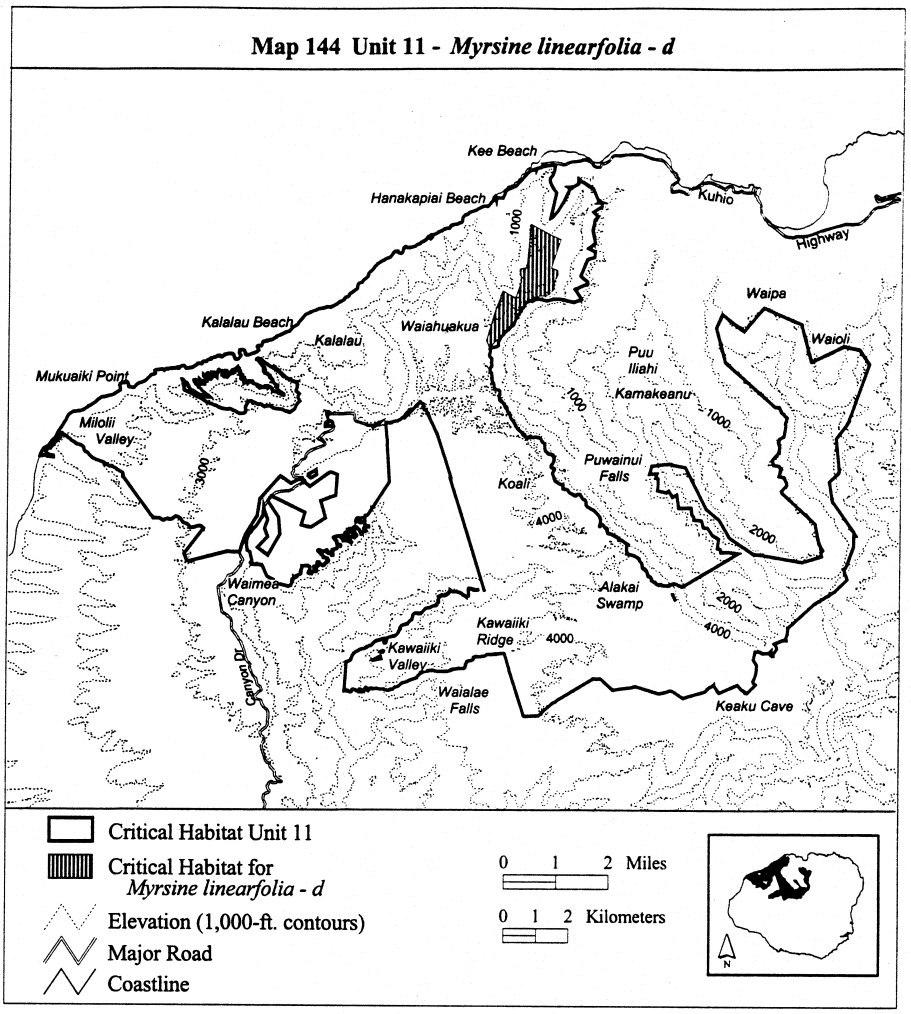
(B) Map 143 follows:



(cclv) Kauai 11—*Myrsine linearifolia*—d (286 ha; 707 ac)

(A) [Reserved]

(B) Map 144 follows:

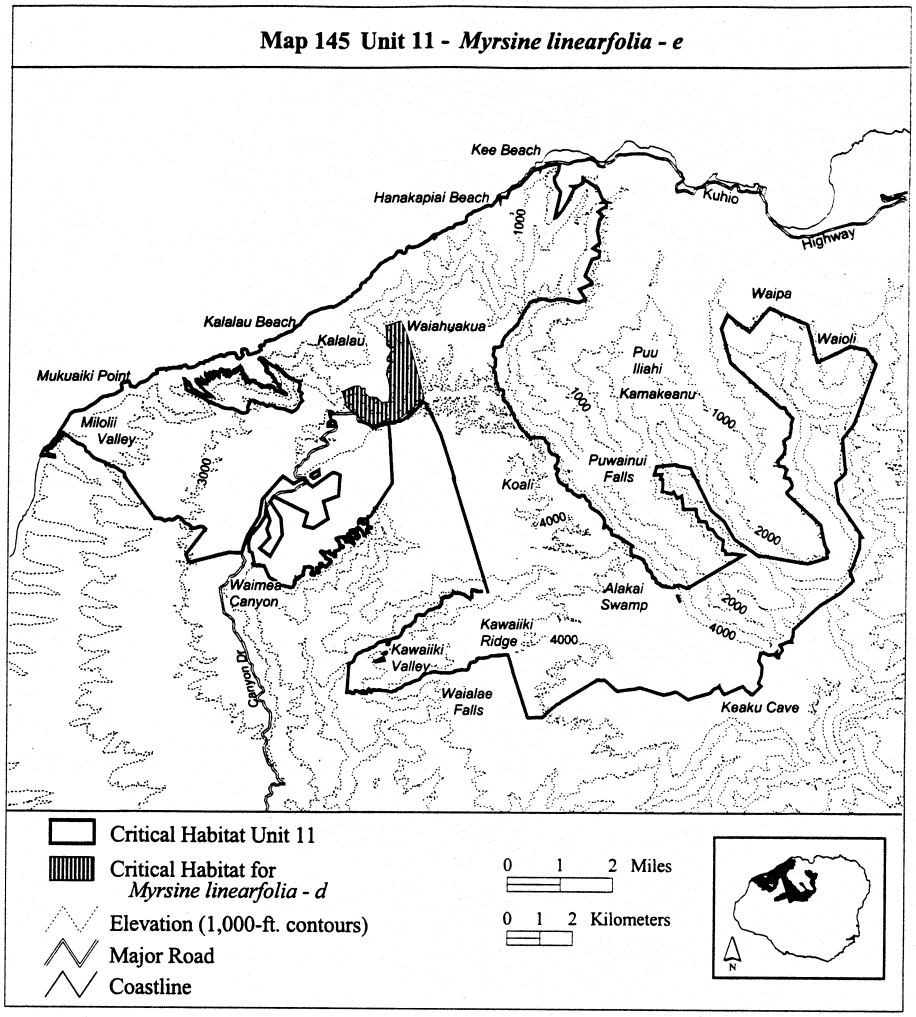


(cclvi) Kauai 11—*Myrsine linearifolia*—e (346 ha; 854 ac)

(A) [Reserved]

(B) Excluding 1 area bounded by the following 11 points (<1 ha, 1 ac): Start at 434908, 2449290; 434890, 2449251; 434848, 2449239; 434839, 2449258; 434834, 2449277; 434833, 2449281; 434881, 2449297; 435011, 2449352; 435005, 2449310; 434948, 2449300; 434908, 2449290; return to starting point.

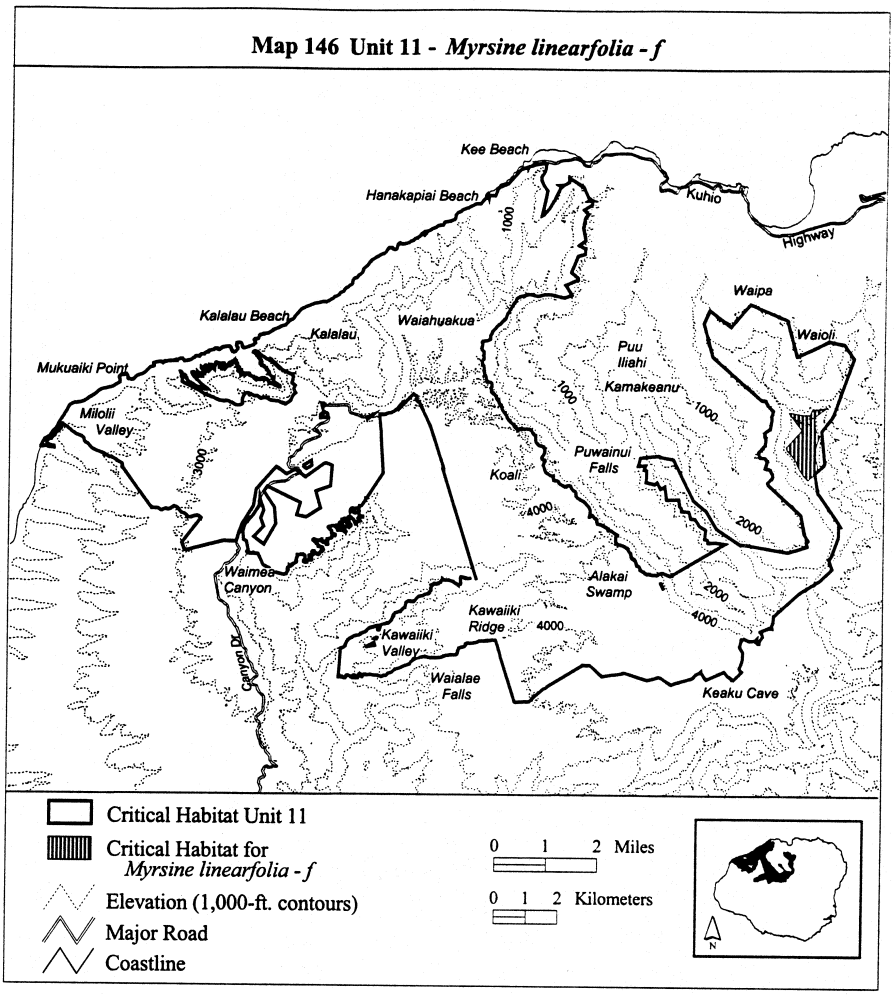
(C) Map 145 follows:



(cclvii) Kauai 11—*Myrsine linearifolia*—f (135 ha; 334 ac)

(A) [Reserved]

(B) Map 146 follows:



(cclviii) Kauai 11–*Myrsine mezii*–b

(A) [Reserved]

(B) See paragraph (a)(1)(cxxx)(B) of this section for the map of this unit.

(cclix) Kauai 11–*Myrsine mezii*–c

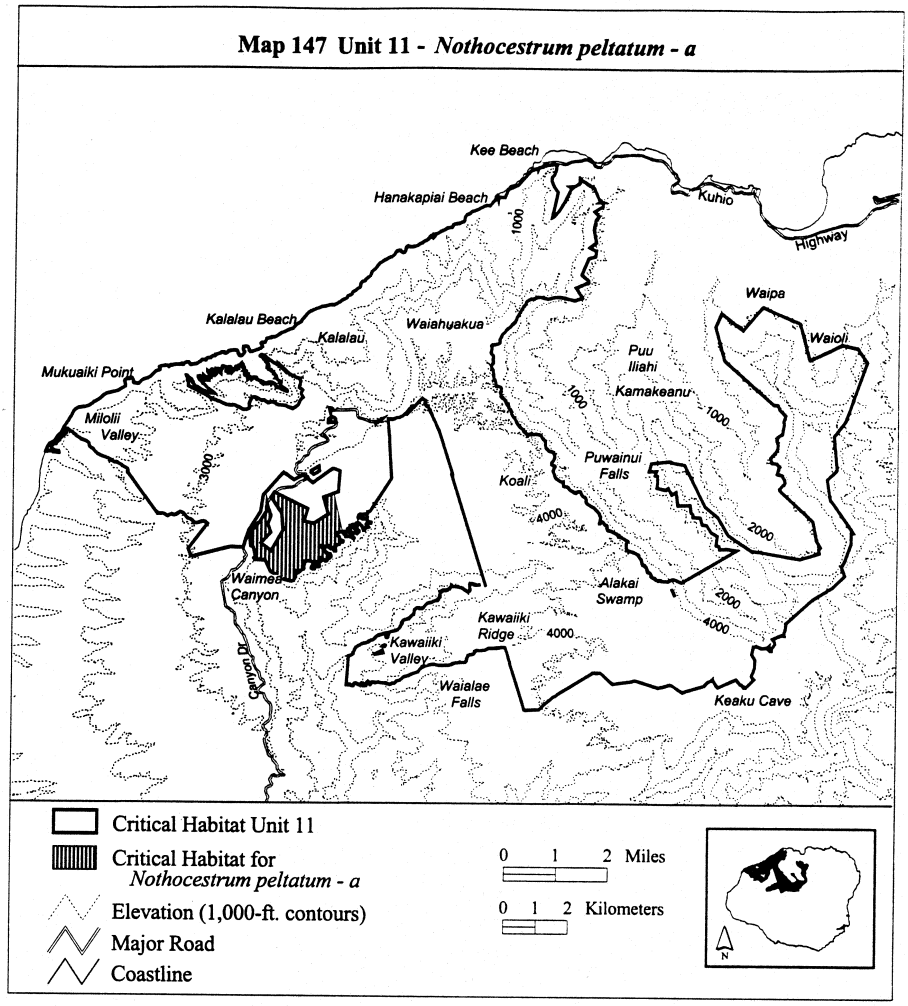
(A) [Reserved]

(B) See paragraph (a)(1)(cxlvi)(B) of this section for the map of this unit.

(cclx) Kauai 11—*Nothocestrum peltatum*—a (427 ha; 1,056 ac)

(A) [Reserved]

(B) Map 147 follows:

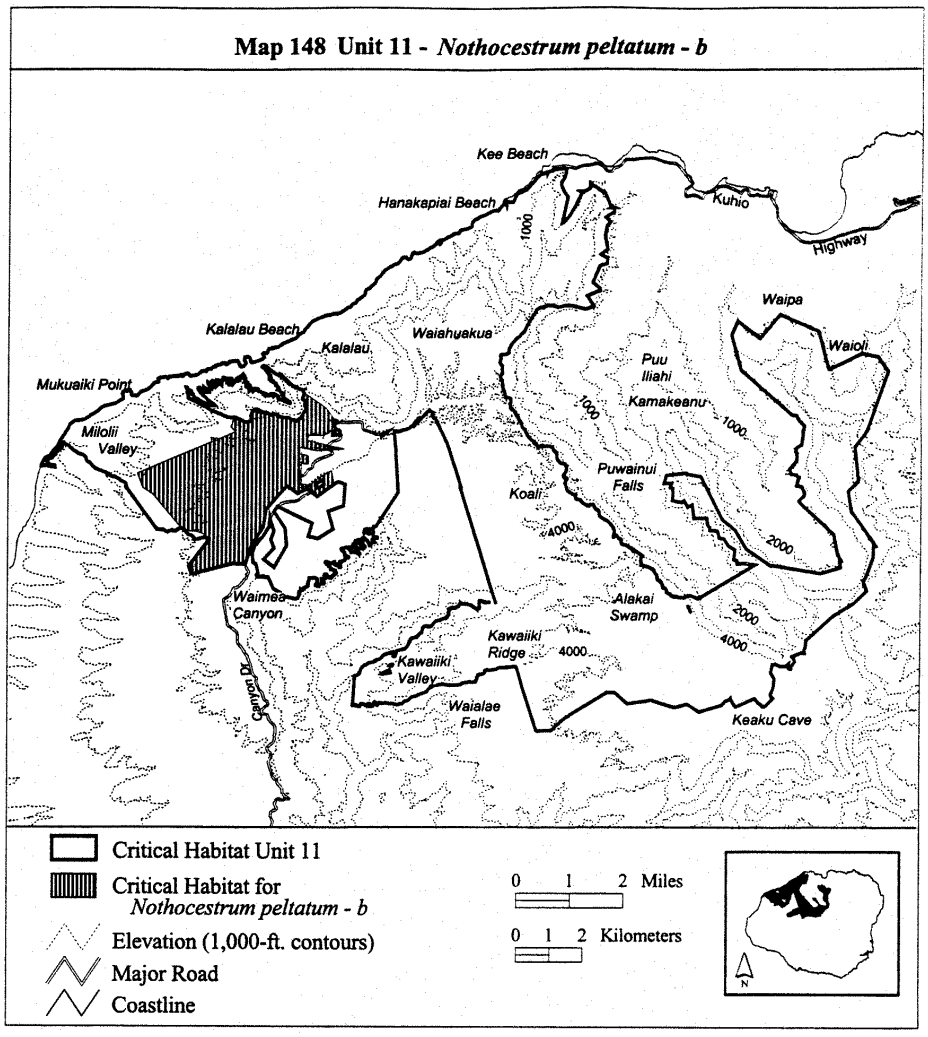


(cclxi) Kauai 11—*Nothocestrum peltatum*—b (1,464 ha; 3,617 ac)

(A) [Reserved]

(B) Excluding 1 area bounded by the following 4 points (3 ha, 8 ac): Start at 433109, 2447775; 432932, 2447668; 432827, 2447751; 433094, 2447922; return to starting point.

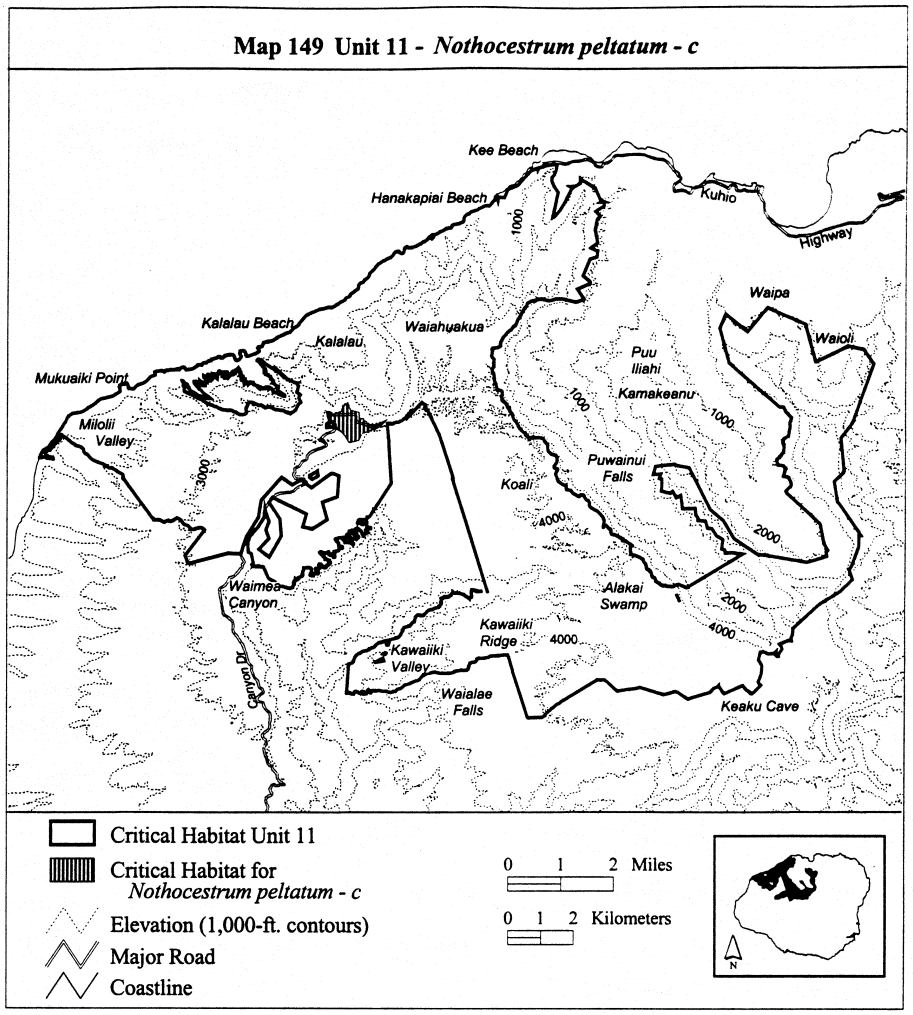
(C) Map 148 follows:



(cclxii) Kauai 11—*Nothocestrum peltatum*—c (80 ha; 198 ac)

(A) [Reserved]

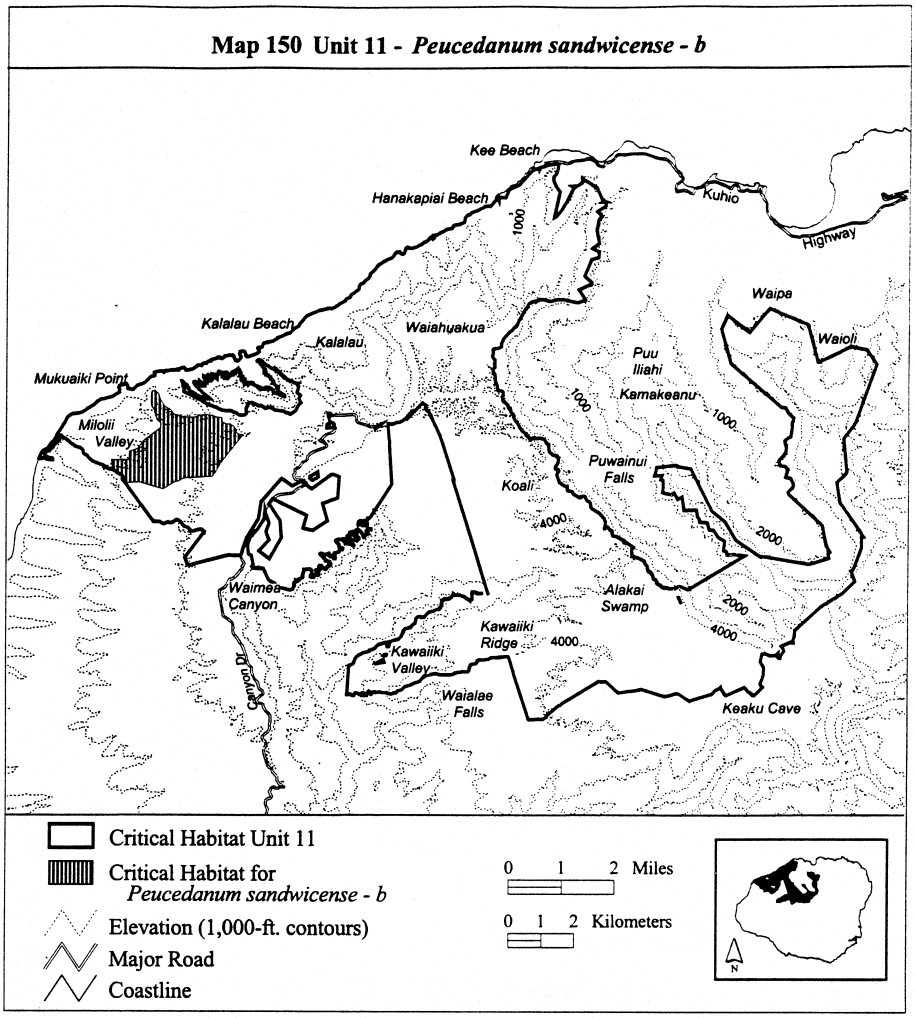
(B) Map 149 follows:



(cclxiii) Kauai 11—*Peucedanum sandwicense*—b (579 ha; 1,430 ac)

(A) [Reserved]

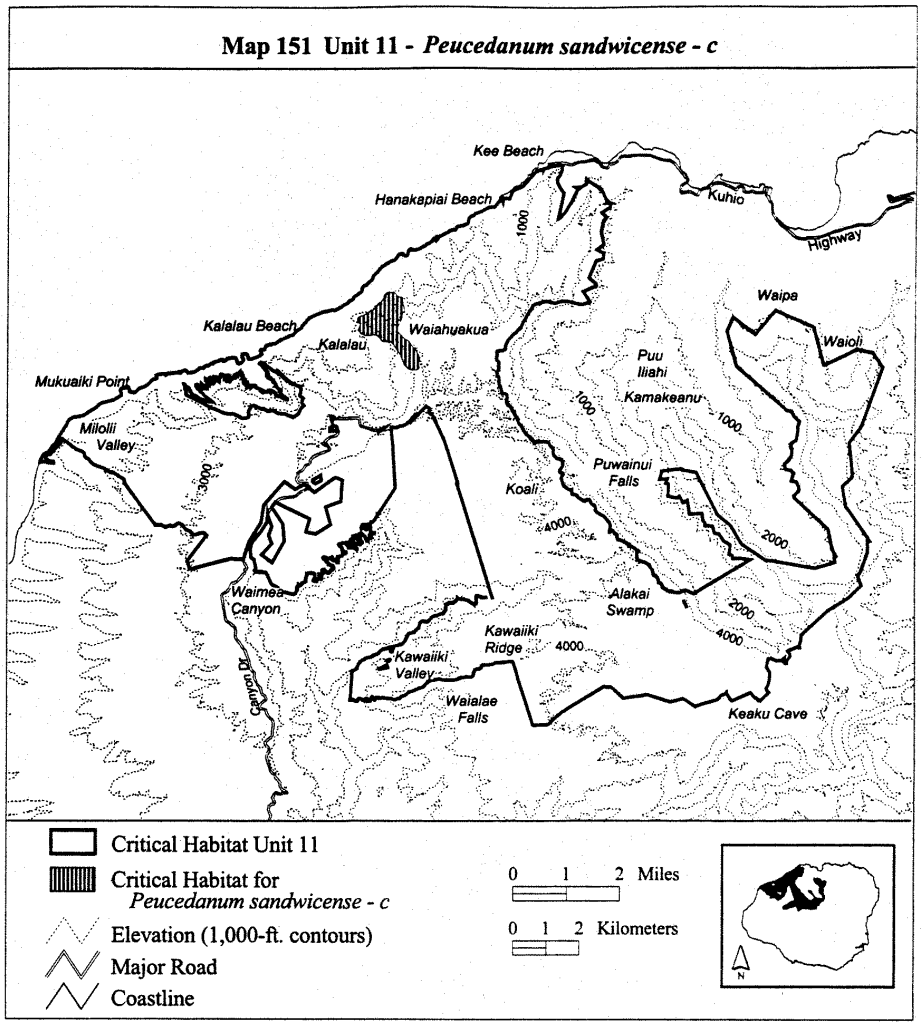
(B) Map 150 follows:



(cclxiv) Kauai 11—*Peucedanum sandwicense*—c (181 ha; 447 ac)

(A) [Reserved]

(B) Map 151 follows:

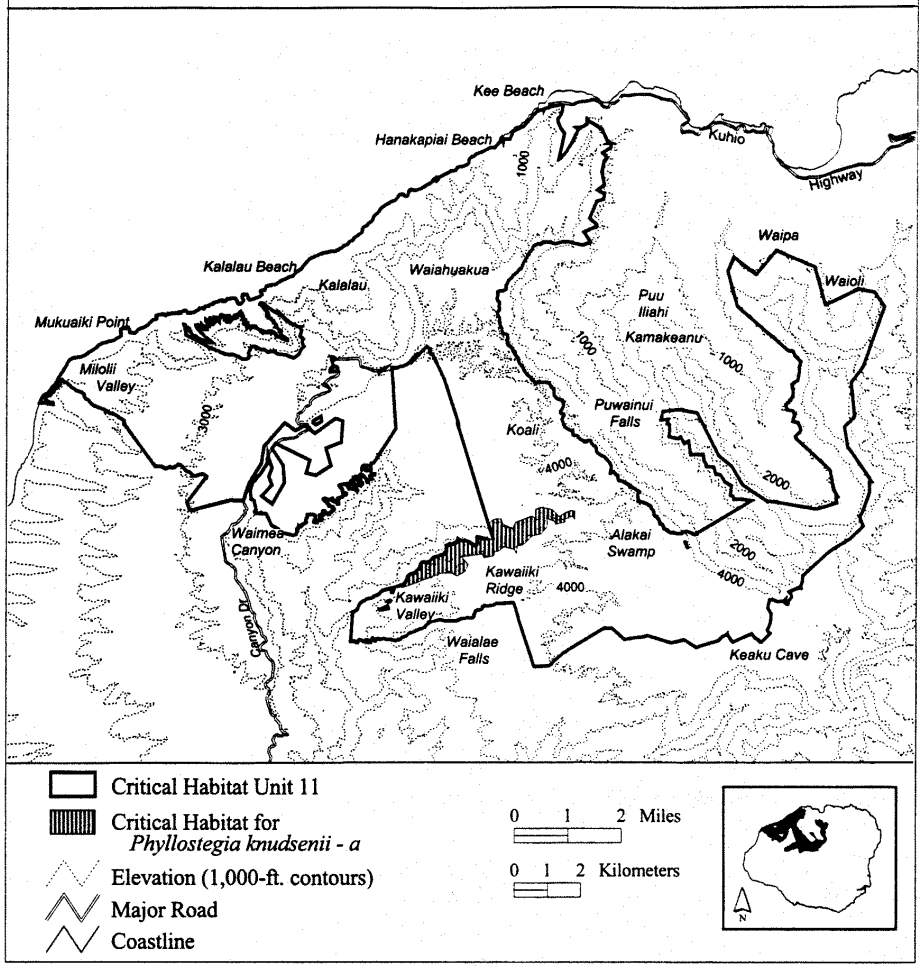


(cclxv) Kauai 11—*Phyllostegia knudsenii*—a (297 ha, 735 ac)

(A) [Reserved]

(B) Map 152 follows:

Map 152 Unit 11 - *Phyllostegia knudsenii - a*



(cclxvi) Kauai 11–*Phyllostegia renovans*–c

(A) [Reserved]

(B) See paragraph (a)(1)(cxxx)(B) of this section for the map of this unit.

(cclxvii) Kauai 11–*Phyllostegia renovans*–d

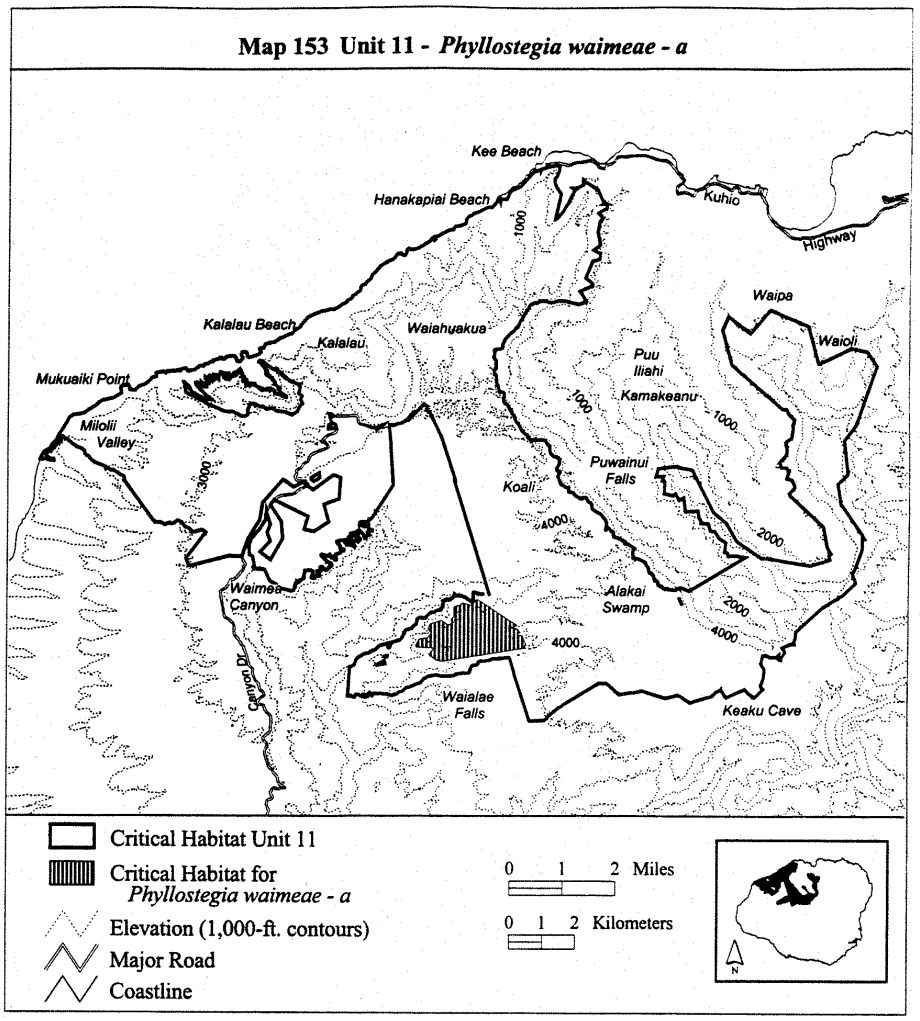
(A) [Reserved]

(B) See paragraph (a)(1)(cxl)(B) of this section for the map of this unit.

(cclxviii) Kauai 11—*Phyllostegia waimeae*—a (364 ha; 901 ac)

(A) [Reserved]

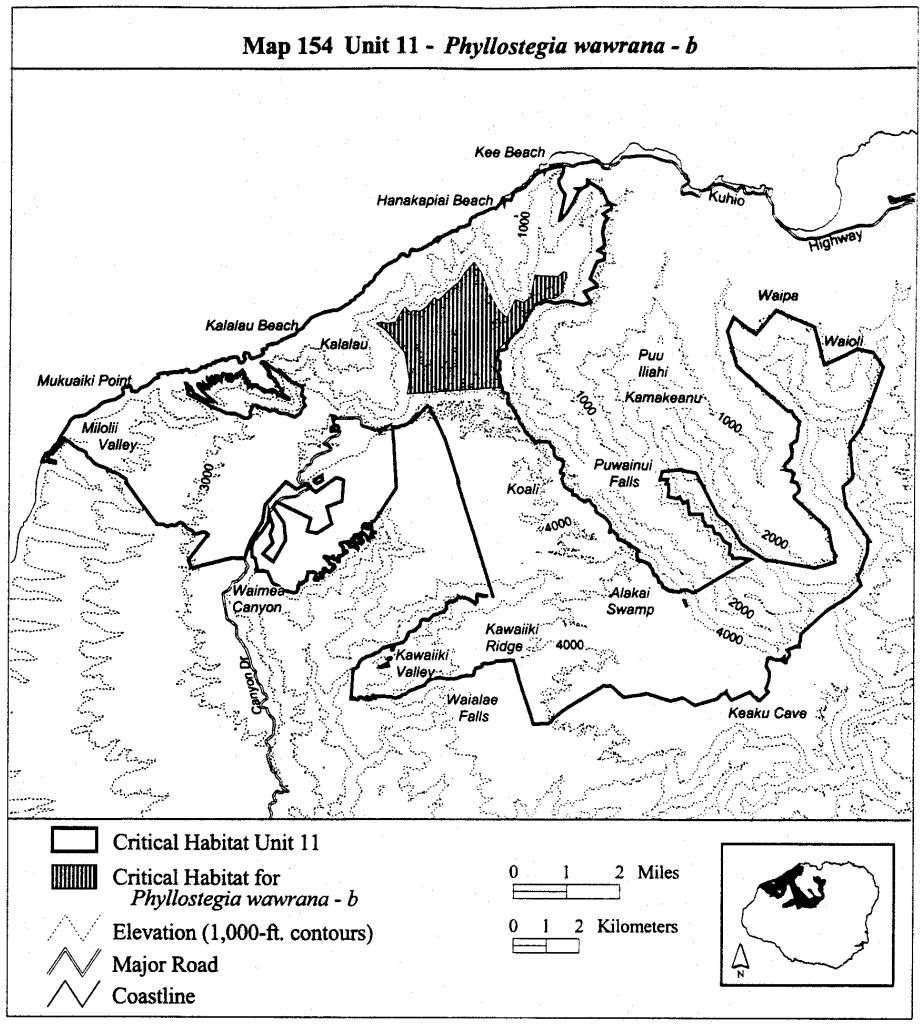
(B) Map 153 follows:



(cclxix) Kauai 11—*Phyllostegia wawrana*—b (1,037 ha; 2,562 ac)

(A) [Reserved]

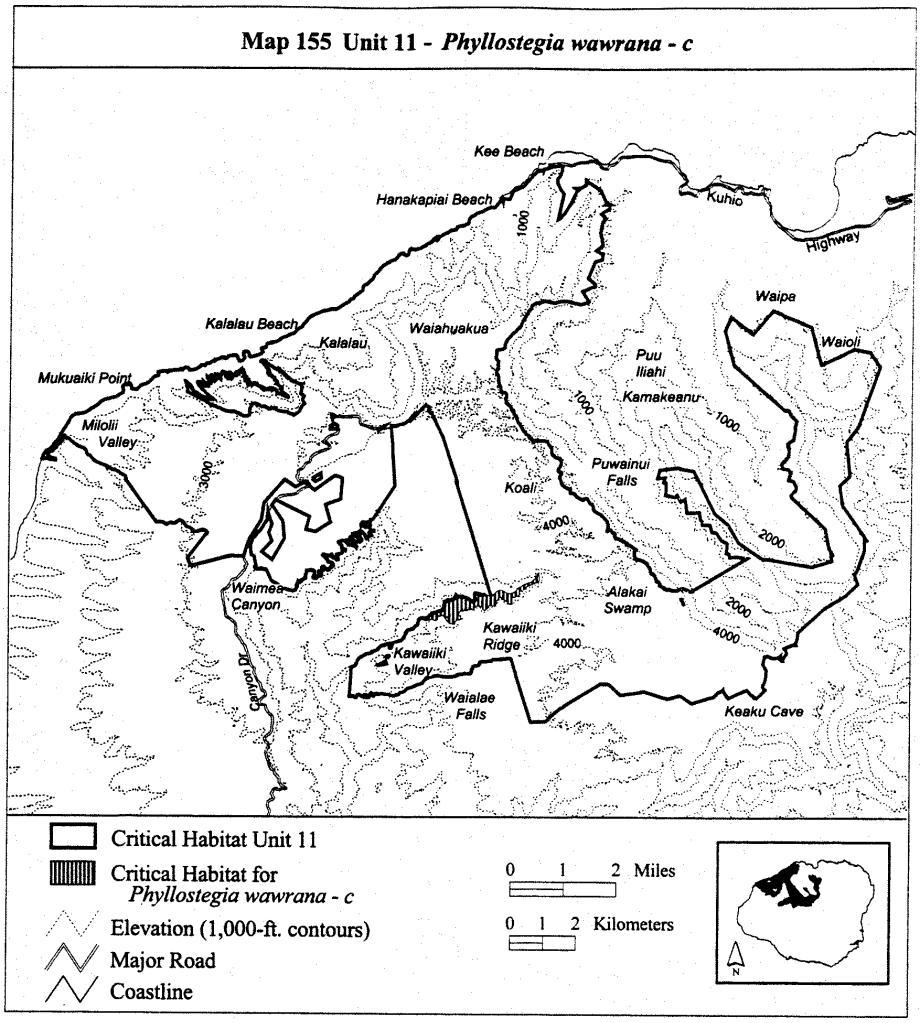
(B) Map 154 follows:



(cclxx) Kauai 11—*Phyllostegia wawrana*—c (108 ha; 268 ac)

(A) [Reserved]

(B) Map 155 follows:

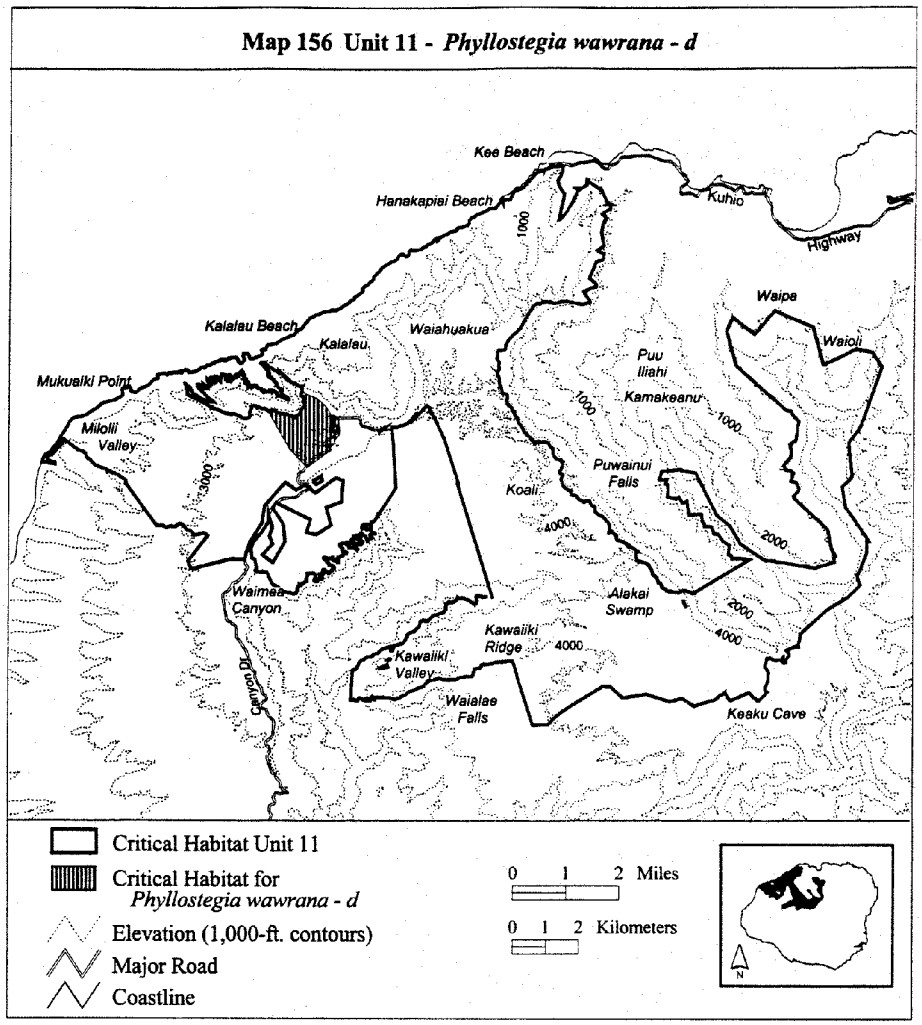


(cclxxi) Kauai 11—*Phyllostegia wawrana*—d (251 ha; 619 ac)

(A) [Reserved]

(B) Excluding 1 area bounded by the following 10 points (3 ha, 8 ac): Start at 433368, 2449292; 433367, 2449352; 433448, 2449426; 433546, 2449412; 433567, 2449398; 433589, 2449323; 433612, 2449262; 433588, 2449244; 433567, 2449260; 433369, 2449255; return to starting point.

(C) Map 156 follows:



(cclxxii) Kauai 11–*Pittosporum napaliense*–b

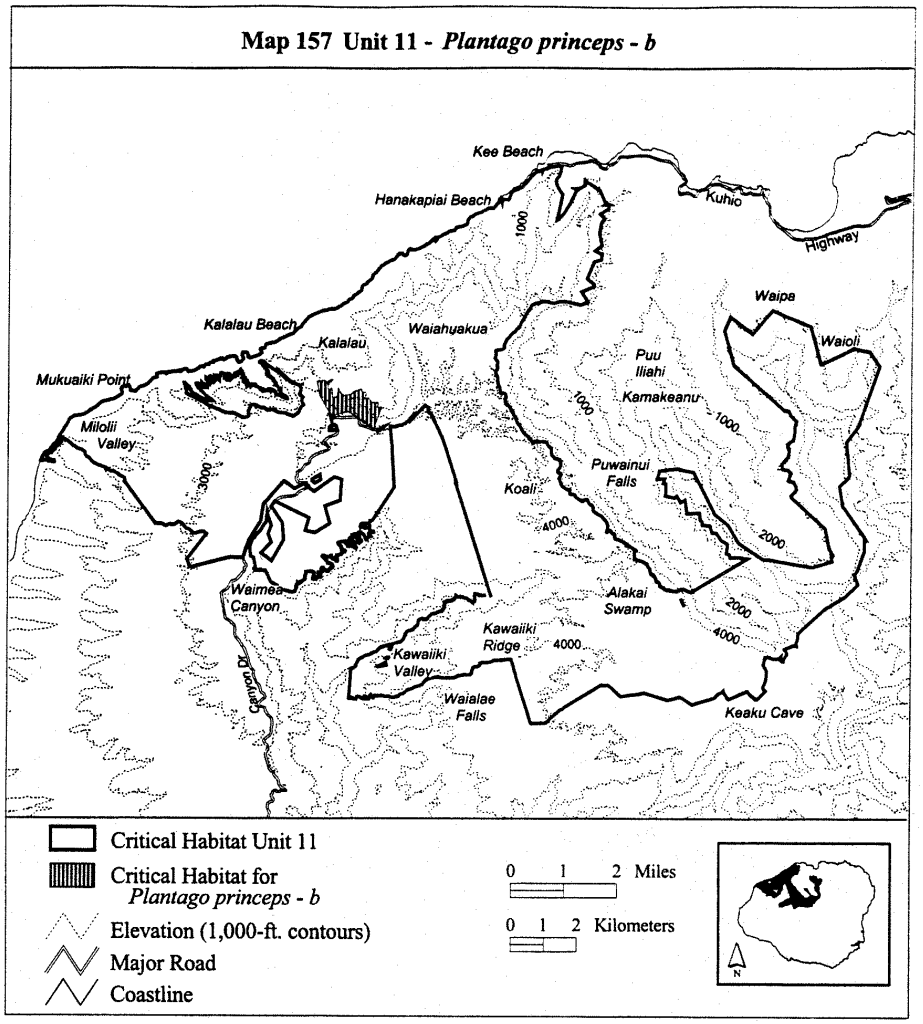
(A) [Reserved]

(B) See paragraph (a)(1)(cxxxiii)(B) of this section for the map of this unit.

(cclxxiii) Kauai 11—*Plantago princeps*—b (126 ha; 312 ac)

(A) [Reserved]

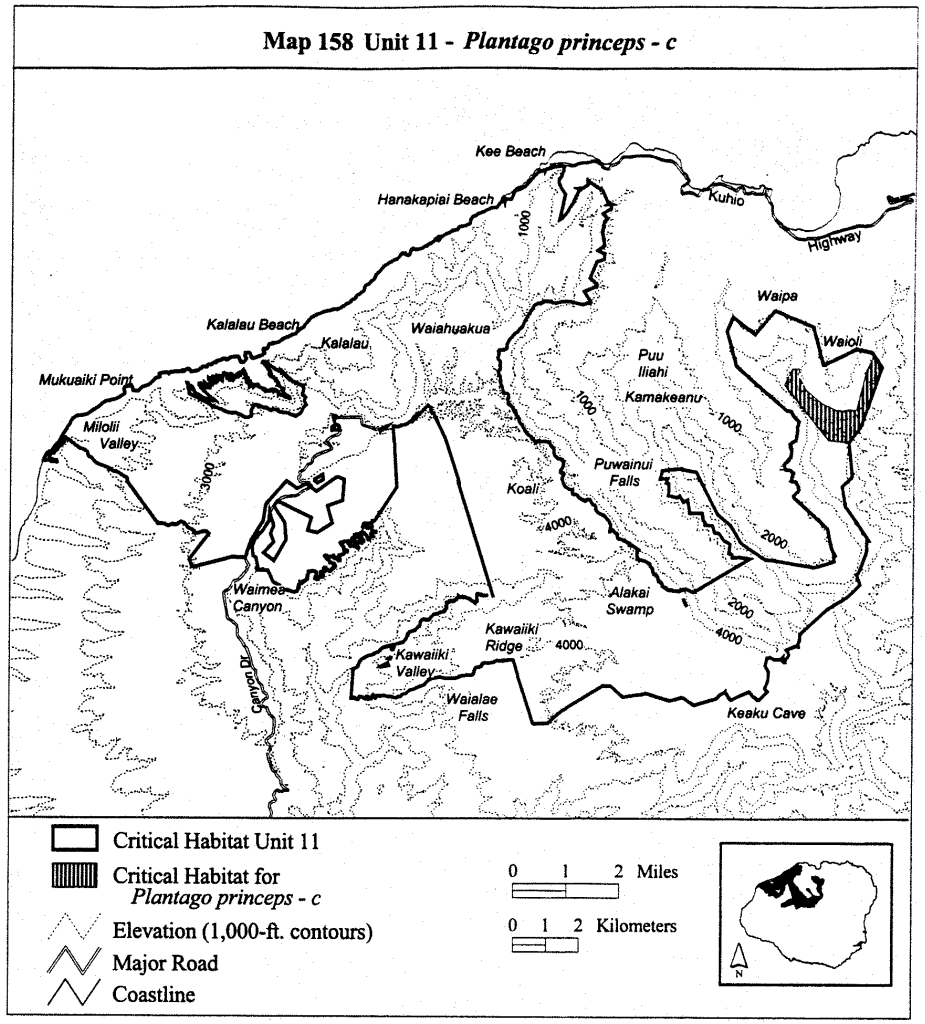
(B) Map 157 follows:



(cclxxiv) Kauai 11—*Plantago princeps*—c (244 ha; 603 ac)

(A) [Reserved]

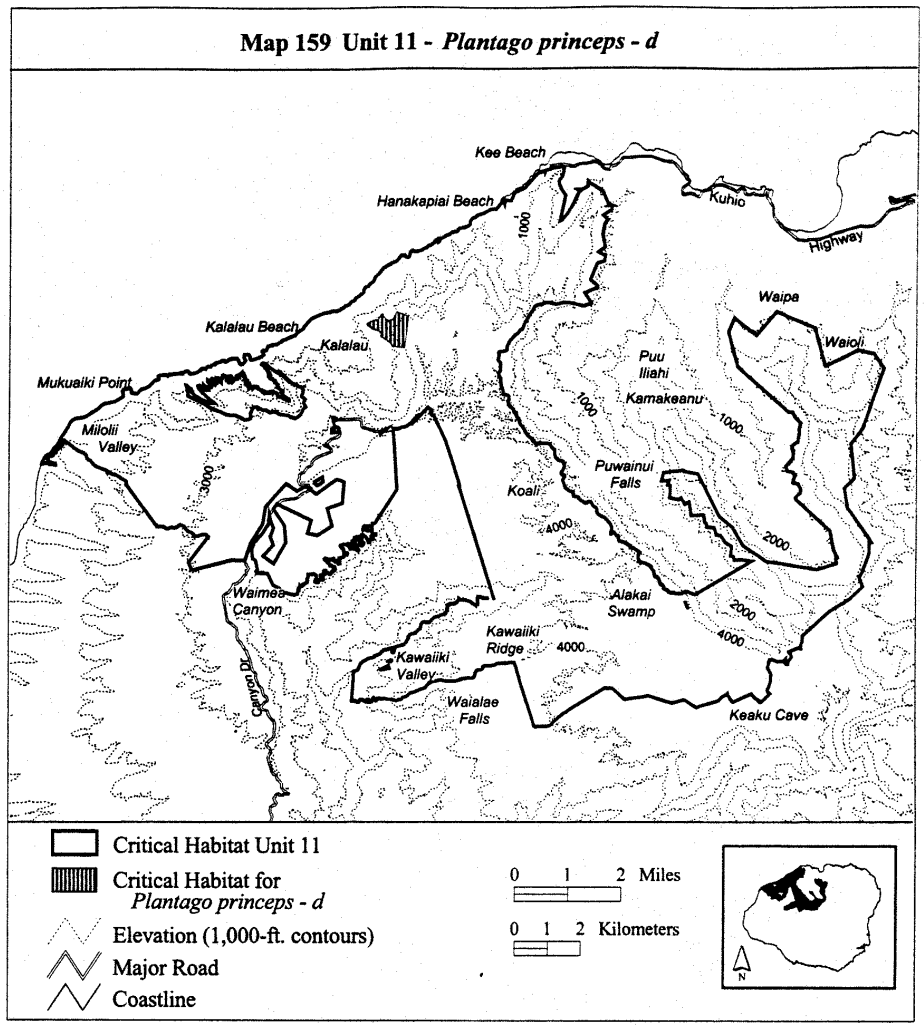
(B) Map 158 follows:



(cclxxv) Kauai 11—*Plantago princeps*—d (77 ha; 189 ac)

(A) [Reserved]

(B) Map 159 follows:

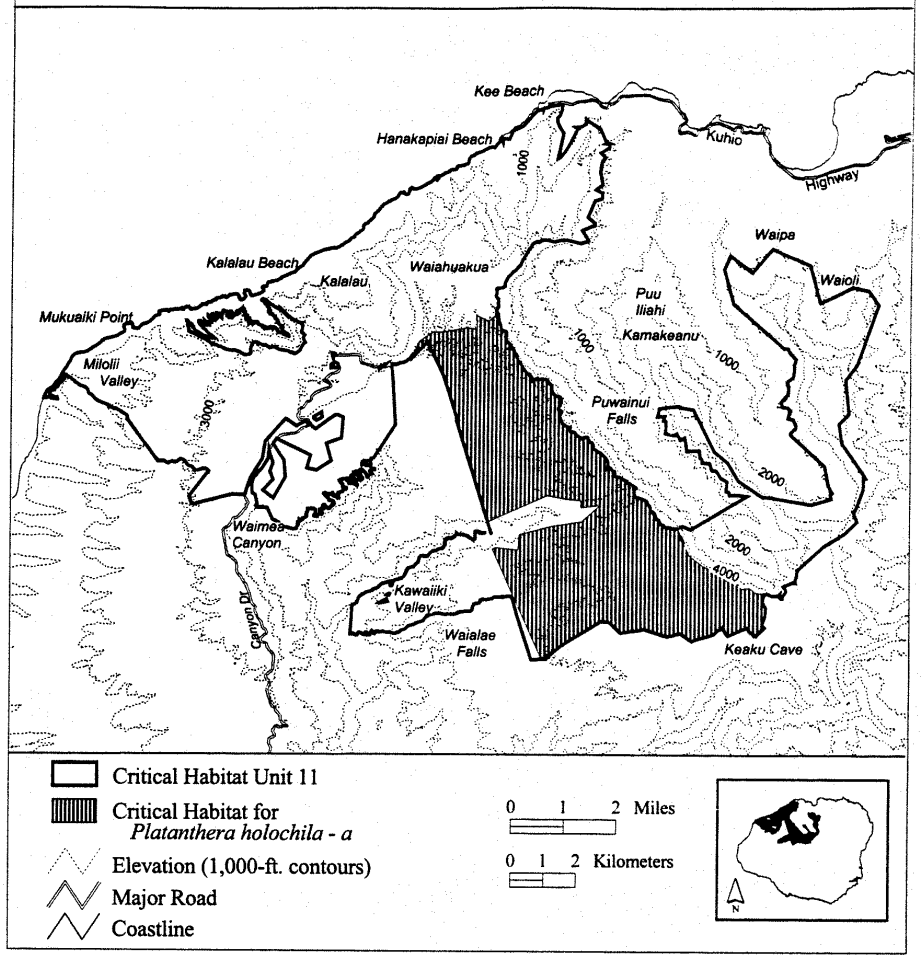


(cclxxvi) Kauai 11—*Platanthera holochila*—a (4,149 ha; 10,253 ac)

(A) [Reserved]

(B) Map 160 follows:

Map 160 Unit 11 - *Platanthera holochila - a*



(cclxxvii) Kauai 11–*Platydesma rostrata*–f

(A) [Reserved]

(B) See paragraph (a)(1)(cxxx)(B) of this section for the map of this unit.

(cclxxviii) Kauai 11–*Platydesma rostrata*–g

(A) [Reserved]

(B) See paragraph (a)(1)(cxxxiii)(B) of this section for the map of this unit.

(cclxxix) Kauai 11–*Platydesma rostrata*–h

(A) [Reserved]

(B) See paragraph (a)(1)(cxl)(B) of this section for the map of this unit.

(cclxxx) Kauai 11–*Platydesma rostrata*–i

(A) [Reserved]

(B) See paragraph (a)(1)(cxli)(B) of this section for the map of this unit.

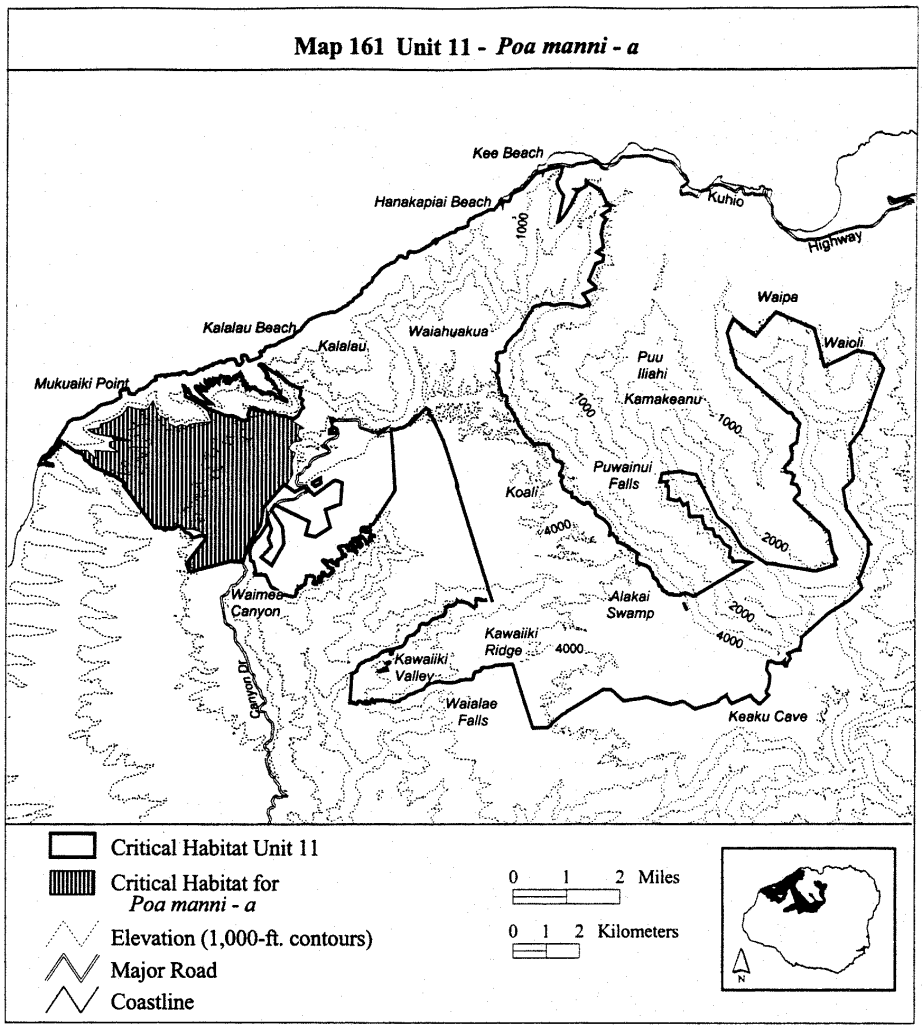
(cclxxxi) Kauai 11–*Platydesma rostrata*–j

(A) [Reserved]

(B) See paragraph (a)(1)(cxlvi)(B) of this section for the map of this unit.

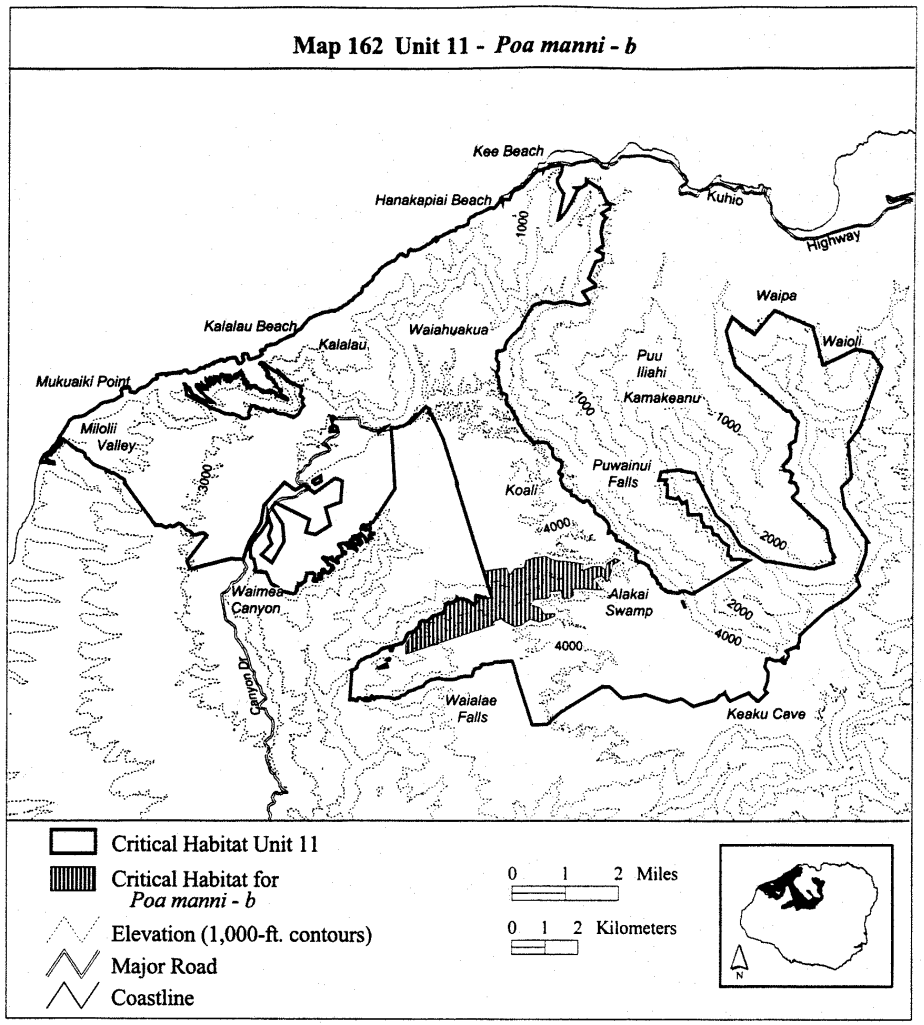
(cclxxxii) Kauai 11—*Poa mannii*—a (1,871 ha; 4,624 ac)

(A) [Reserved]
(B) Map 161 follows:



(cclxxxiii) Kauai 11—*Poa mannii*—b (677 ha; 1,673 ac)

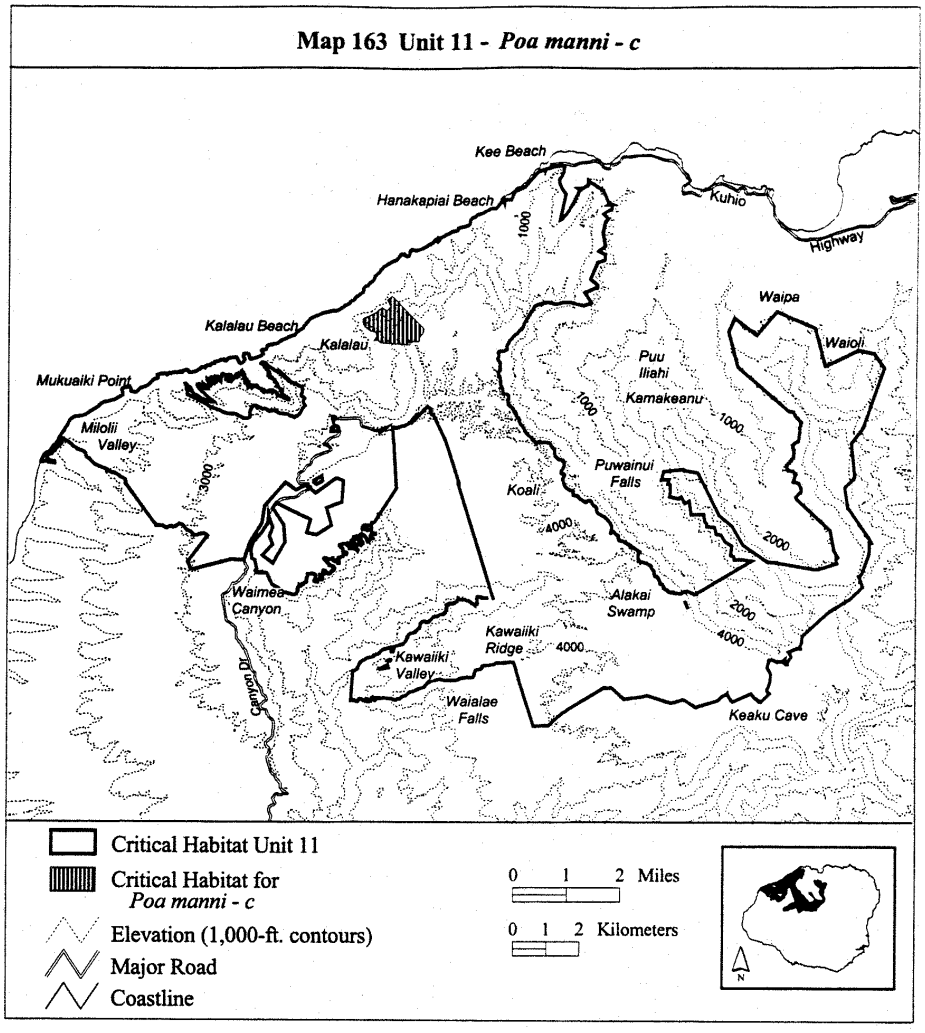
(A) [Reserved]
(B) Map 162 follows:



(cclxxxiv) Kauai 11—*Poa mannii*—c (155 ha; 382 ac)

(A) [Reserved]

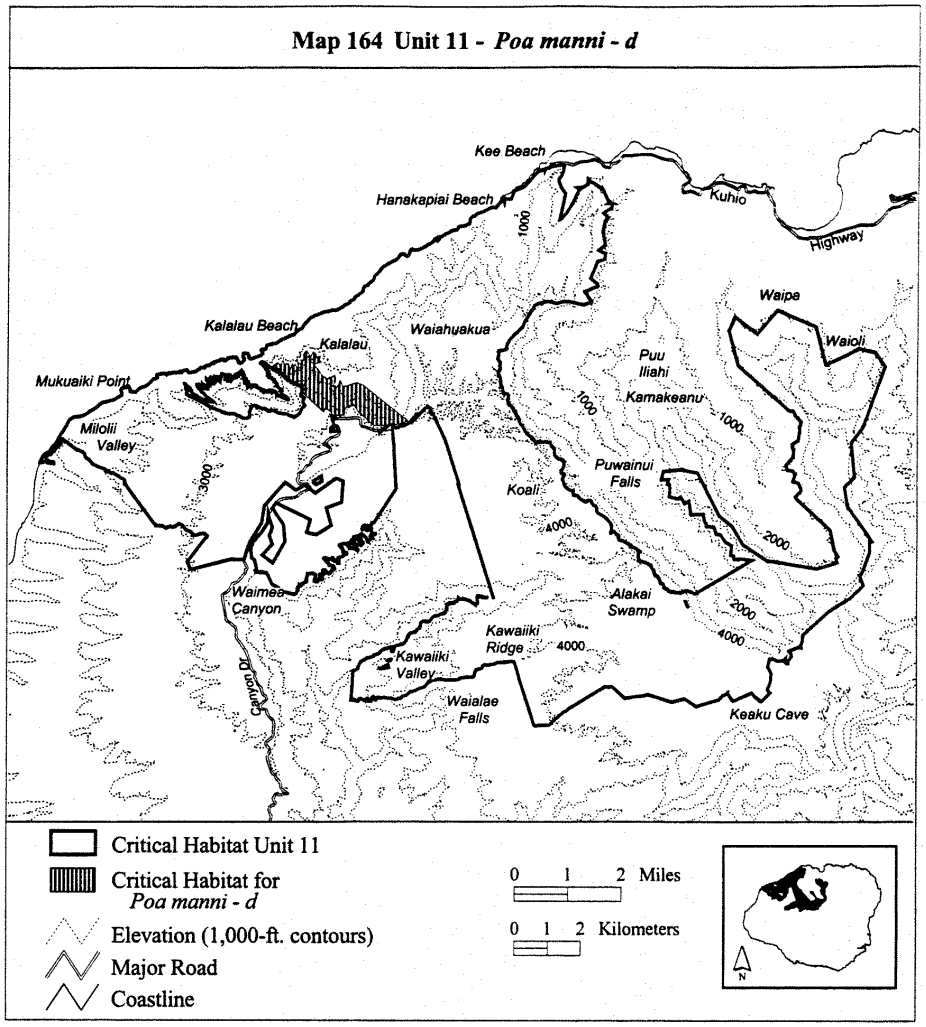
(B) Map 163 follows:



(cclxxxv) Kauai 11—*Poa mannii*—d (307 ha; 758 ac)

(A) [Reserved]

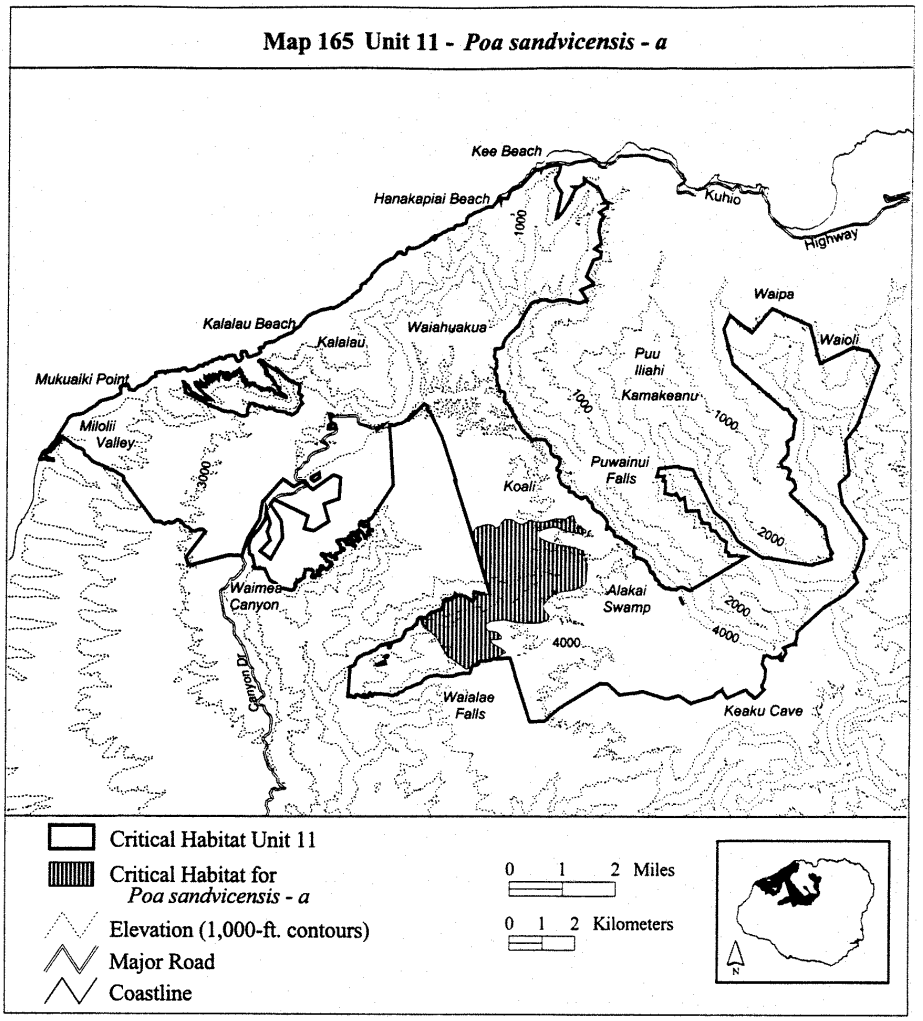
(B) Map 164 follows:



(cclxxxvi) Kauai 11—*Poa sandvicensis*—a (1,111 ha; 2,745 ac)

(A) [Reserved]

(B) Map 165 follows:

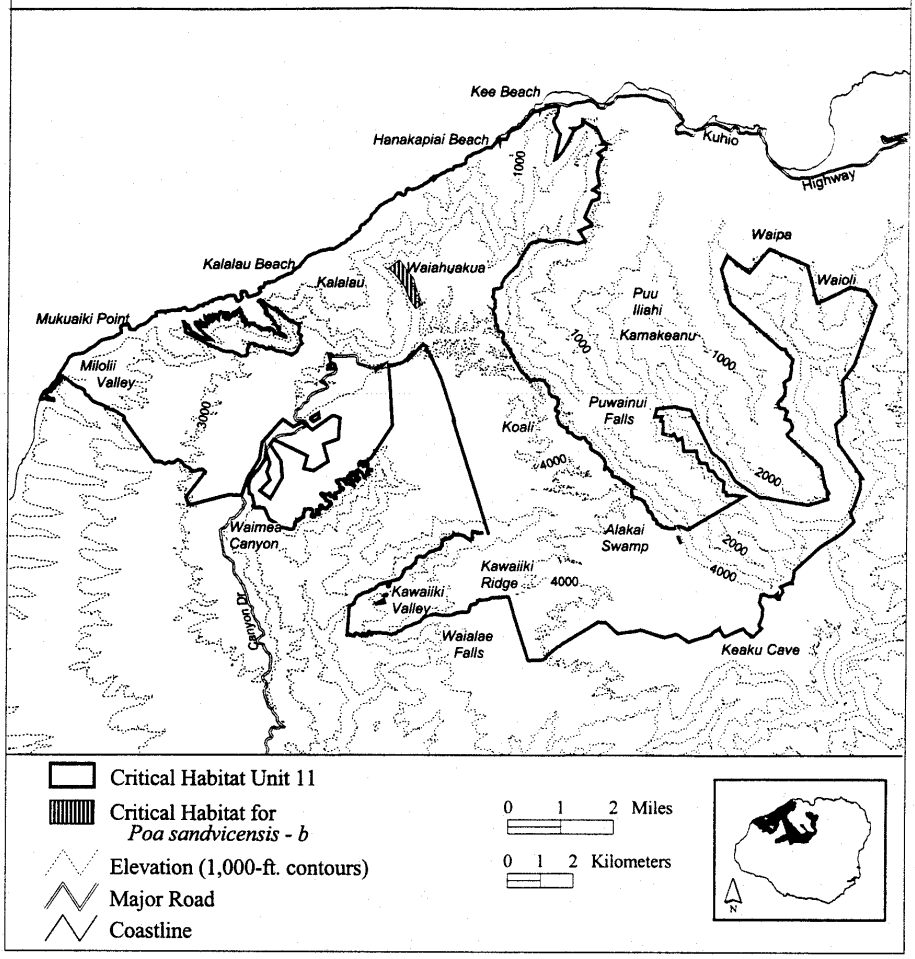


(cclxxxvii) Kauai 11—*Poa sandvicensis*—b (52 ha; 129 ac)

(A) [Reserved]

(B) Map 166 follows:

Map 166 Unit 11 - *Poa sandvicensis - b*



(cclxxxviii) Kauai 11—*Poa siphonoglossa*—a (1,621 ha; 4,006 ac)

(A) [Reserved]

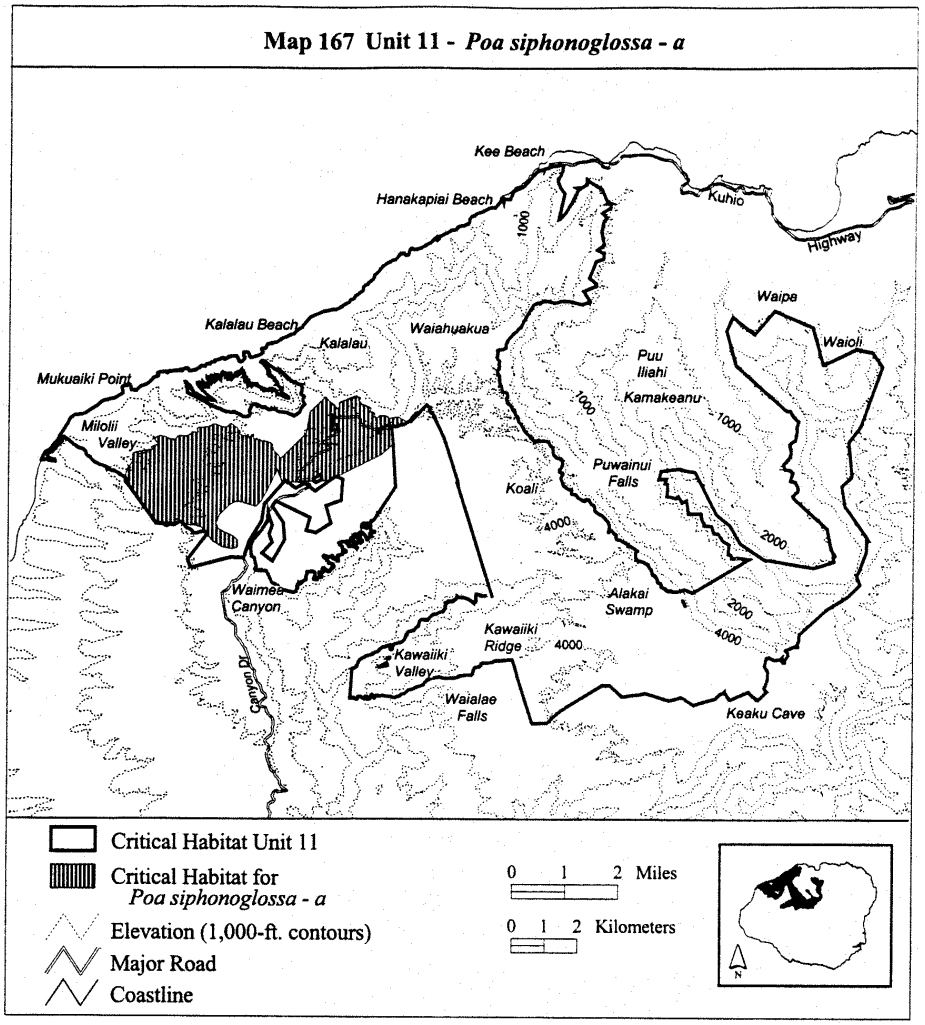
(B) Excluding 3 areas:

(*1*) Bounded by the following 10 points (3 ha, 8 ac): Start at 433368, 2449292; 433367, 2449352; 433448, 2449426; 433546, 2449412; 433567, 2449398; 433589, 2449323; 433612, 2449262; 433588, 2449244; 433567, 2449260; 433369, 2449255; return to starting point; and

(*2*) Bounded by the following 9 points (1 ha, 2 ac): Start at 433484, 2449703; 433480, 2449629; 433457, 2449622; 433440, 2449604; 433426, 2449556; 433419, 2449599; 433399, 2449709; 433436, 2449707; 433460, 2449707; return to starting point; and

(*3*) Bounded by the following 11 points (1 ha, 1 ac): Start at 434908, 2449290; 434890, 2449251; 434848, 2449239; 434839, 2449258; 434834, 2449277; 434833, 2449281; 434881, 2449297; 435011, 2449352; 435005, 2449310; 434948, 2449300; 434908, 2449290; return to starting point.

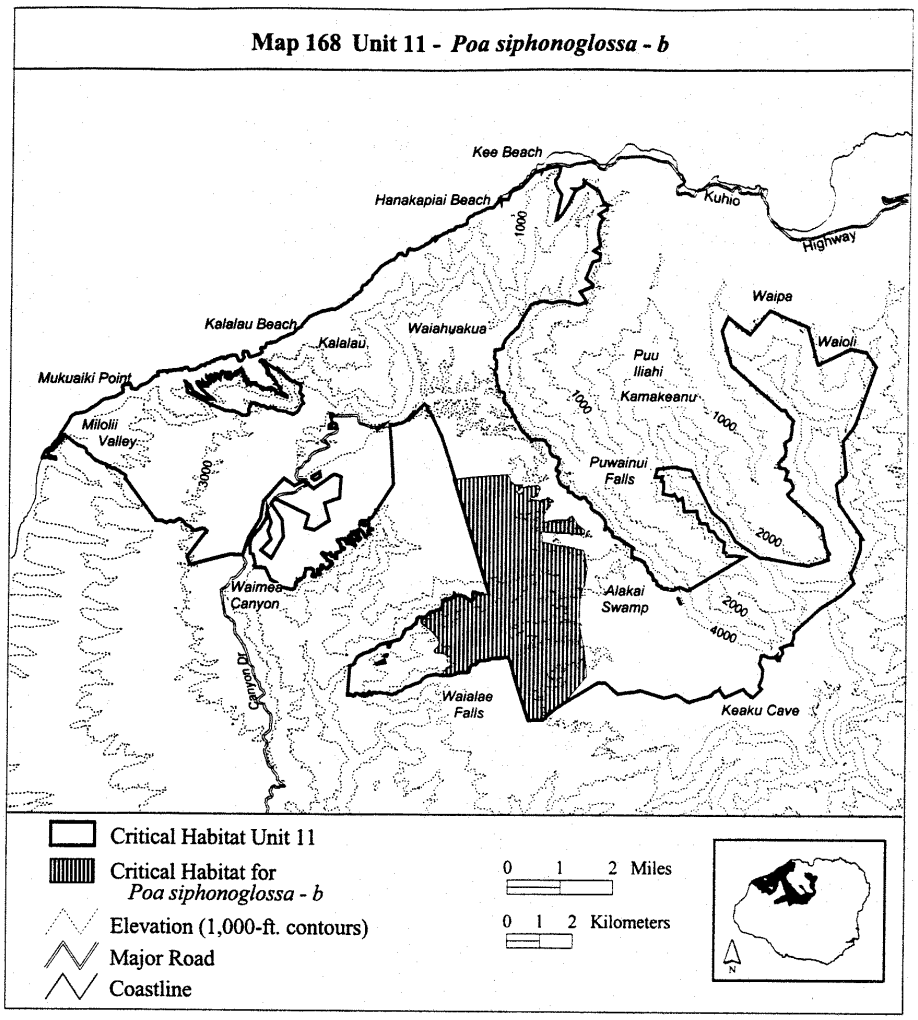
(C) Map 167 follows:



(cclxxxix) Kauai 11—*Poa siphonoglossa*—b (2,190 ha; 5,411 ac)

(A) [Reserved]

(B) Map 168 follows:



(ccxc) Kauai 11–*Psychotria grandiflora*–b

(A) [Reserved]

(B) See paragraph (a)(1)(cxxx)(B) of this section for the map of this unit.

(ccxci) Kauai 11–*Psychotria grandiflora*–c

(A) [Reserved]

(B) See paragraph (a)(1)(cxlvi)(B) of this section for the map of this unit.

(ccxcii) Kauai 11–*Psychotria hobdyi*–b

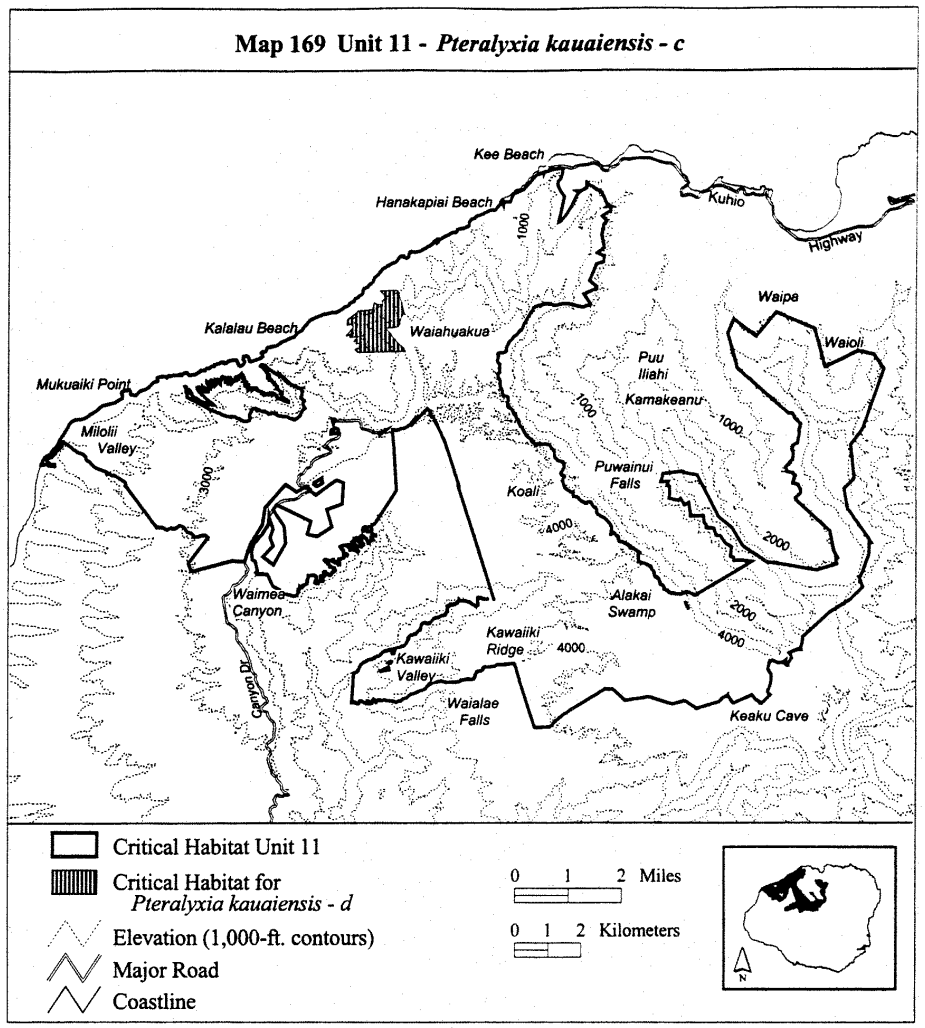
(A) [Reserved]

(B) See paragraph (a)(1)(cxxxiii)(B) of this section for the map of this unit.

(ccxciii) Kauai 11—*Pteralyxia kauaiensis*—c (209 ha; 516 ac)

(A) [Reserved]

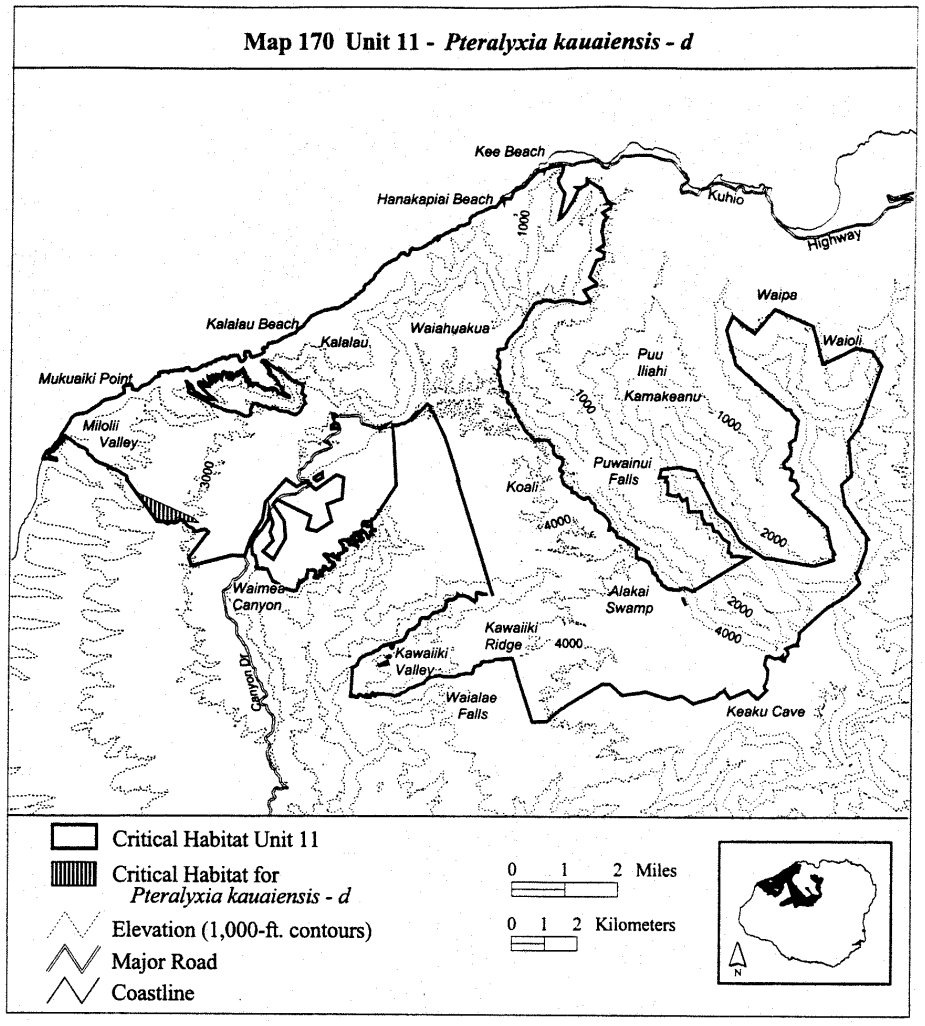
(B) Map 169 follows:



(ccxciv) Kauai 11—*Pteralyxia kauaiensis*—d (57 ha; 141 ac)

(A) [Reserved]

(B) Map 170 follows:

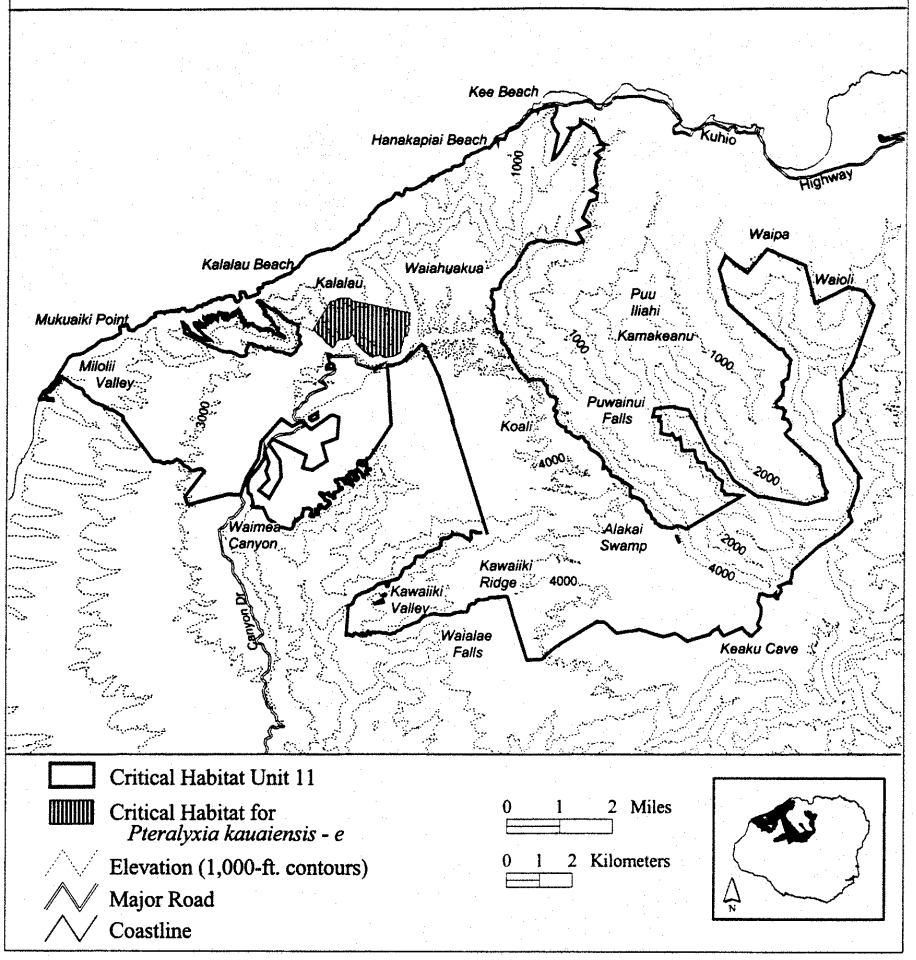


(ccxcv) Kauai 11—*Pteralyxia kauaiensis*—e (353 ha; 872 ac)

(A) [Reserved]

(B) Map 171 follows:

Map 171 Unit 11 - *Pteralyxia kauaiensis - e*



(ccxcvi) Kauai 11—*Pteralyxia kauaiensis*—f (589 ha; 1,453 ac)

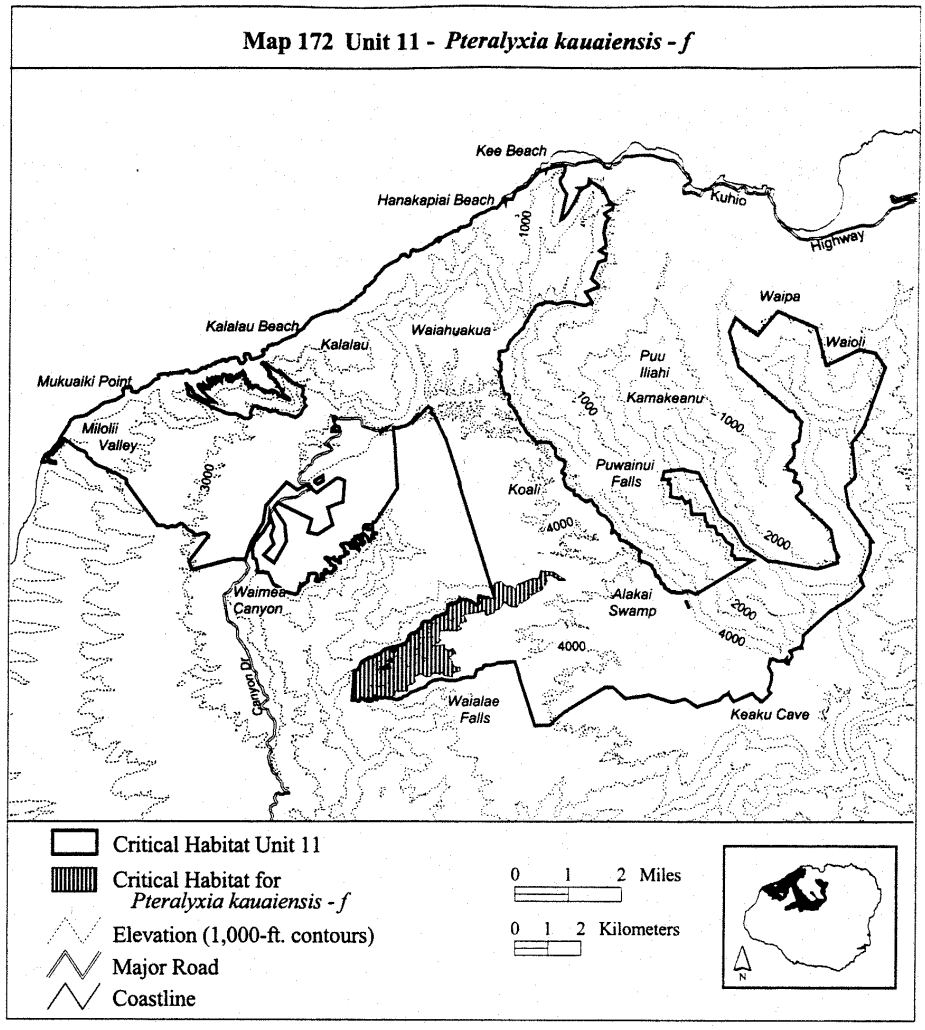
(A) [Reserved]

(B) Excluding 2 areas:

(*1*) Bounded by the following 3 points (1 ha; 3 ac): Start at 435132, 2442248; 435160, 2442164; 434848, 2442098; return to starting point; and

(*2*) Bounded by the following 4 points (0 ha; 1 ac): Start at 435151, 2442425; 435215, 2442393; 435195, 2442353; 435128, 2442379; return to starting point.

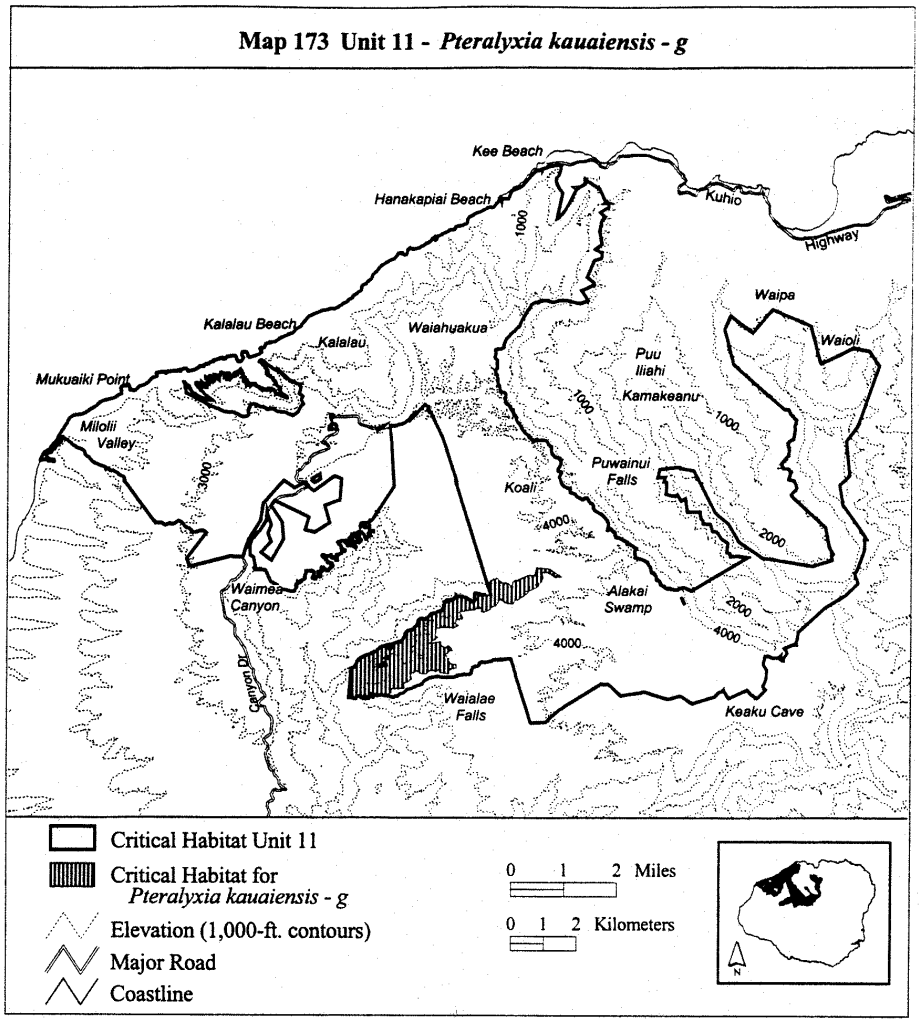
(C) Map 172 follows:



(ccxcvii) Kauai 11—*Pteralyxia kauaiensis*—g (445 ha; 1,100 ac)

(A) [Reserved]

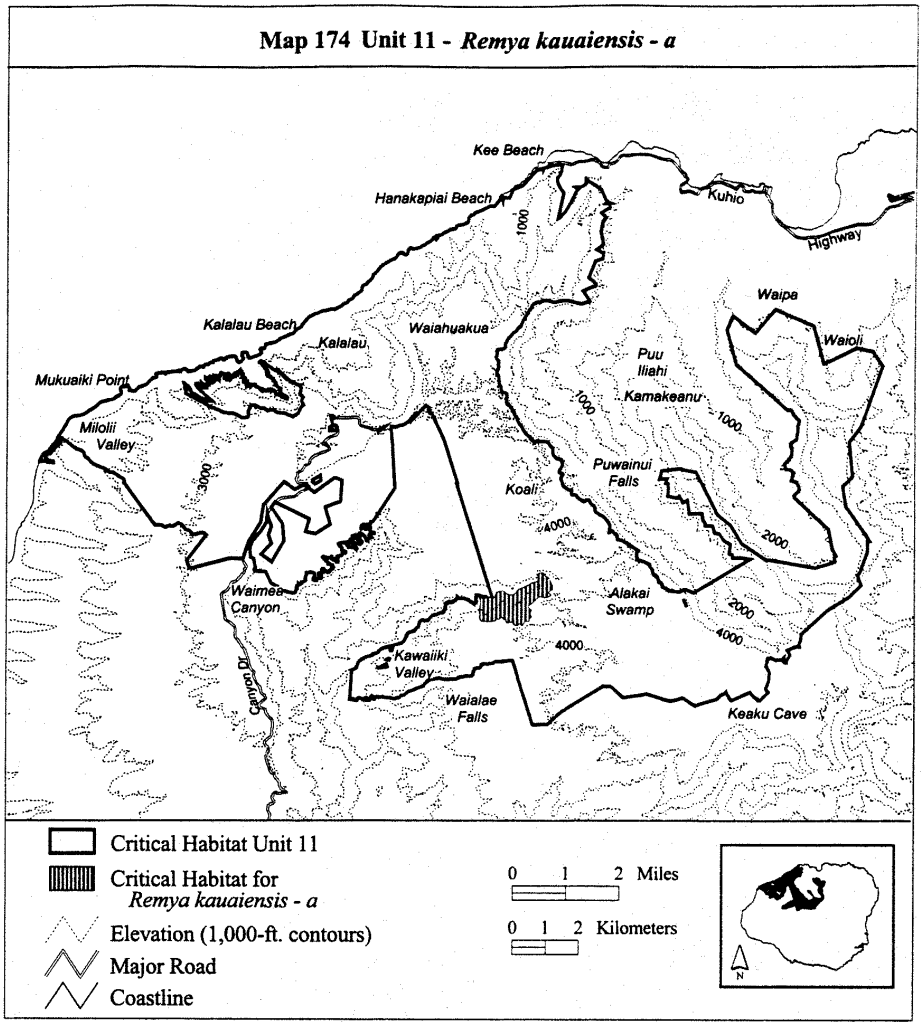
(B) Map 173 follows:



(ccxcviii) Kauai 11—*Remya kauaiensis*—a (172 ha; 426 ac)

(A) [Reserved]

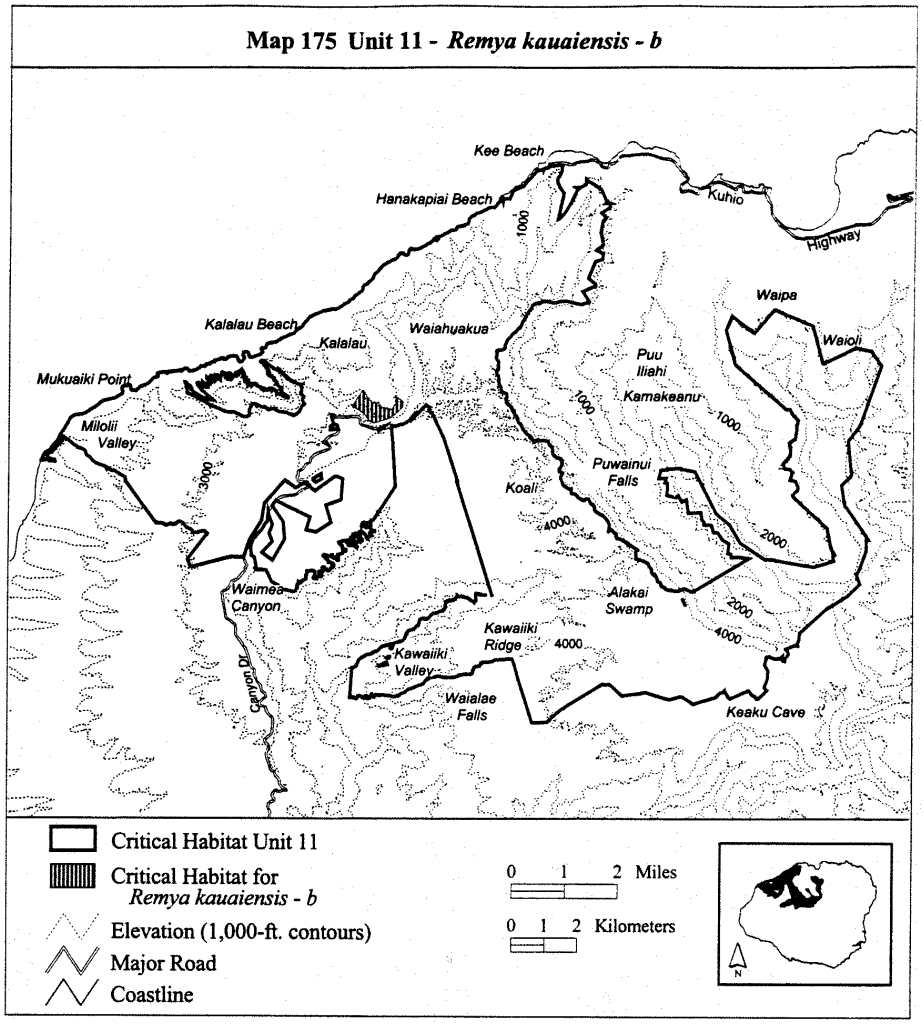
(B) Map 174 follows:



(ccxcix) Kauai 11—*Remya kauaiensis*—b (66 ha; 163 ac)

(A) [Reserved]

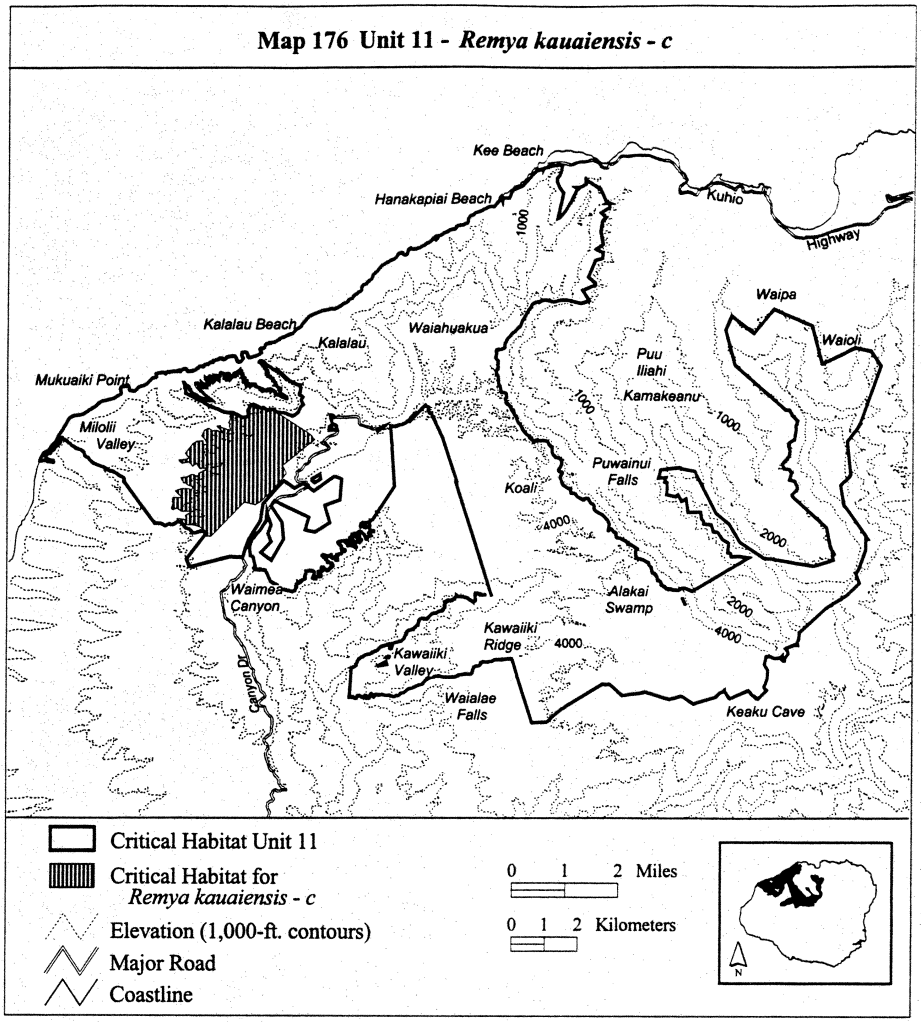
(B) Map 175 follows:



(ccc) Kauai 11—*Remya kauaiensis*—c (886 ha; 2,190 ac)

(A) [Reserved]

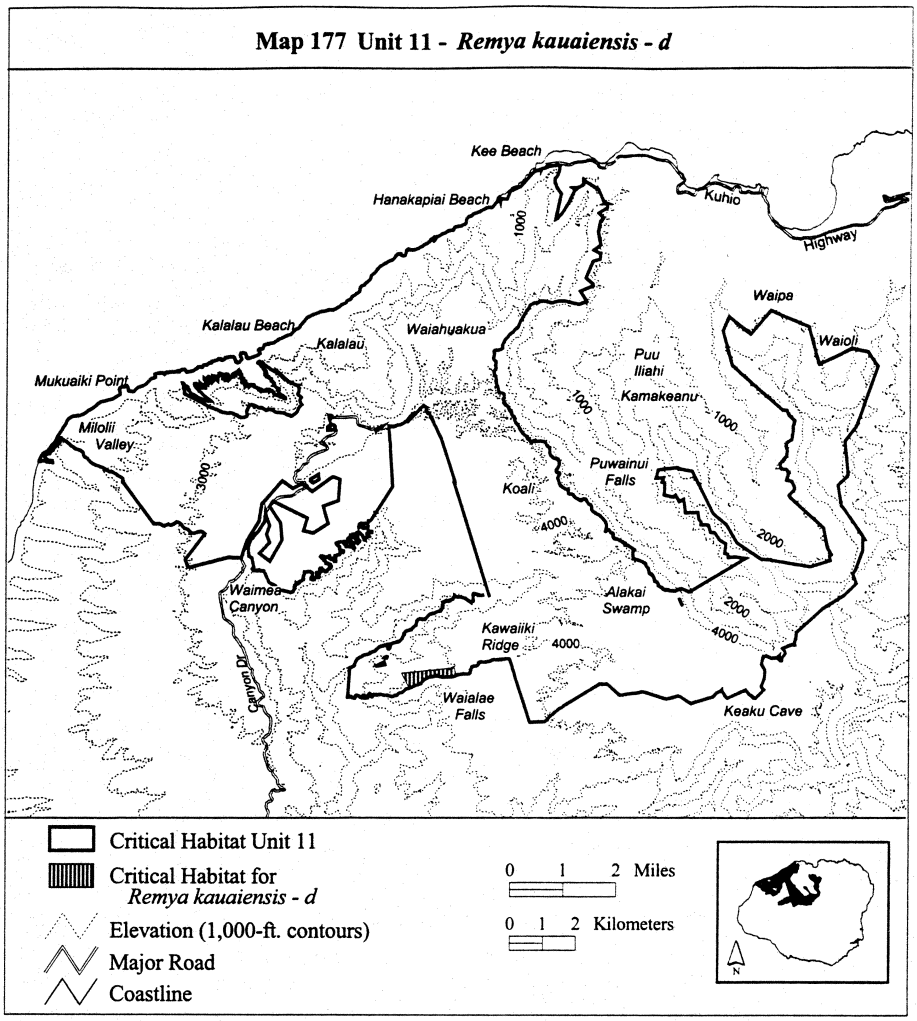
(B) Map 176 follows:



(ccci) Kauai 11—*Remya kauaiensis*—d (47 ha; 115 ac)

(A) [Reserved]

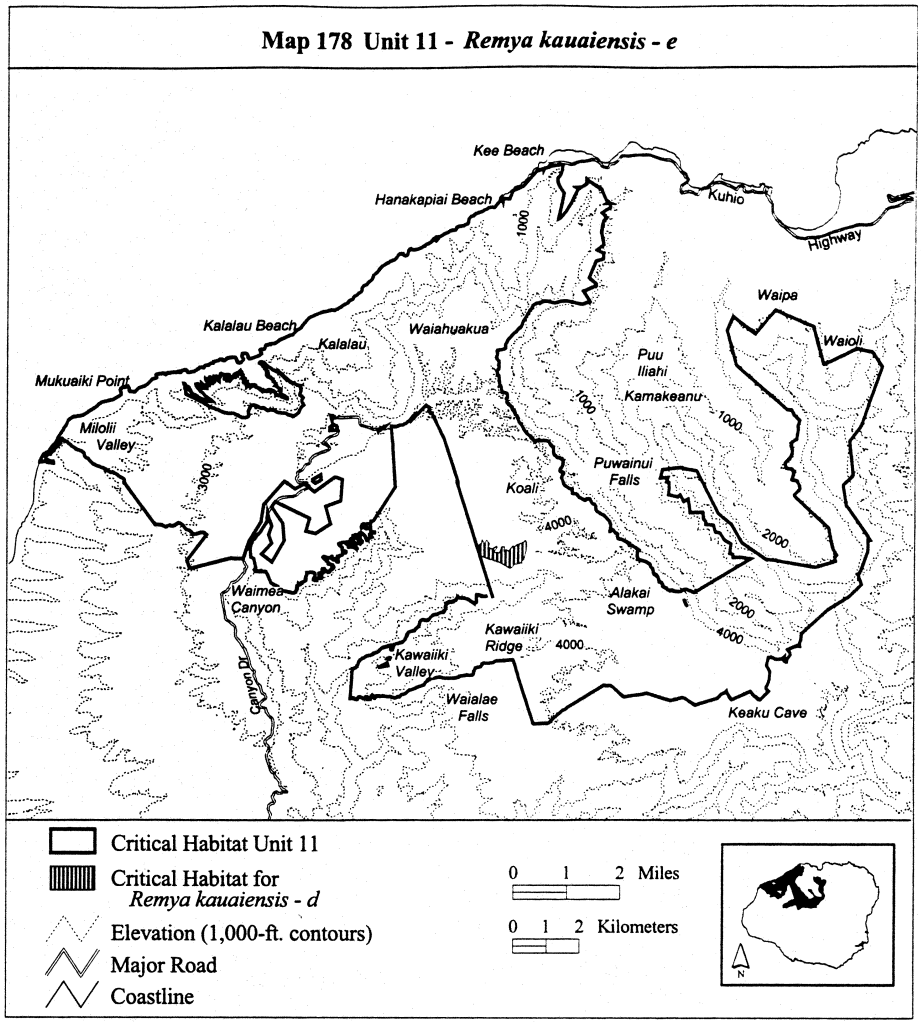
(B) Map 177 follows:



(cccii) Kauai 11—*Remya kauaiensis*—e (66 ha, 163 ac)

(A) [Reserved]

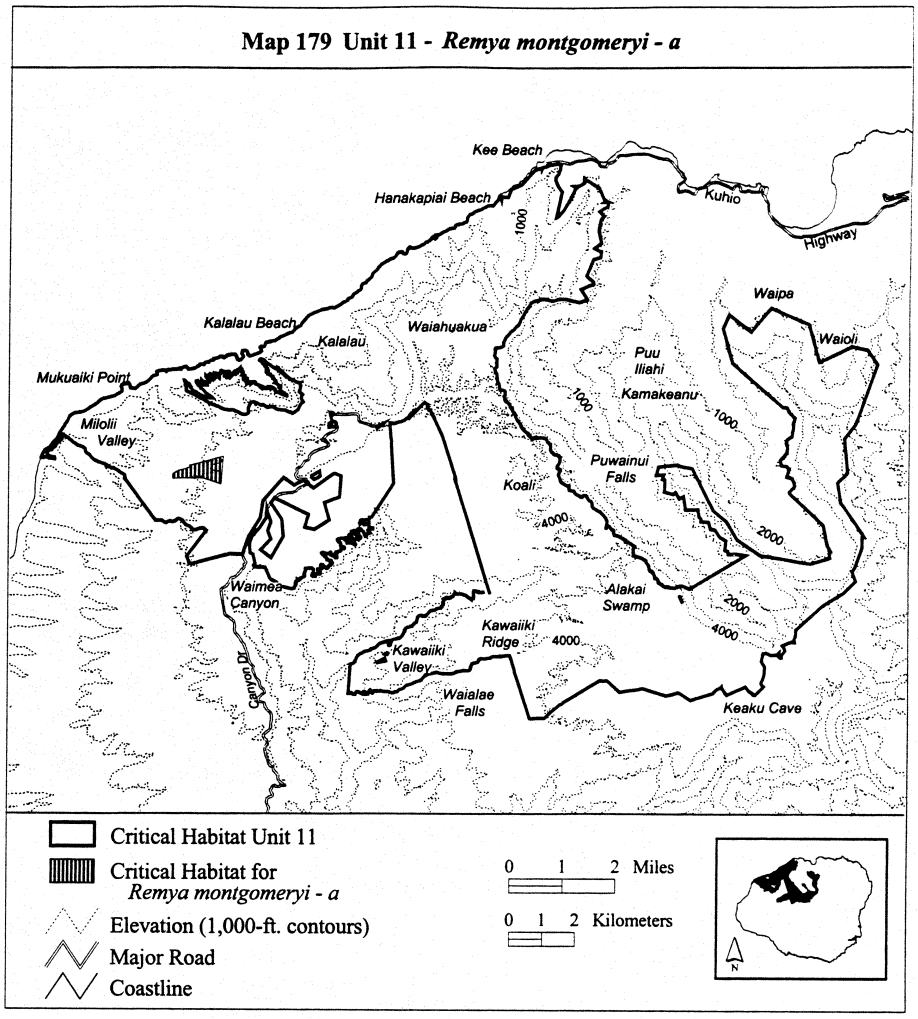
(B) Map 178 follows:



(ccciii) Kauai 11—*Remya montgomeryi*—a (69 ha; 171 ac)

(A) [Reserved]

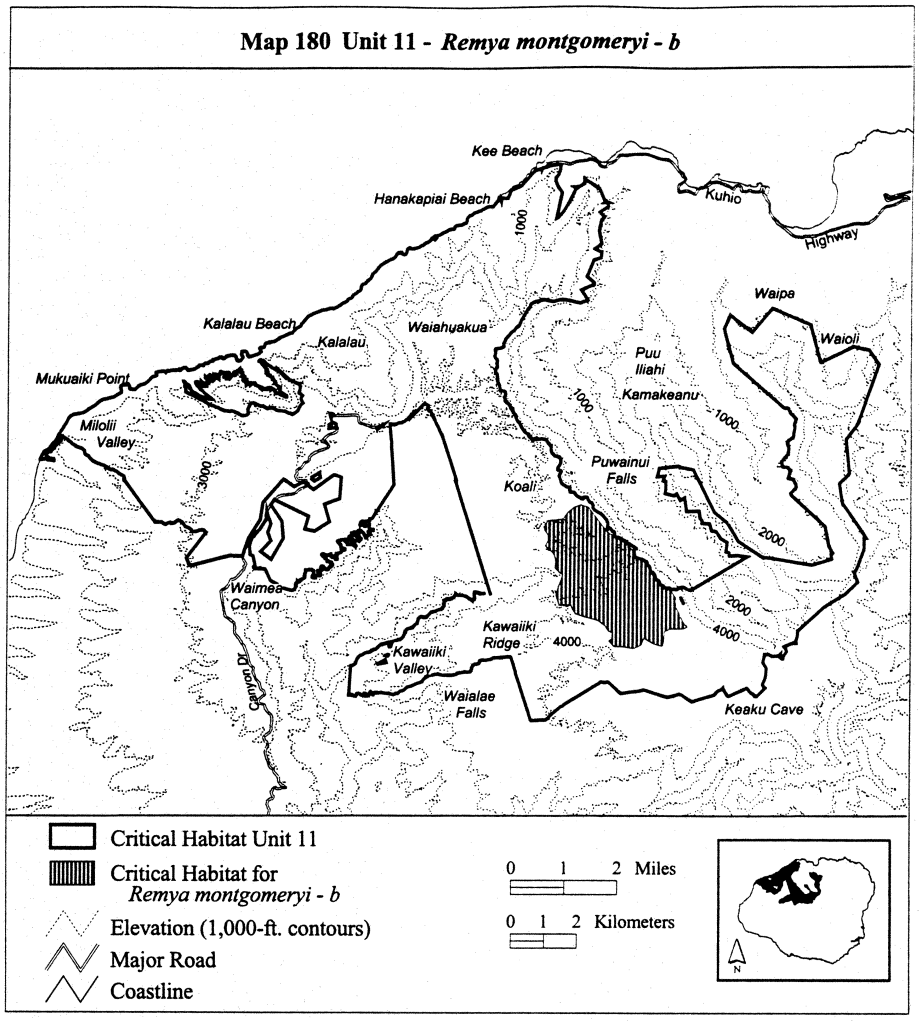
(B) Map 179 follows:



(ccciv) Kauai 11—*Remya montgomeryi*—b (1,010 ha; 2,496 ac)

(A) [Reserved]

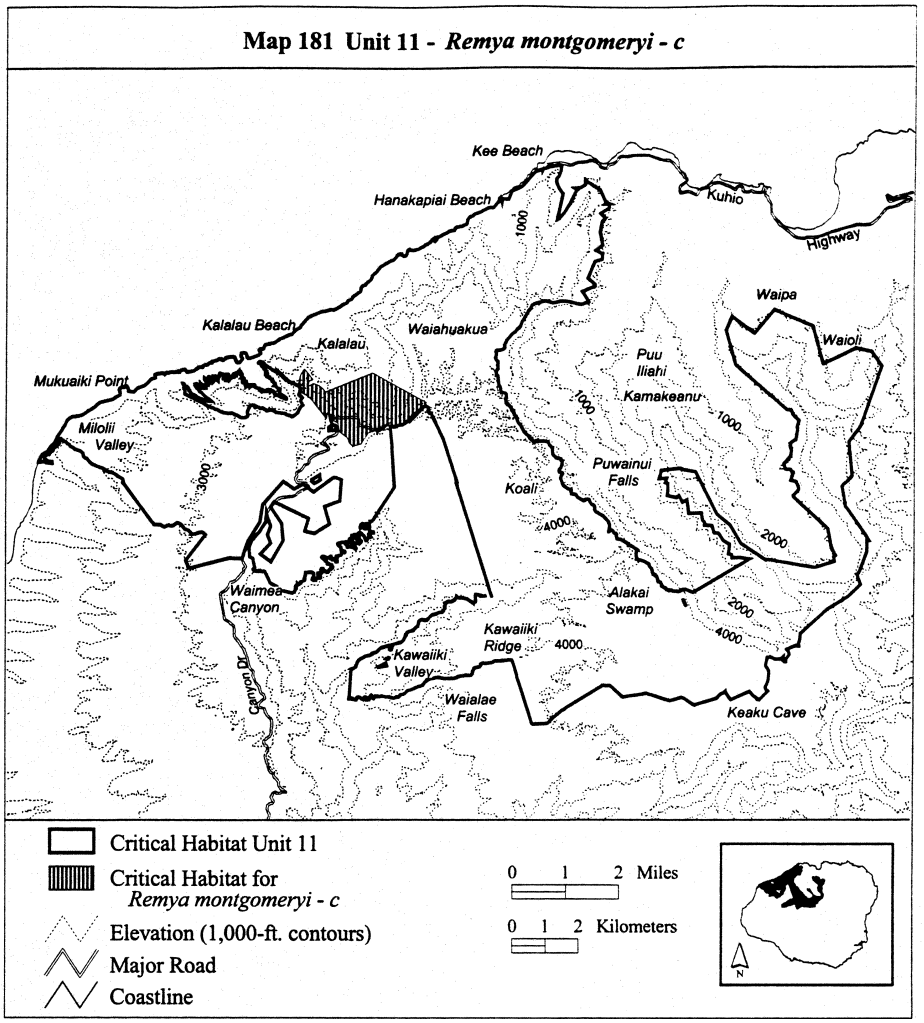
(B) Map 180 follows:



(cccv) Kauai 11—*Remya montgomeryi*—c (435 ha; 1,076 ac)

(A) [Reserved]

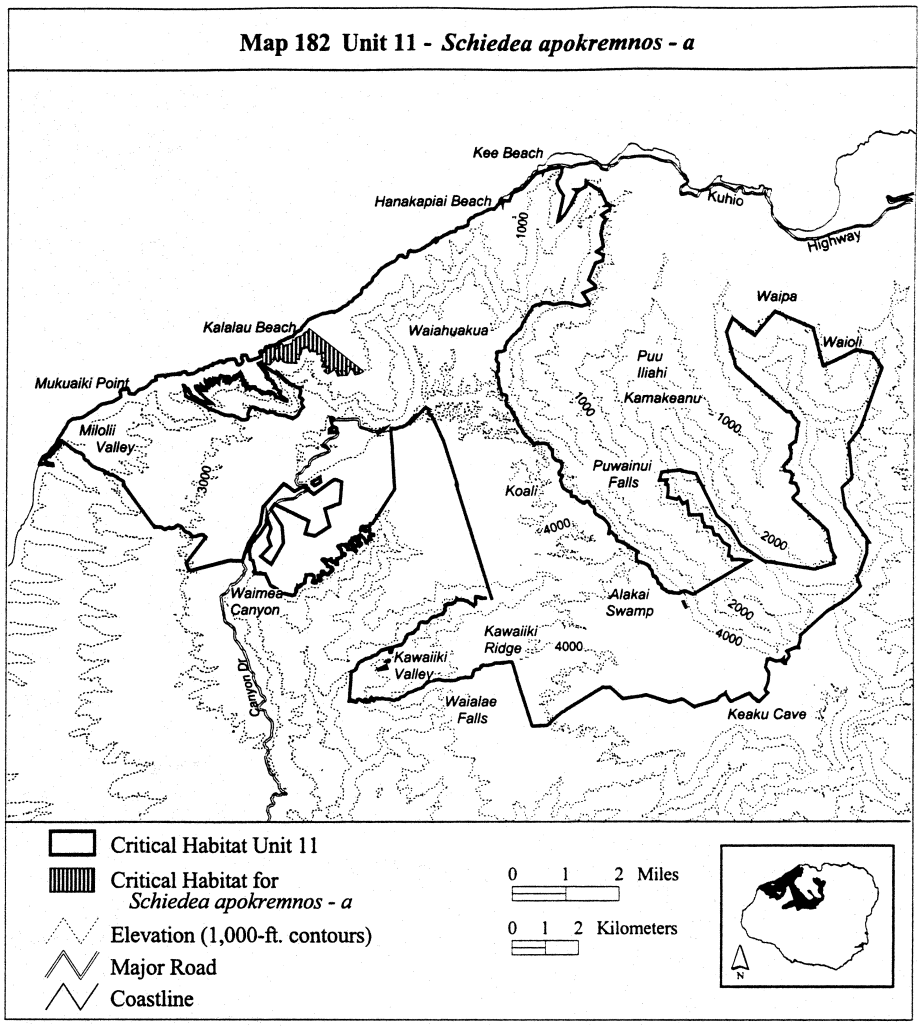
(B) Map 181 follows:



(cccvi) Kauai 11—*Schiedea apokremnos*—a (170 ha; 420 ac)

(A) [Reserved]

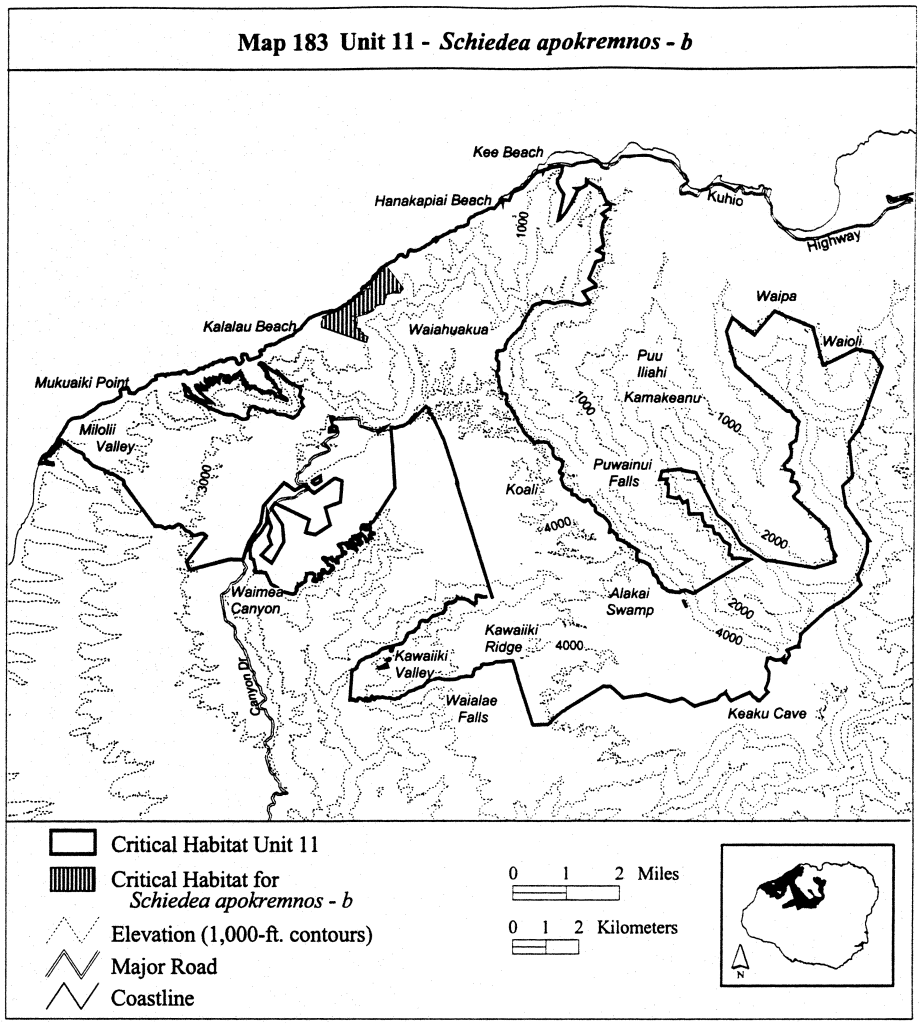
(B) Map 182 follows:



(cccvii) Kauai 11—*Schiedea apokremnos*—b (187 ha; 463 ac)

(A) [Reserved]

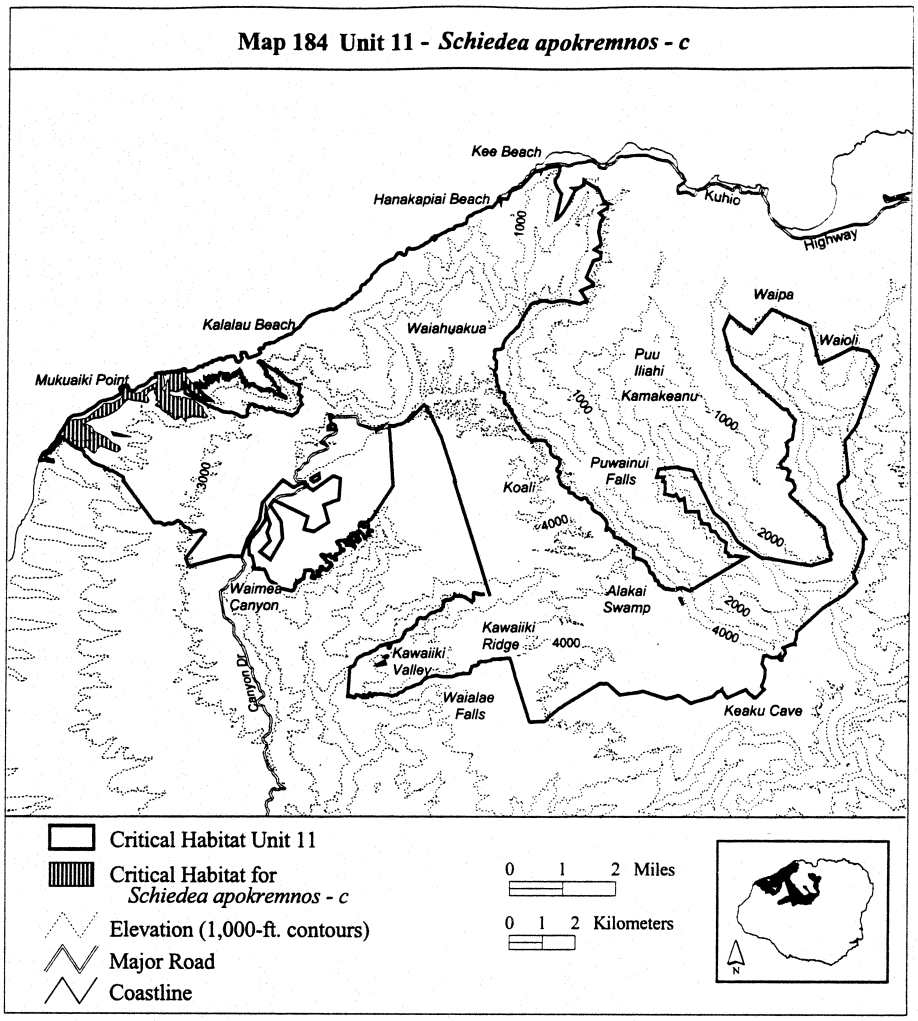
(B) Map 183 follows:



(cccviii) Kauai 11—*Schiedea apokremnos*—c (295 ha; 730 ac)

(A) [Reserved]

(B) Map 184 follows:



(cccix) Kauai 11–*Schiedea attenuata*–a

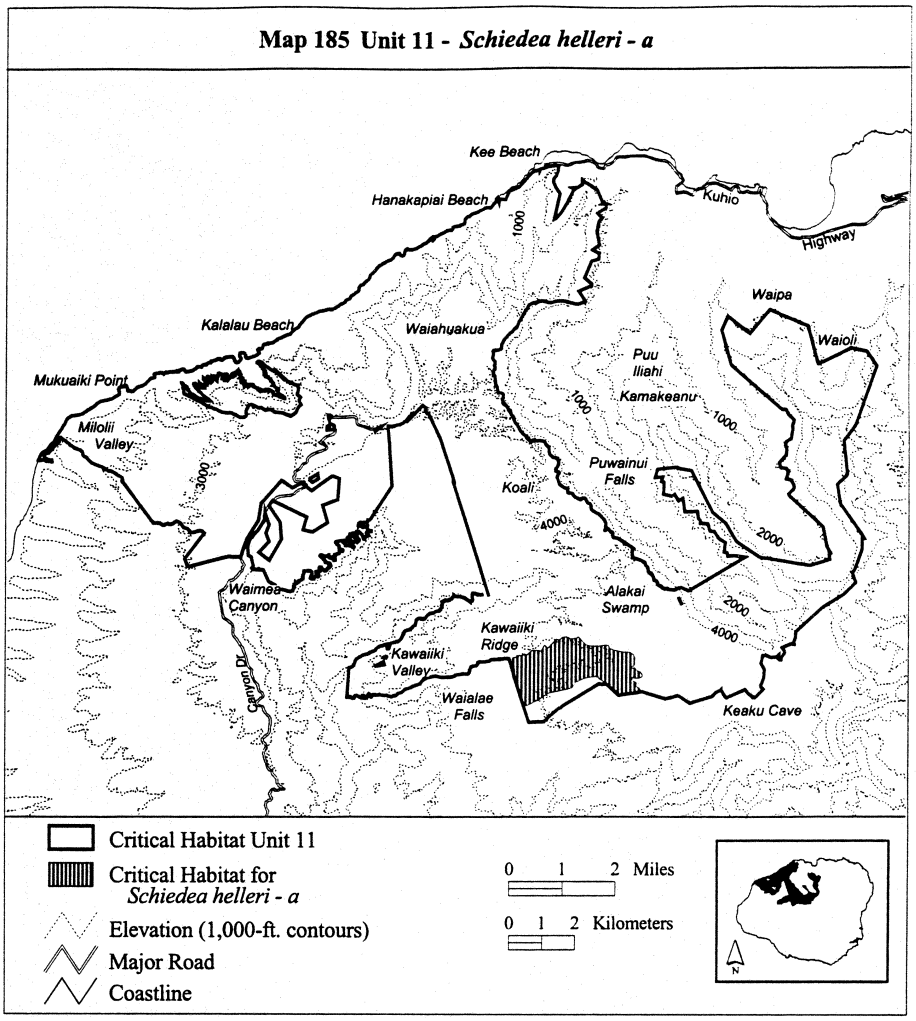
(A) [Reserved]

(B) See paragraph (a)(1)(cxxxvi)(B) of this section for the map of this unit.

(cccx) Kauai 11—*Schiedea helleri*—a (485 ha; 1,198 ac)

(A) [Reserved]

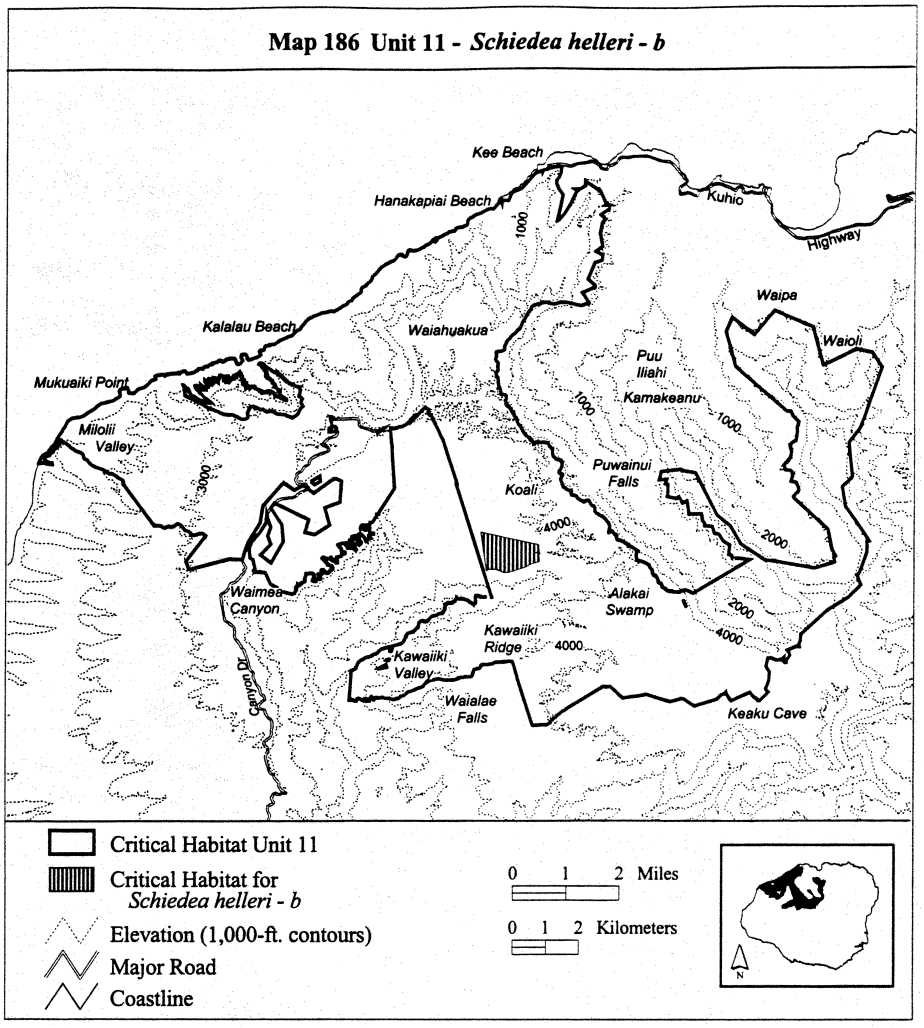
(B) Map 185 follows:



(cccxi) Kauai 11—*Schiedea helleri*—b (154 ha; 381 ac)

(A) [Reserved]

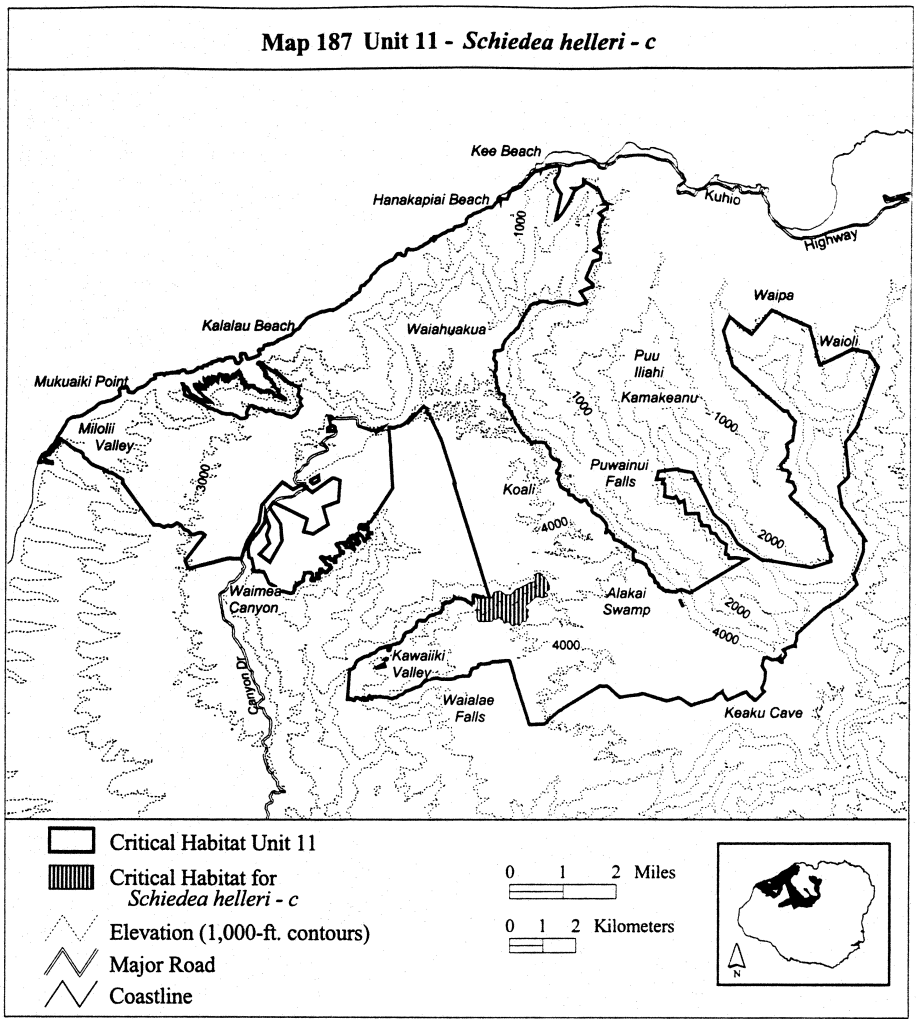
(B) Map 186 follows:



(cccxii) Kauai 11—*Schiedea helleri*—c (172 ha; 426 ac)

(A) [Reserved]

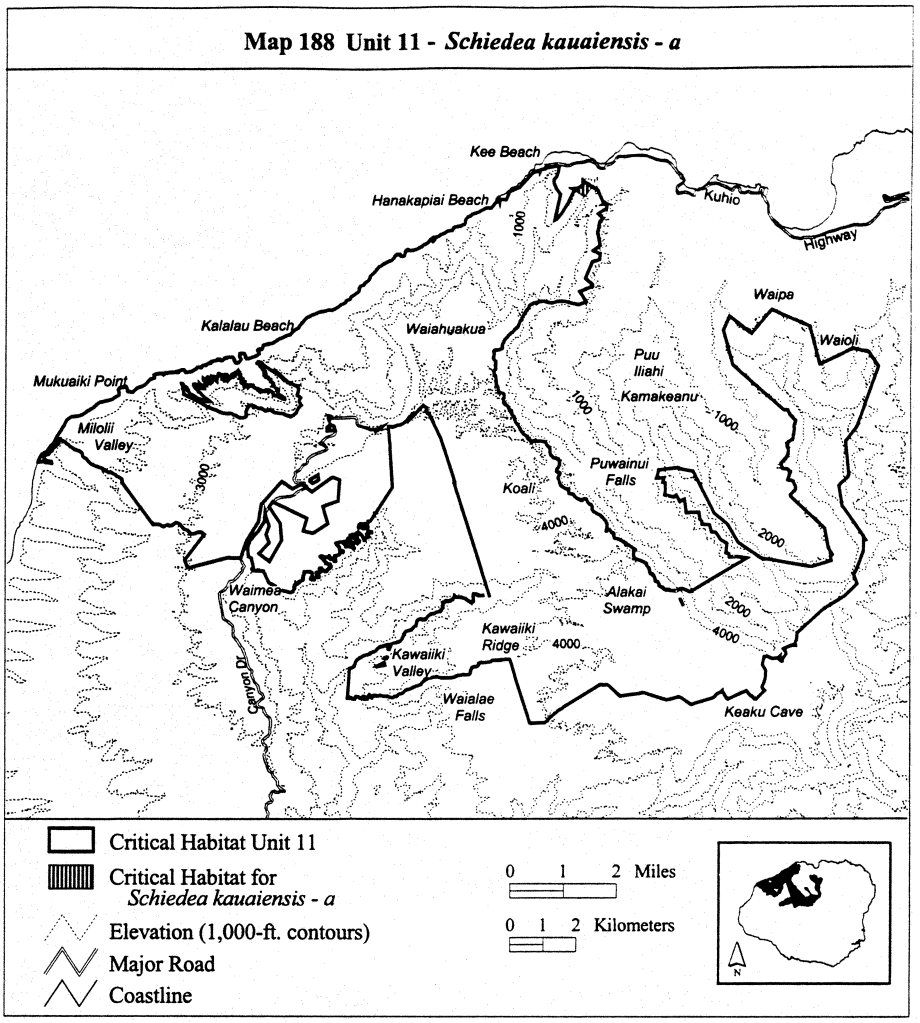
(B) Map 187 follows:



(cccxiii) Kauai 11—*Schiedea kauaiensis*—a (12 ha; 29 ac)

(A) [Reserved]

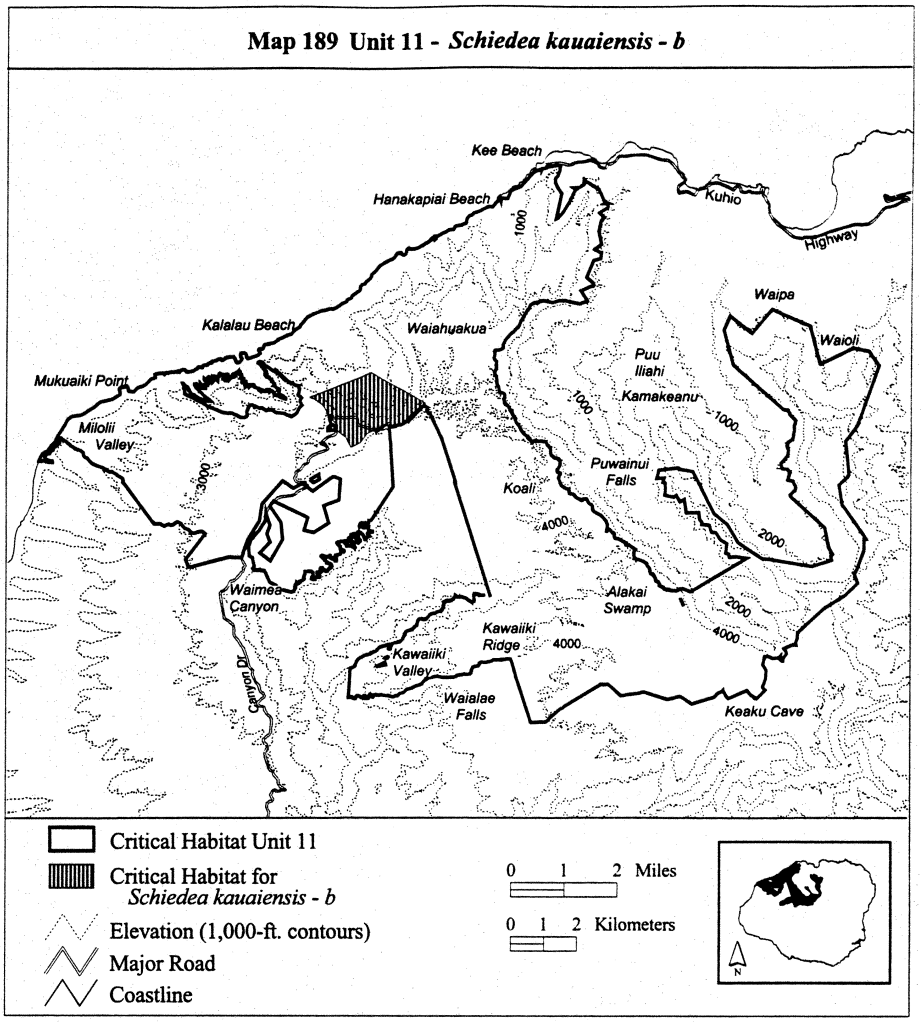
(B) Map 188 follows:



(cccxiv) Kauai 11—*Schiedea kauaiensis*—b (394 ha; 974 ac)

(A) [Reserved]

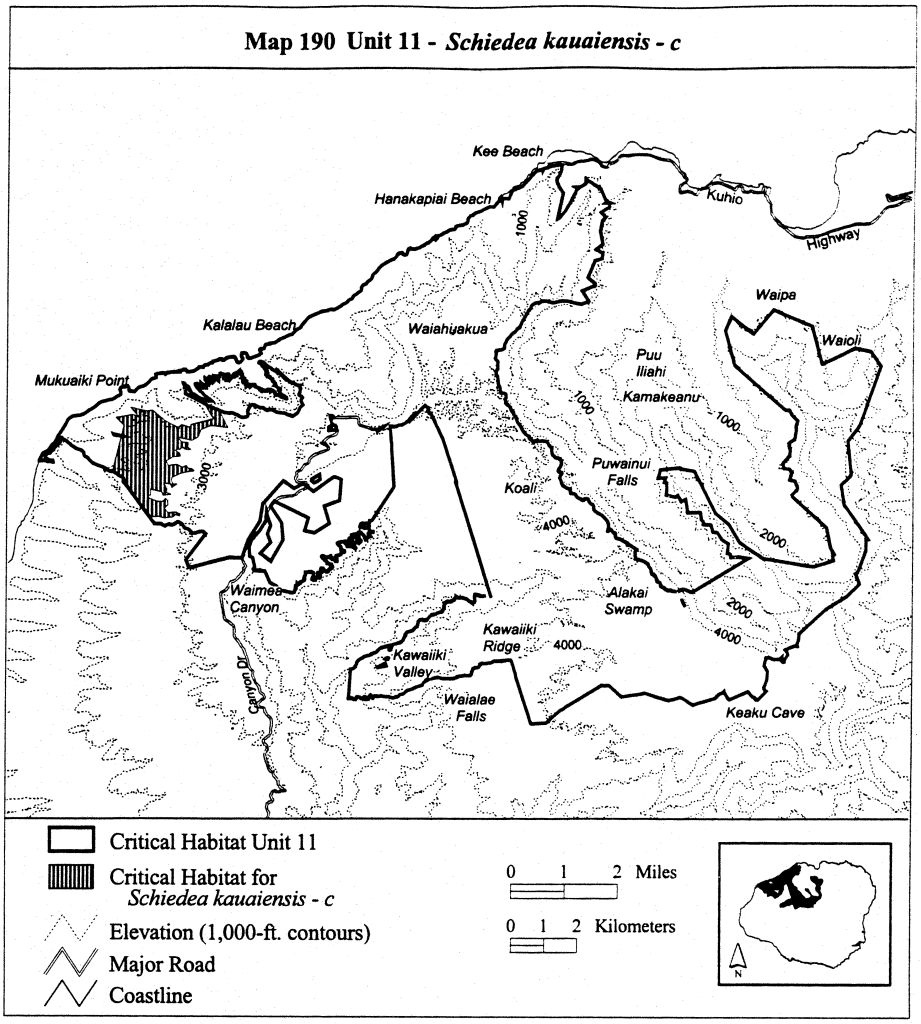
(B) Map 189 follows:



(cccxv) Kauai 11—*Schiedea kauaiensis*—c (510 ha; 1,260 ac)

(A) [Reserved]

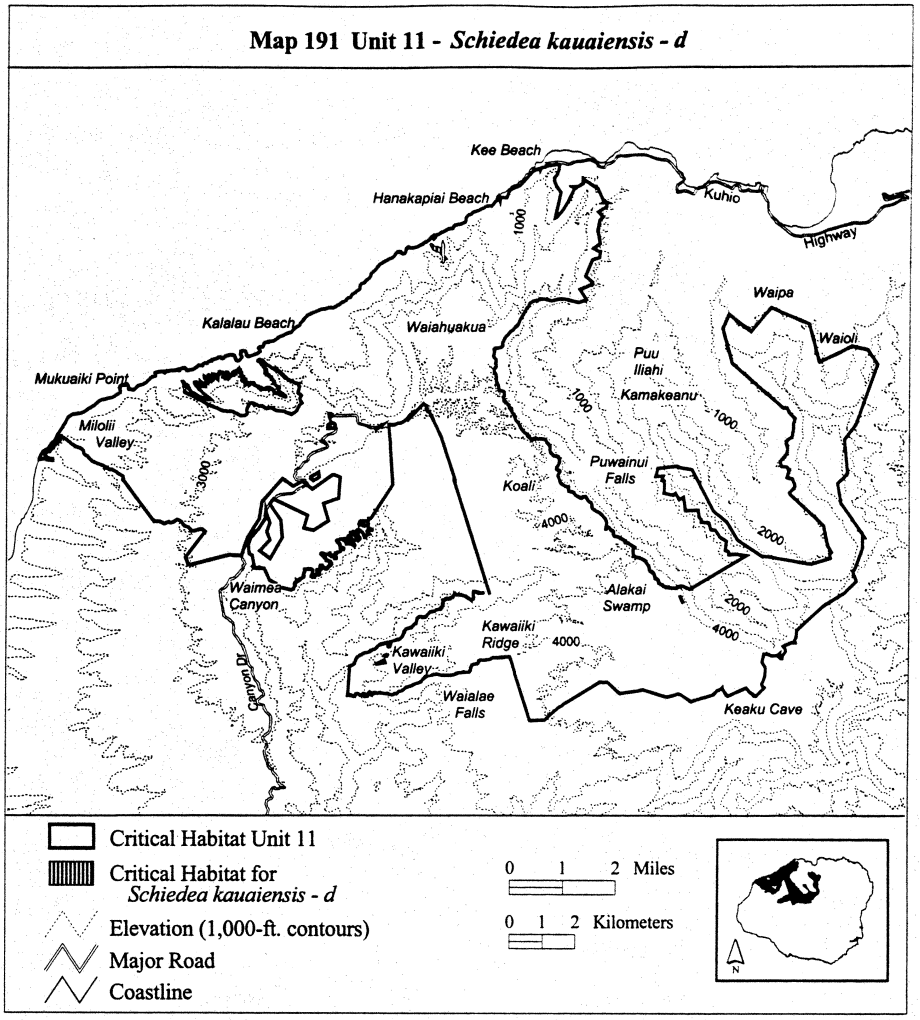
(B) Map 190 follows:



(cccxvi) Kauai 11—*Schiedea kauaiensis*—d (11 ha; 28 ac)

(A) [Reserved]

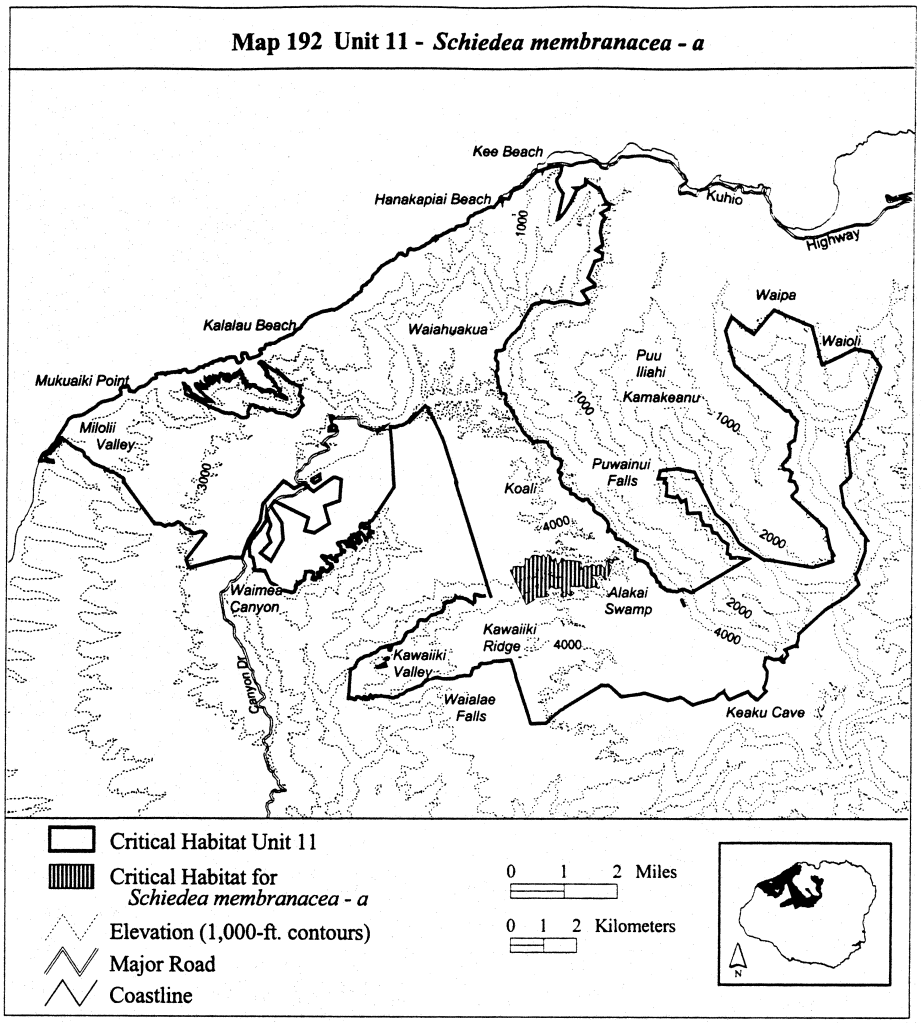
(B) Map 191 follows:



(cccxvii) Kauai 11—*Schiedea membranacea*—a (251 ha; 620 ac)

(A) [Reserved]

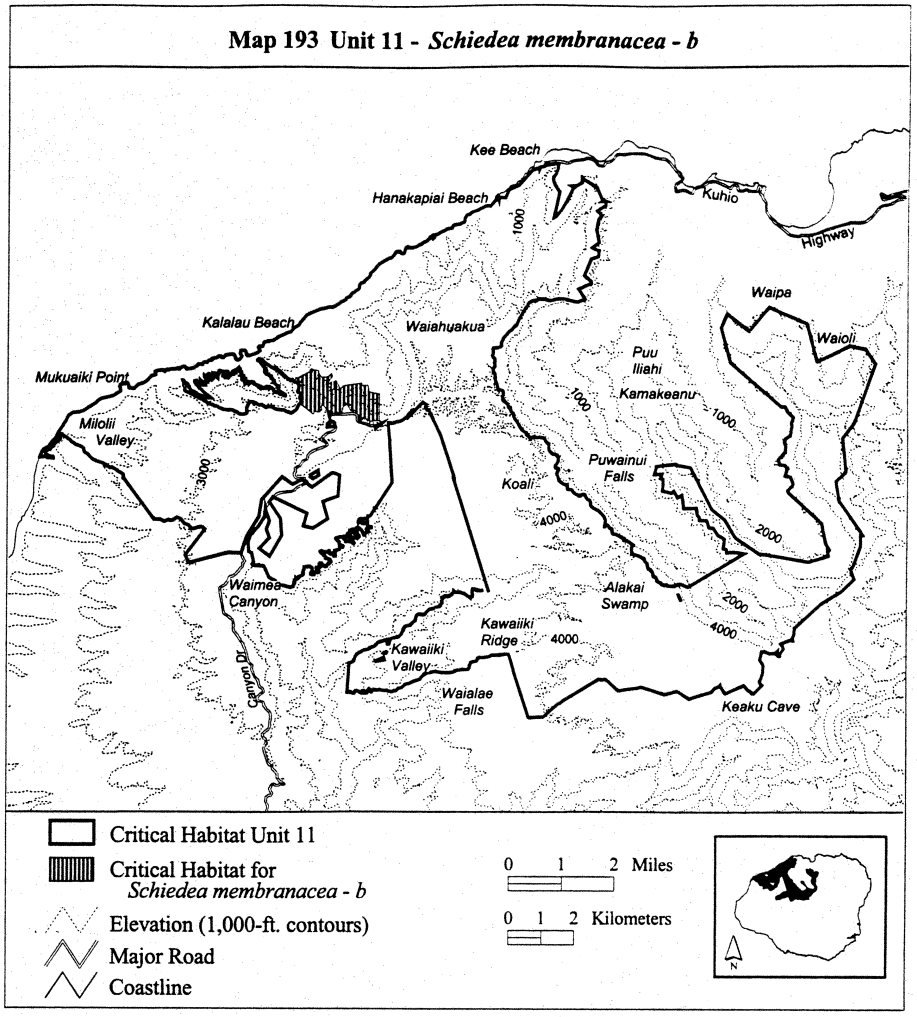
(B) Map 192 follows:



(cccxviii) Kauai 11—*Schiedea membranacea*—b (234 ha; 579 ac)

(A) [Reserved]

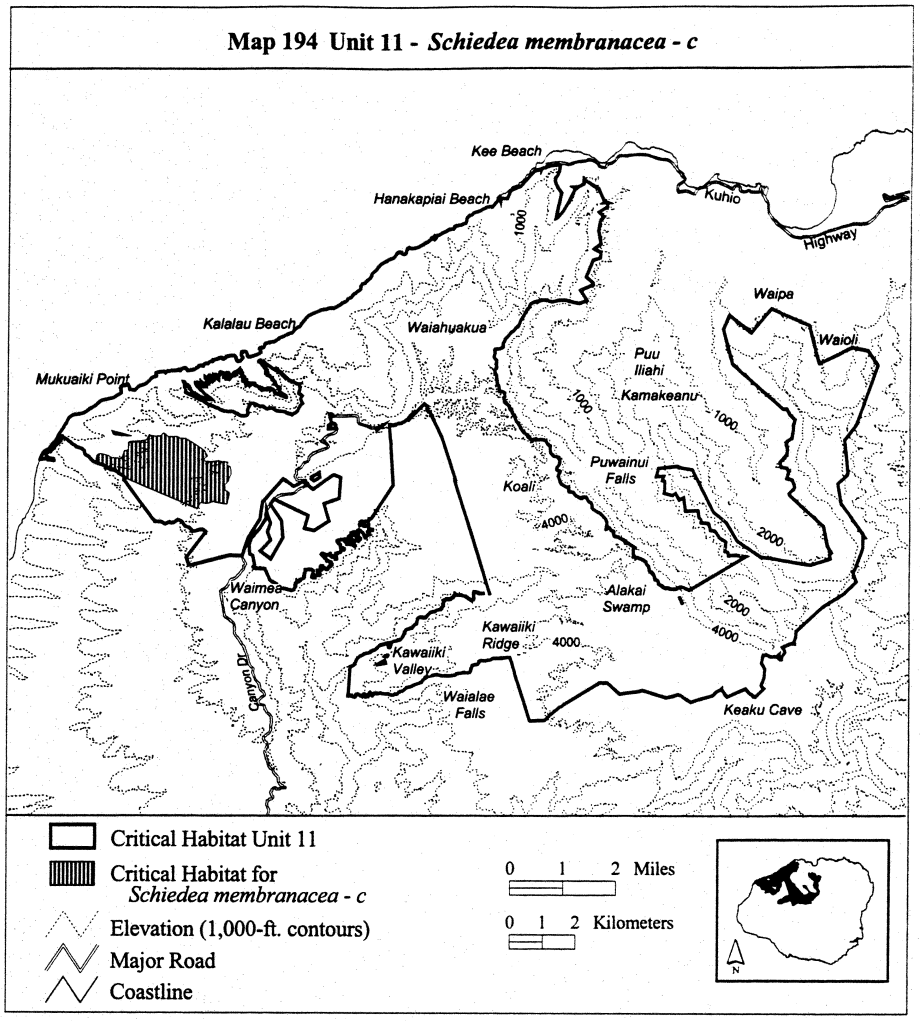
(B) Map 193 follows:



(cccxix) Kauai 11—*Schiedea membranacea*—c (527 ha; 1,303 ac)

(A) [Reserved]

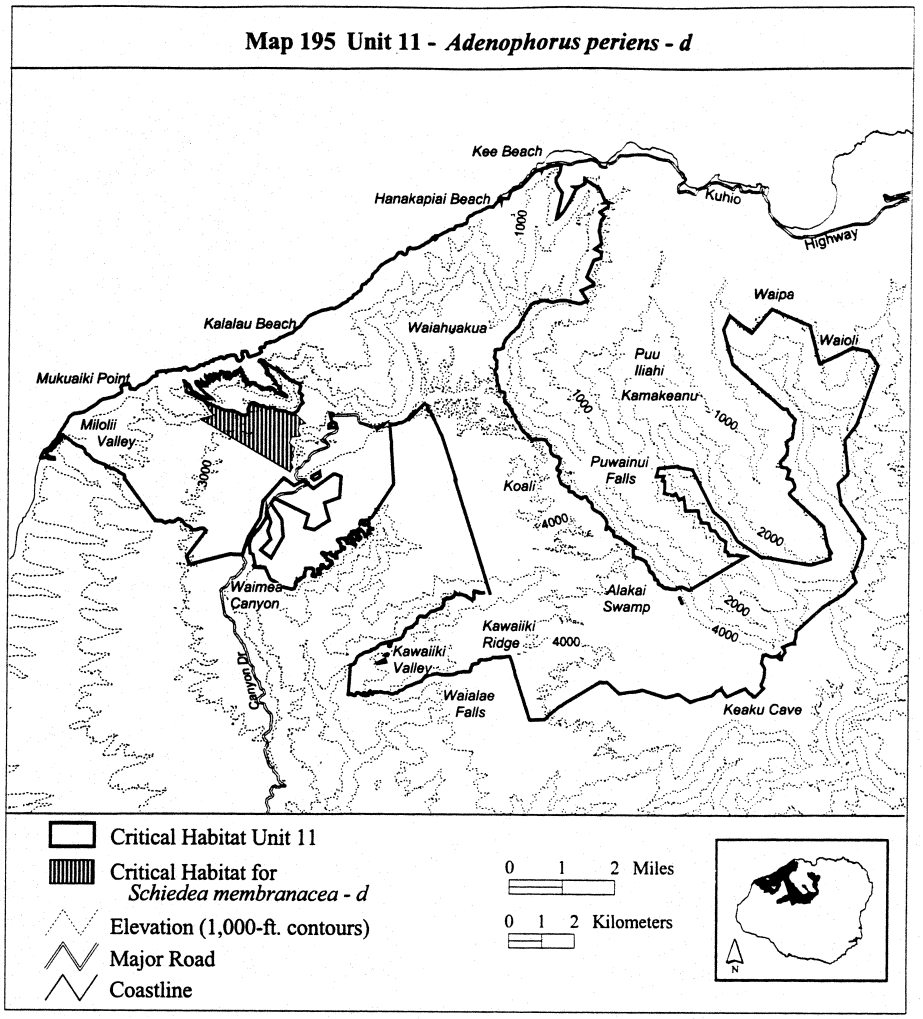
(B) Map 194 follows:



(cccxx) Kauai 11—*Schiedea membranacea*—d (327 ha; 809 ac)

(A) [Reserved]

(B) Map 195 follows:

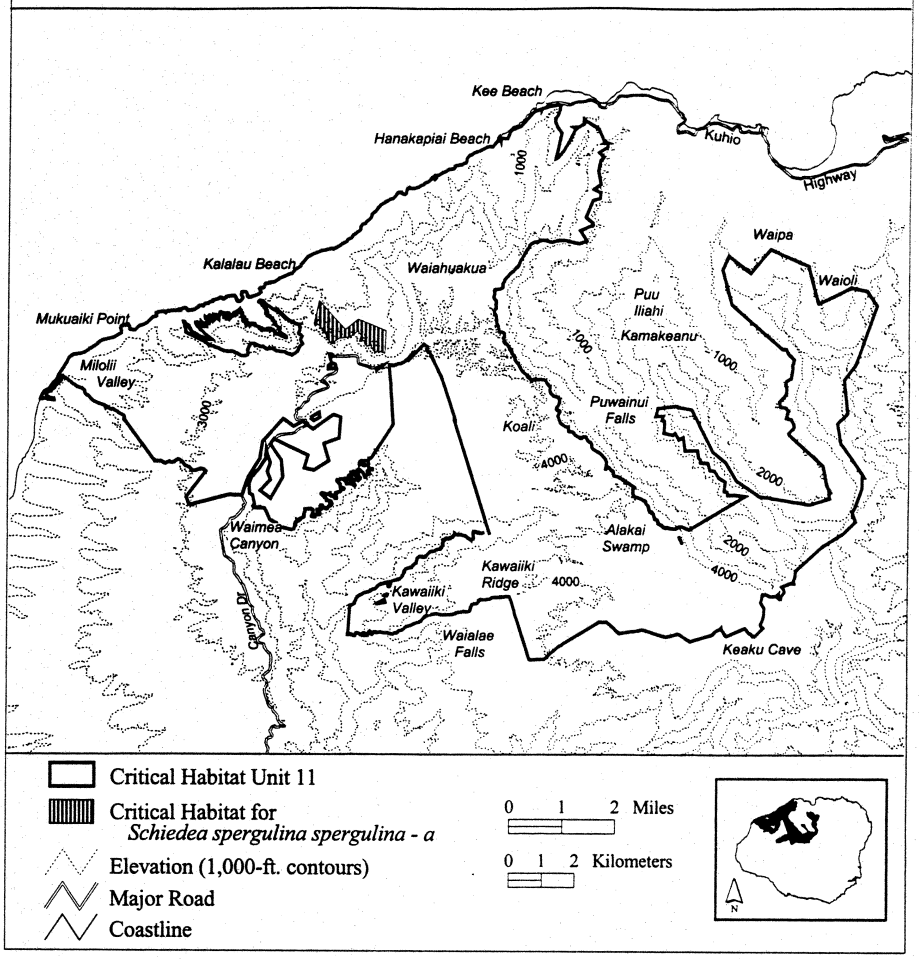


(cccxxi) Kauai 11—*Schiedea spergulina* var. *spergulina*—a (131 ha; 323 ac)

(A) [Reserved]

(B) Map 196 follows:

Map 196 Unit 11 - *Schiedea spergulina var. spergulina - a*

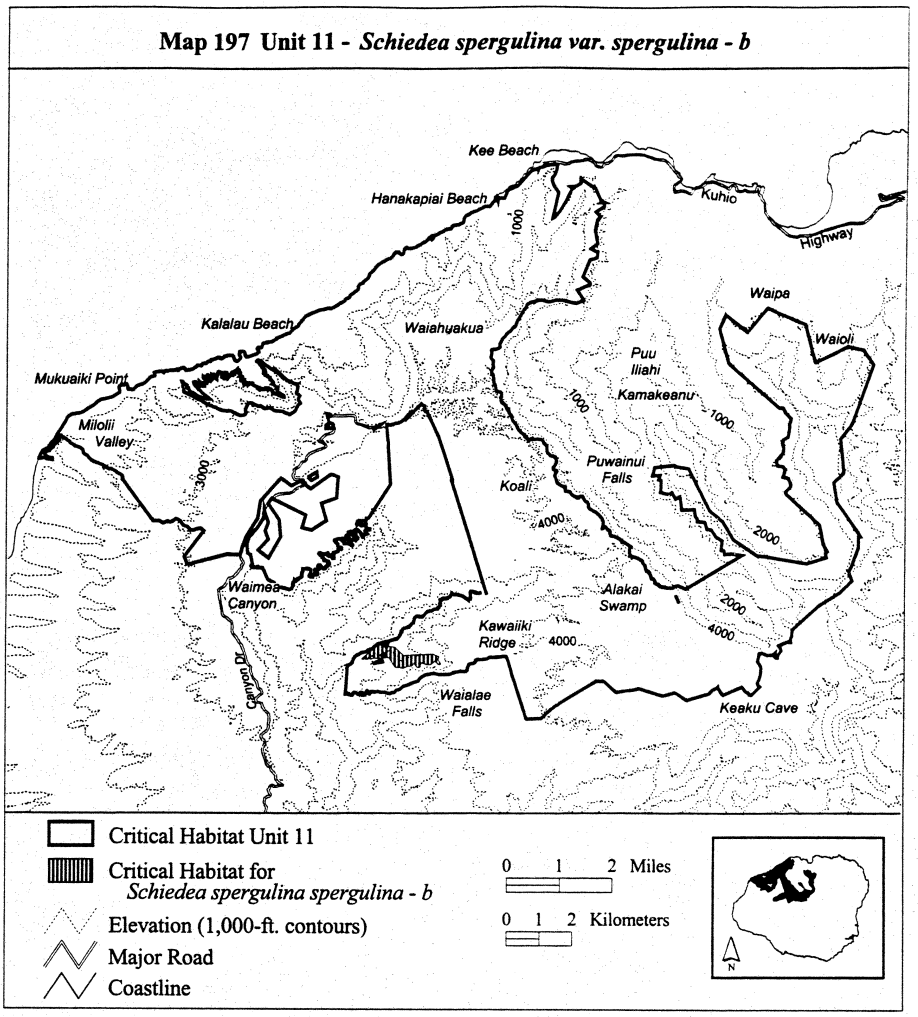


(cccxxii) Kauai 11—*Schiedea spergulina* var. *spergulina*—b (78 ha; 191 ac)

(A) [Reserved]

(B) Excluding 1 area bounded by the following 4 points (0 ha, 1 ac): Start at 435151, 2442425; 435215, 2442393; 435195, 2442353; 435128, 2442379; return to starting point.

(C) Map 197 follows:



(cccxxiii) Kauai 11—*Schiedea stellarioides*—a (1,260 ha; 3,112 ac)

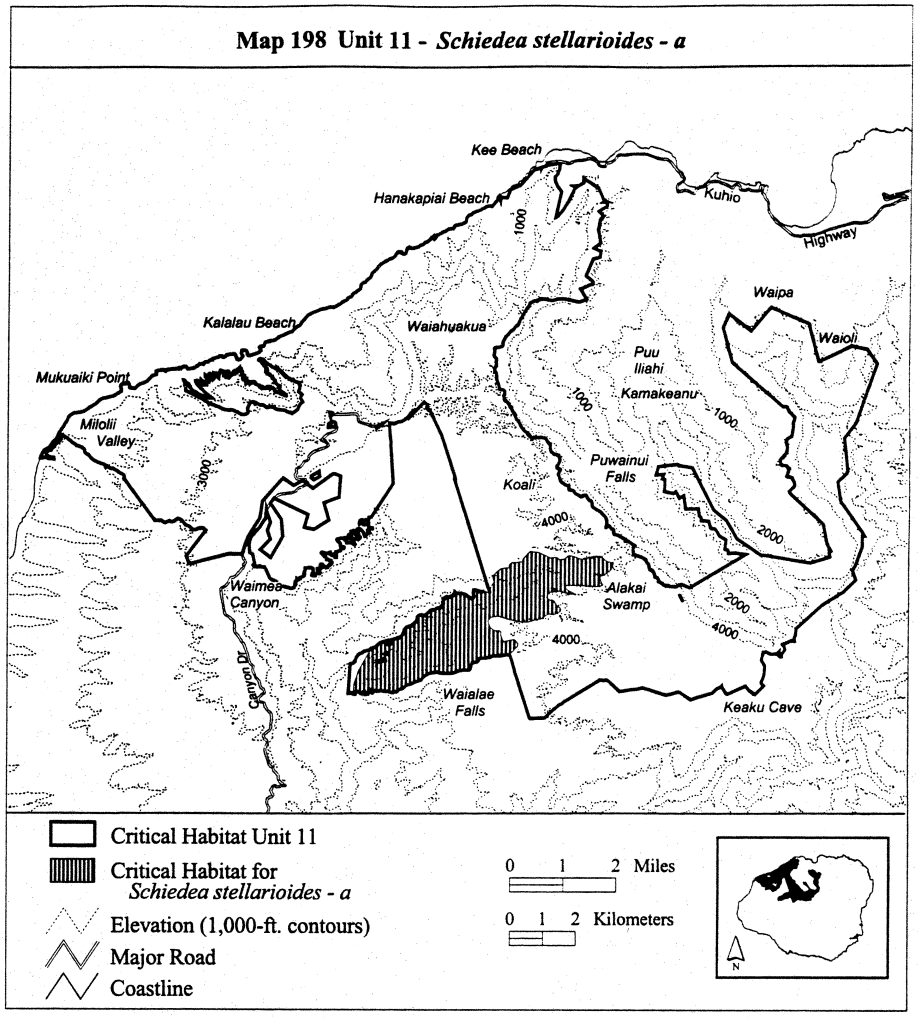
(A) [Reserved]

(B) Excluding 2 areas:

(*1*) Bounded by the following 3 points (1 ha; 3 ac): Start at 435132, 2442248; 435160, 2442164; 434848, 2442098; return to starting point; and

(*2*) Bounded by the following 4 points (0 ha; 1 ac): Start at 435151, 2442425; 435215, 2442393; 435195, 2442353; 435128, 2442379; return to starting point.

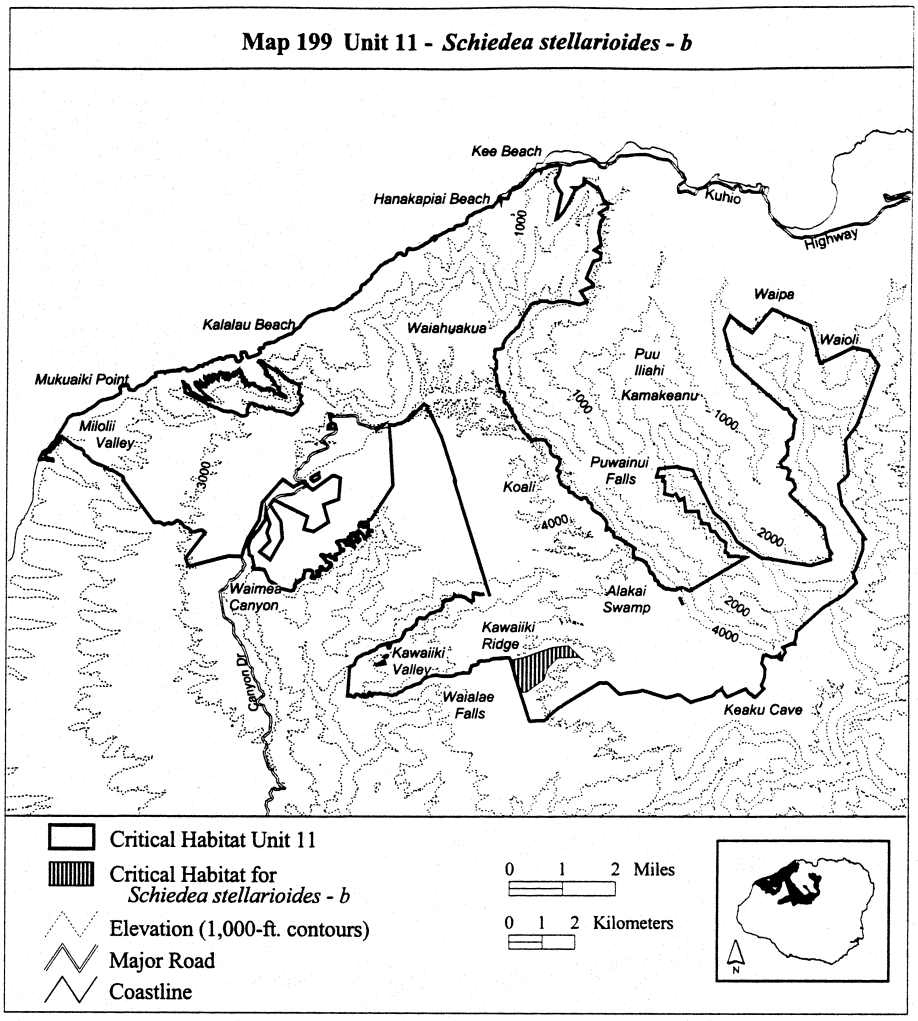
(C) Map 198 follows:



(cccxxiv) Kauai 11—*Schiedea stellarioides*—b (129 ha; 320 ac)

(A) [Reserved]

(B) Map 199 follows:



(cccxxv) Kauai 11—*Solanum sandwicense*—a (2,398 ha; 5,924 ac)

(A) [Reserved]

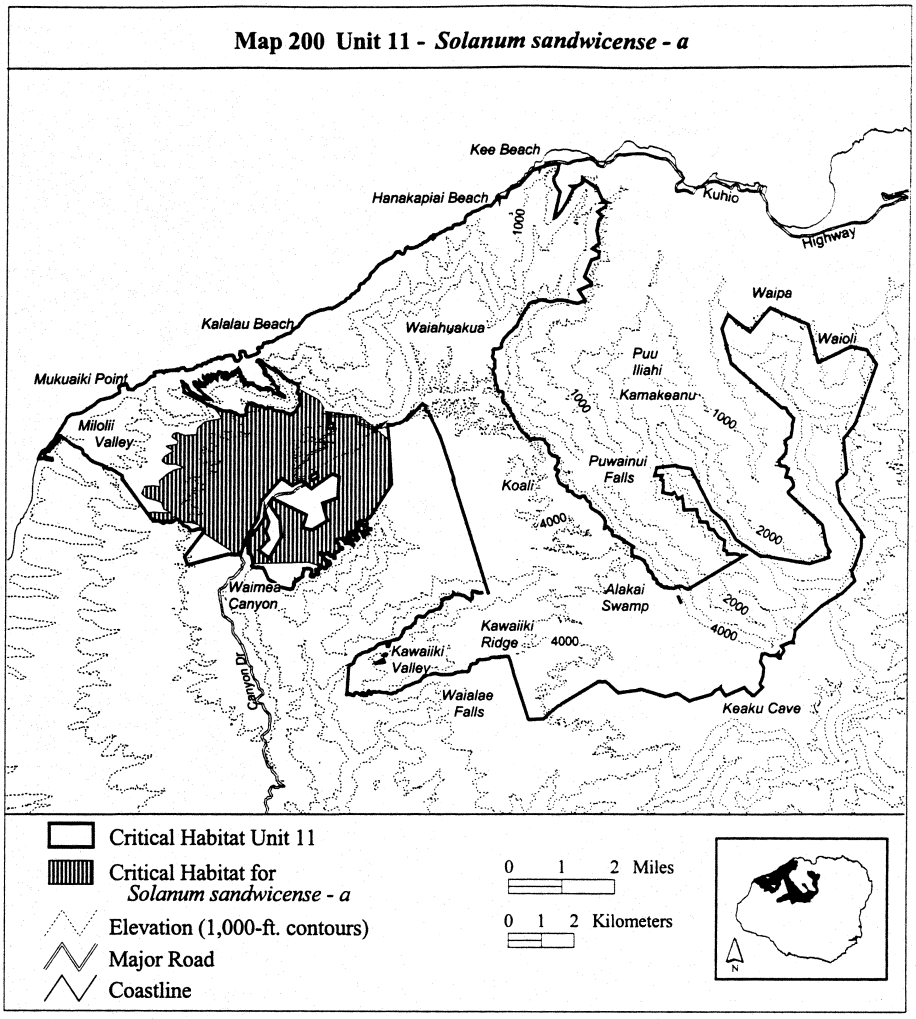
(B) Excluding 3 areas:

(*1*) Bounded by the following 10 points (3 ha; 8 ac): Start at 433368, 2449292; 433367, 2449352; 433448, 2449426; 433546, 2449412; 433567, 2449398; 433589, 2449323; 433612, 2449262; 433588, 2449244; 433567, 2449260; 433369, 2449255; return to starting point;

(*2*) Bounded by the following 4 points (3 ha; 8 ac): Start at 433109, 2447775; 432932, 2447668; 432827, 2447751; 433094, 2447922; return to starting point; and

(*3*) Bounded by the following 9 points (1 ha; 2ac): Start at 433484, 2449703; 433480, 2449629; 433457, 2449622; 433440, 2449604; 433426, 2449556; 433419, 2449599; 433399, 2449709; 433436, 2449707; 433460, 2449707; return to starting point.

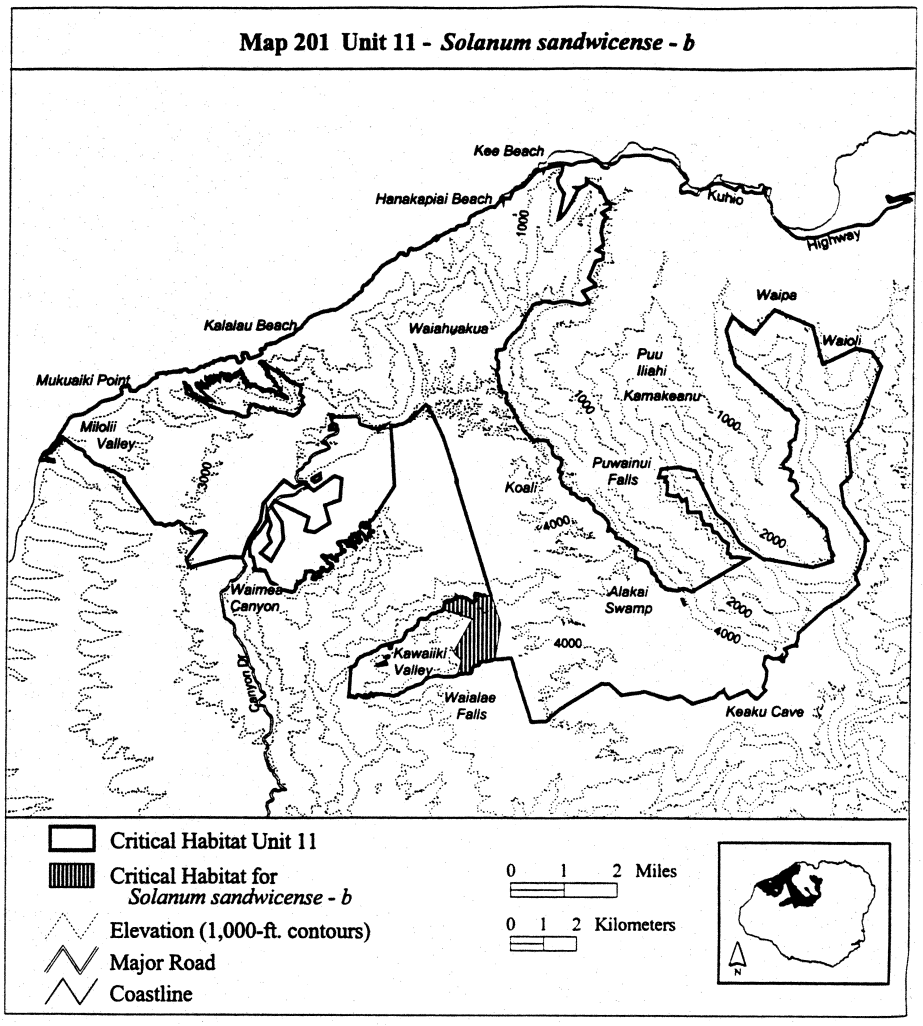
(C) Map 200 follows:



(cccxxvi) Kauai 11—*Solanum sandwicense*—b (249 ha; 614 ac)

(A) [Reserved]

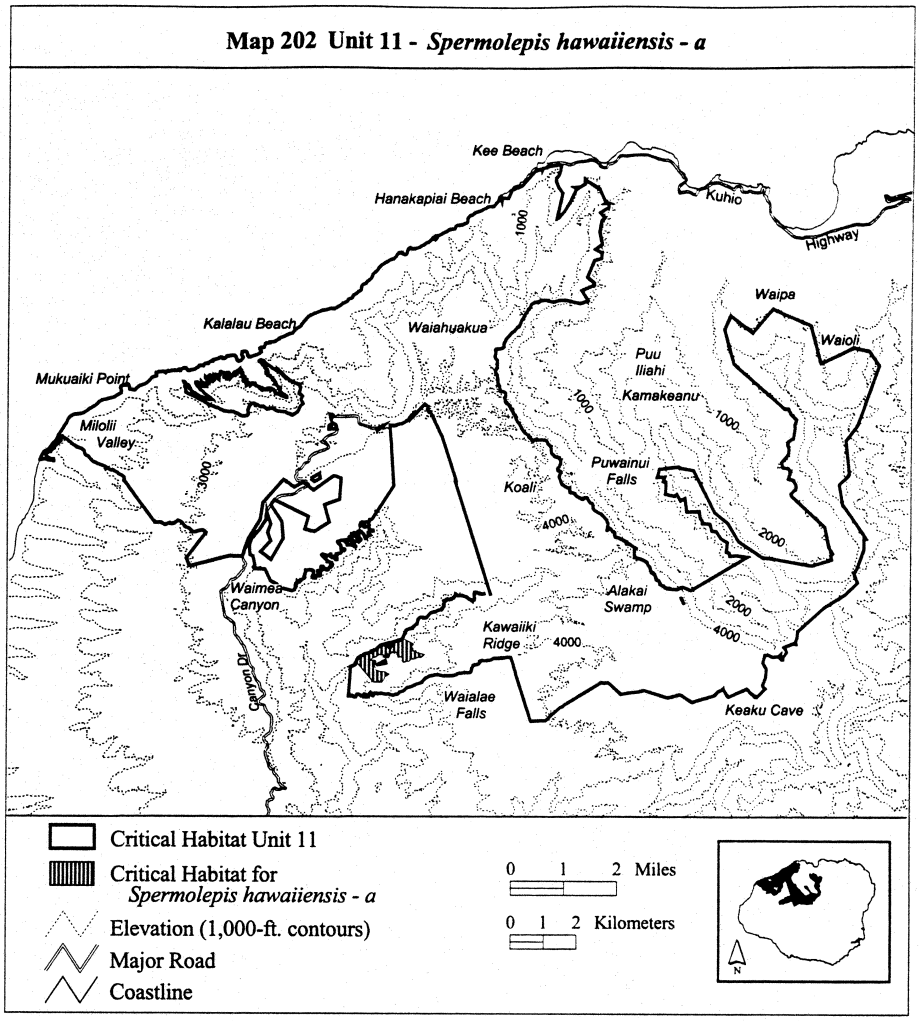
(B) Map 201 follows:



(cccxxvii) Kauai 11—*Spermolepis hawaiiensis*—a (96 ha; 237 ac)

(A) [Reserved]

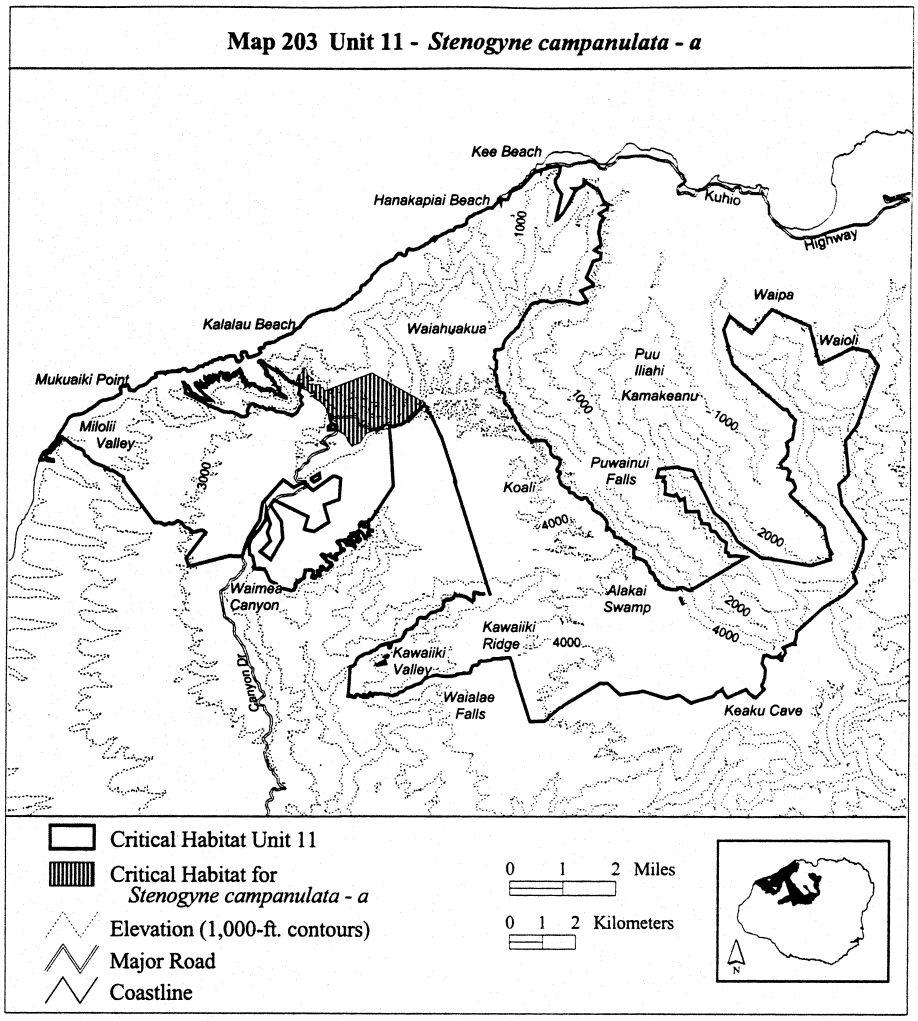
(B) Map 202 follows:



(cccxxviii) Kauai 11—*Stenogyne campanulata*—a (425 ha; 1,050 ac)

(A) [Reserved]

(B) Map 203 follows:



(cccxxix) Kauai 11–*Stenogyne kealiae*–b

(A) [Reserved]

(B) See paragraph (a)(1)(cxxxvi)(B) of this section for the map of this unit.

(cccxxx) Kauai 11–*Stenogyne kealiae*–c

(A) [Reserved]

(B) See paragraph (a)(1)(cxl)(B) of this section for the map of this unit.

(cccxxxi) Kauai 11–*Stenogyne kealiae*–d

(A) [Reserved]

(B) See paragraph (a)(1)(cxlvi)(B) of this section for the map of this unit.

(cccxxxii) Kauai 11–*Tetraplasandra bisattenuata*–c

(A) [Reserved]

(B) See paragraph (a)(1)(cxxxiii)(B) of this section for the map of this unit.

(cccxxxiii) Kauai 11–*Tetraplasandra bisattenuata*–d

(A) [Reserved]

(B) See paragraph (a)(1)(cxl)(B) of this section for the map of this unit.

(cccxxxiv) Kauai 11–*Tetraplasandra flynnii*–c

(A) [Reserved]

(B) See paragraph (a)(1)(cxxx)(B) of this section for the map of this unit.

(cccxxxv) Kauai 11–*Tetraplasandra flynnii*–d

(A) [Reserved]

(B) See paragraph (a)(1)(cxl)(B) of this section for the map of this unit.

(cccxxxvi) Kauai 11–*Tetraplasandra flynnii*–e

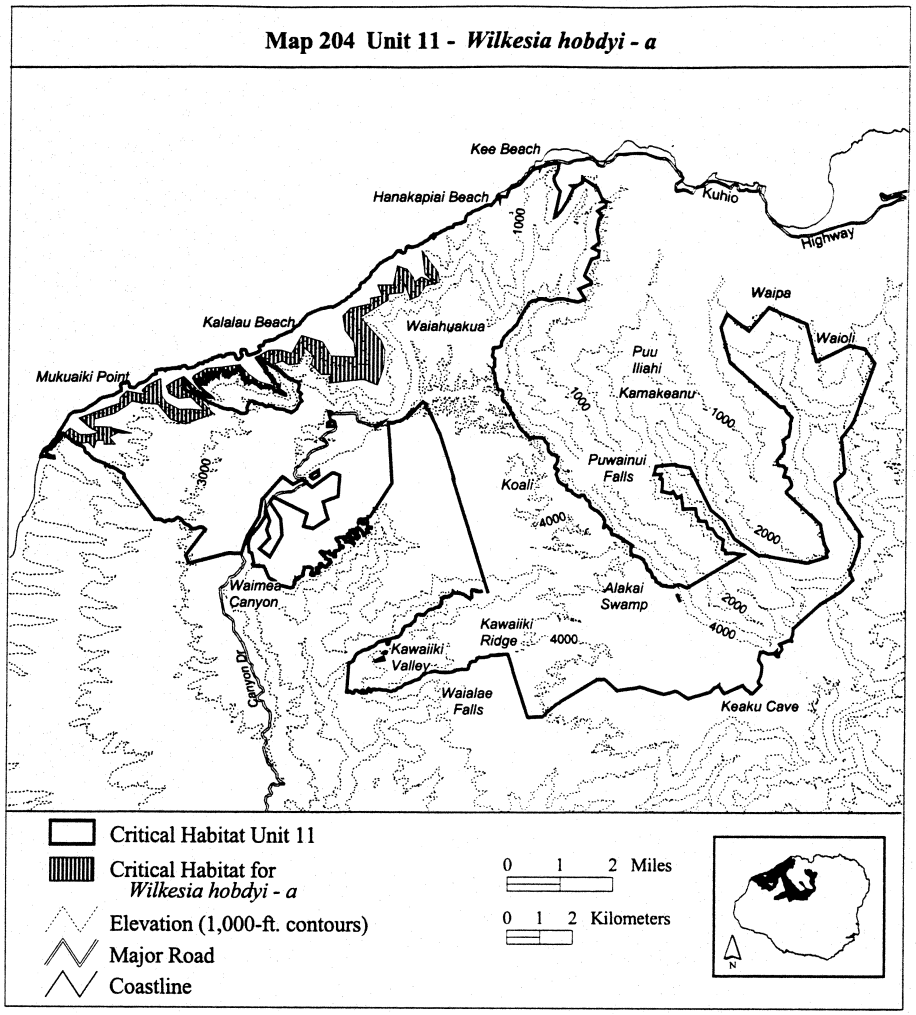
(A) [Reserved]

(B) See paragraph (a)(1)(cxlvi)(B) of this section for the map of this unit.

(cccxxxvii) Kauai 11—*Wilkesia hobdyi*—a (775 ha; 1,914 ac)

(A) [Reserved]

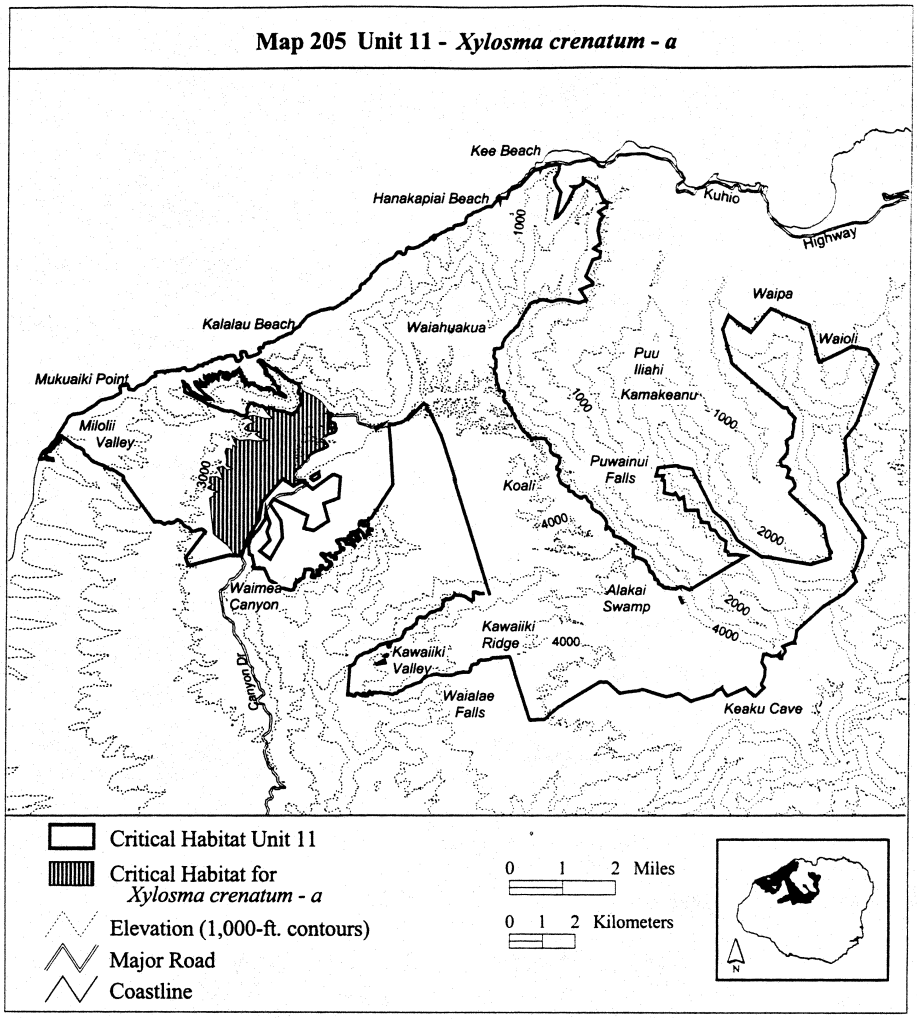
(B) Map 204 follows:



(cccxxxviii) Kauai 11—*Xylosma crenatum*—a (840 ha; 2,076 ac)

(A) [Reserved]

(B) Map 205 follows:



(cccxxxix) Kauai 11—*Zanthoxylum hawaiiense*—a (523 ha; 1,292 ac)

(A) [Reserved]

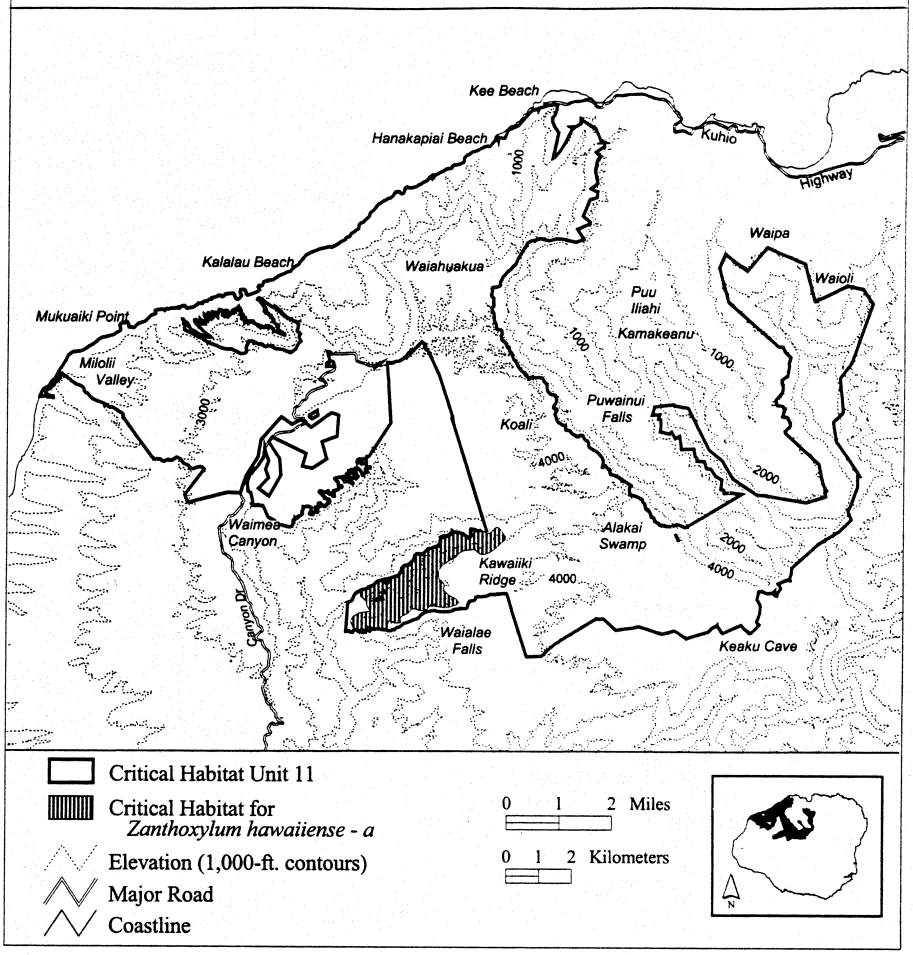
(B) Excluding 2 areas:

(*1*) Bounded by the following 3 points (1 ha, 3 ac): Start at 435132, 2442248; 435160, 2442164; 434848, 2442098; return to starting point; and

(*2*) Bounded by the following 4 points (0 ha, 1 ac): Start at 435151, 2442425; 435215, 2442393; 435195, 2442353; 435128, 2442379; return to starting point.

(C) Map 206 follows:

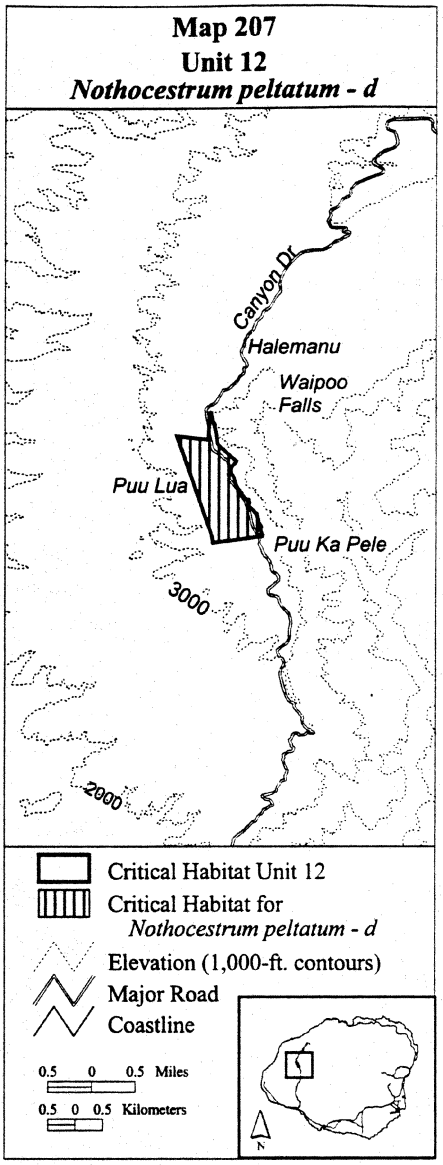
Map 206 Unit 11 - *Zanthoxylum hawaiiense - a*



(cccxl) Kauai 12—*Nothocestrum peltatum*—d (162 ha; 400 ac)

(A) [Reserved]

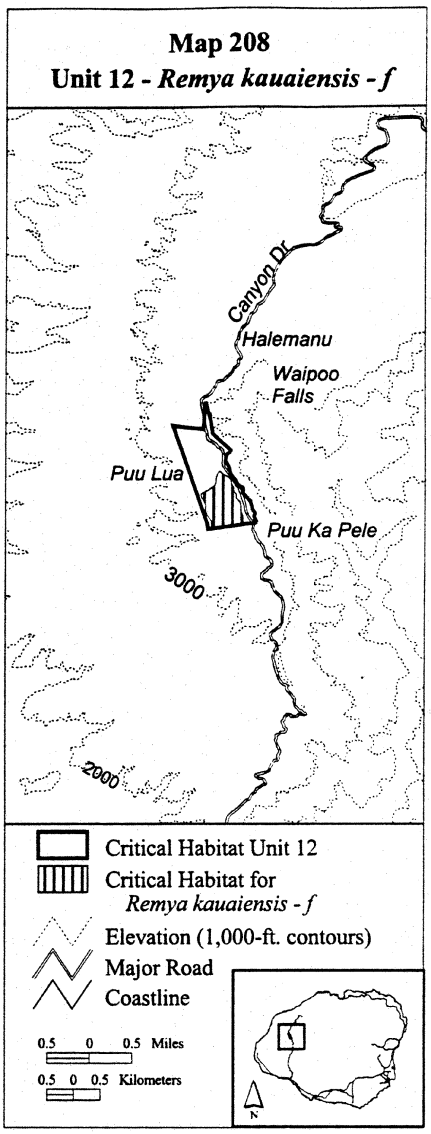
(B) Map 207 follows:



(cccxli) Kauai 12—*Remya kauaiensis*—f (52 ha; 128 ac)

(A) [Reserved]

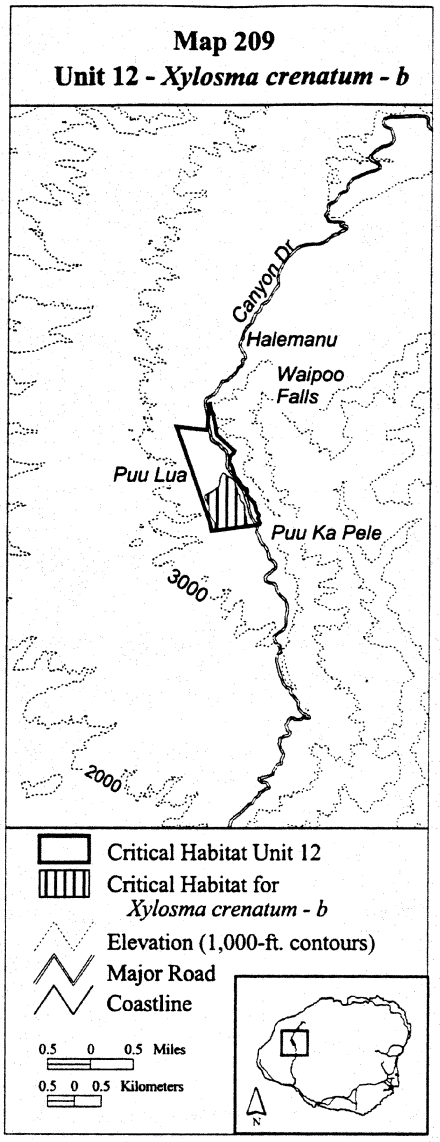
(B) Map 208 follows:



(cccxlii) Kauai 12—*Xylosma crenatum*—b (52 ha; 128 ac)

(A) [Reserved]

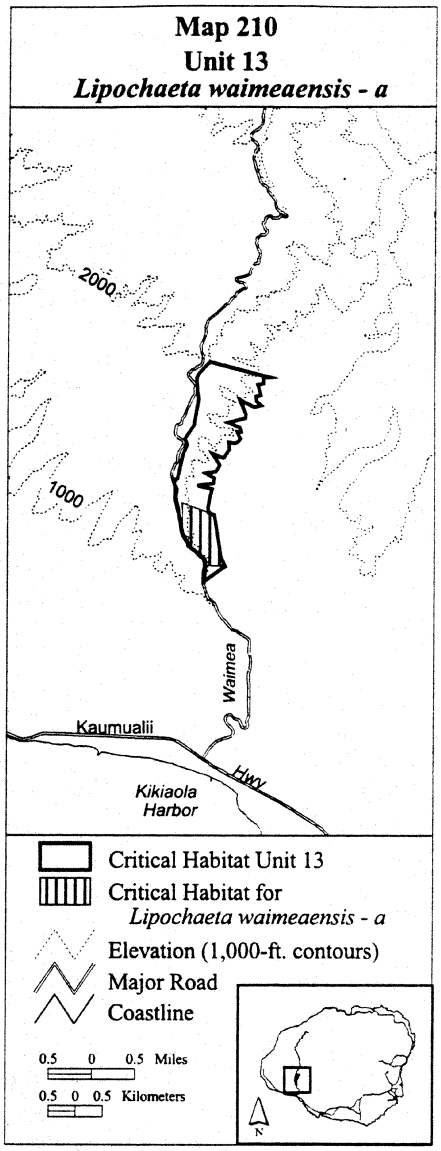
(B) Map 209 follows:



(cccxliii) Kauai 13—*Lipochaeta waimeaensis*—a (56 ha; 139 ac)

(A) [Reserved]

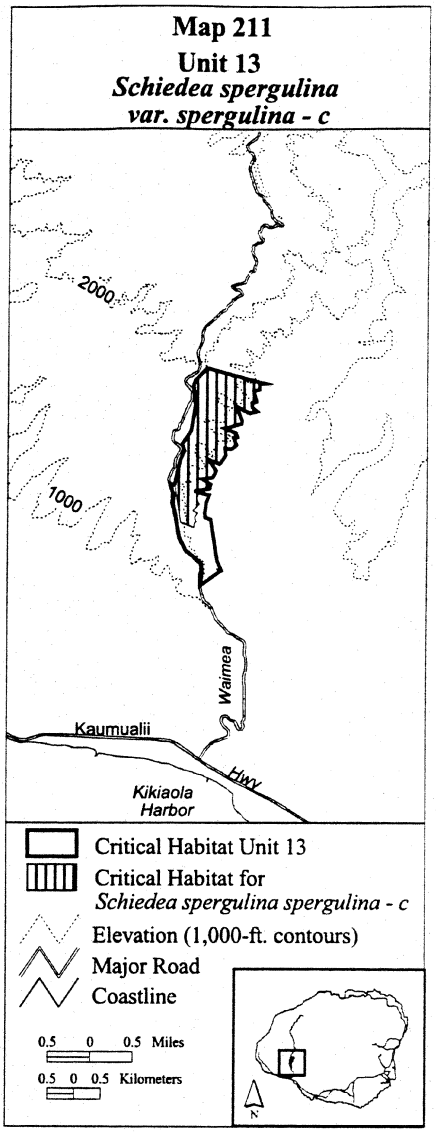
(B) Map 210 follows:



(cccxliv) Kauai 13—*Schiedea spergulina* var. *spergulina*—c (221 ha; 545 ac)

(A) [Reserved]

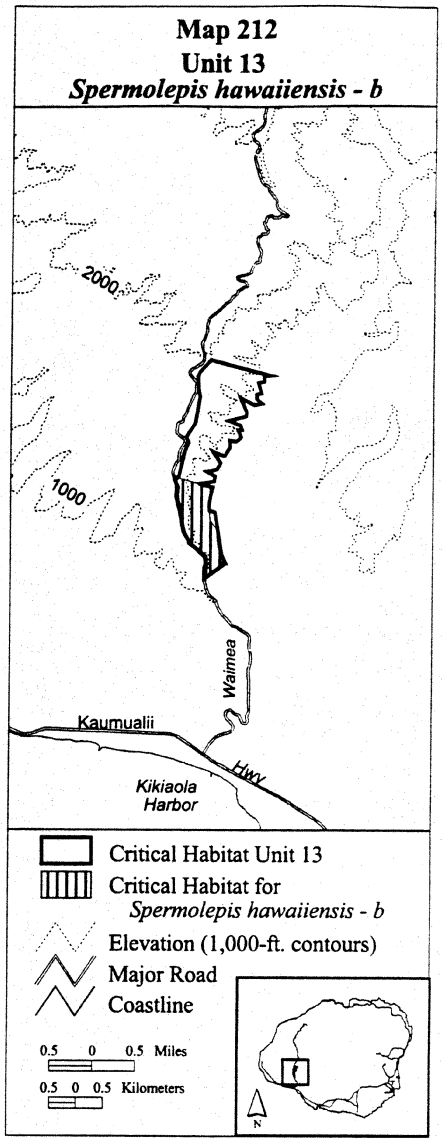
(B) Map 211 follows:



(cccxlv) Kauai 13—*Spermolepis hawaiiensis*—b (87 ha; 215 ac)

(A) [Reserved]

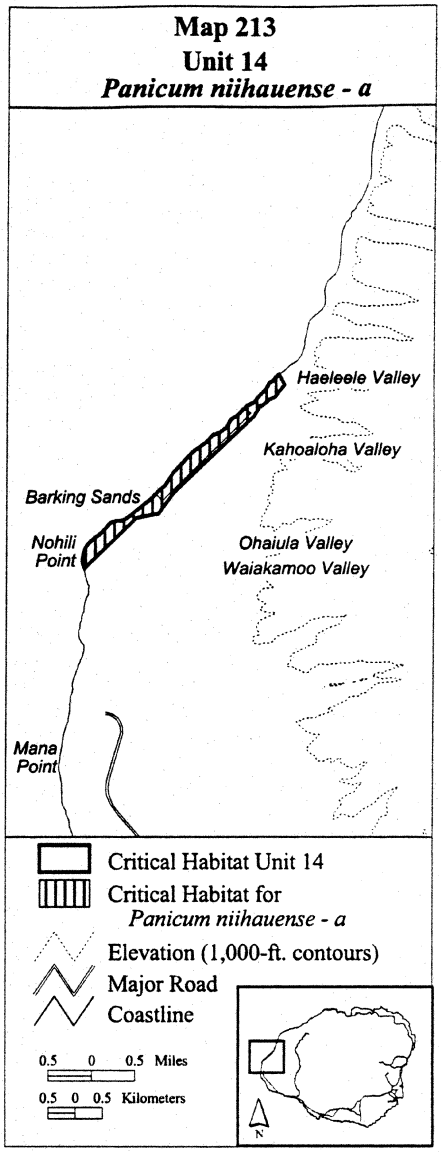
(B) Map 212 follows:



(cccxlvi) Kauai 14—*Panicum niihauense*—a (120 ha; 297 ac)

(A) [Reserved]

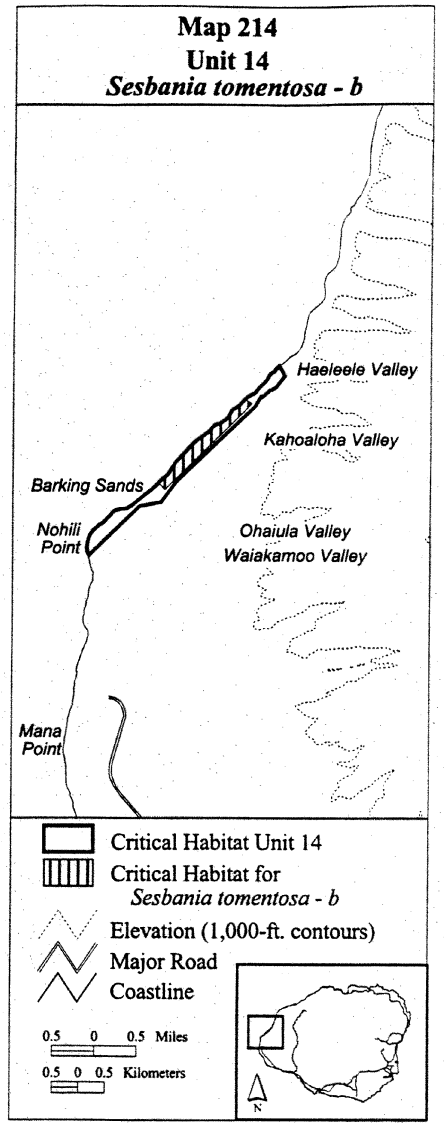
(B) Map 213 follows:



(cccxlvii) Kauai 14—*Sesbania tomentosa*—b (44 ha; 110 ac)

(A) [Reserved]

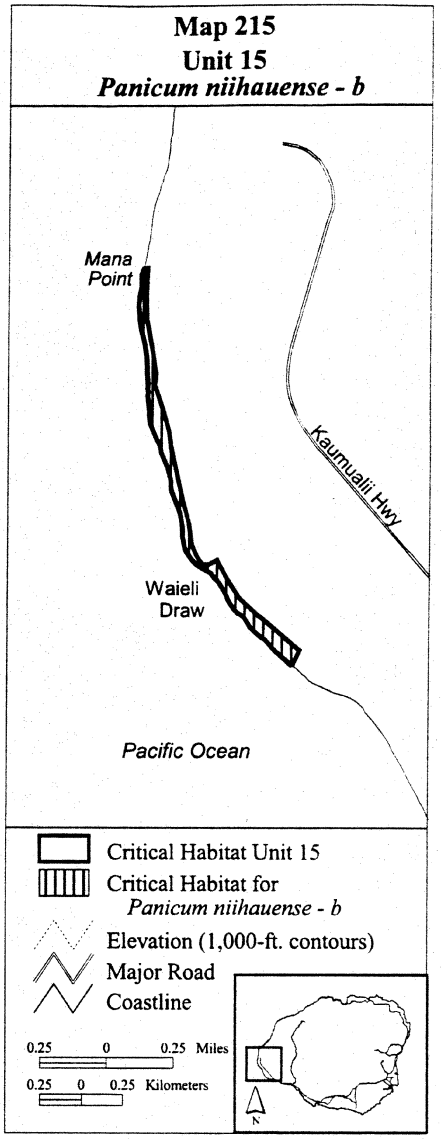
(B) Map 214 follows:

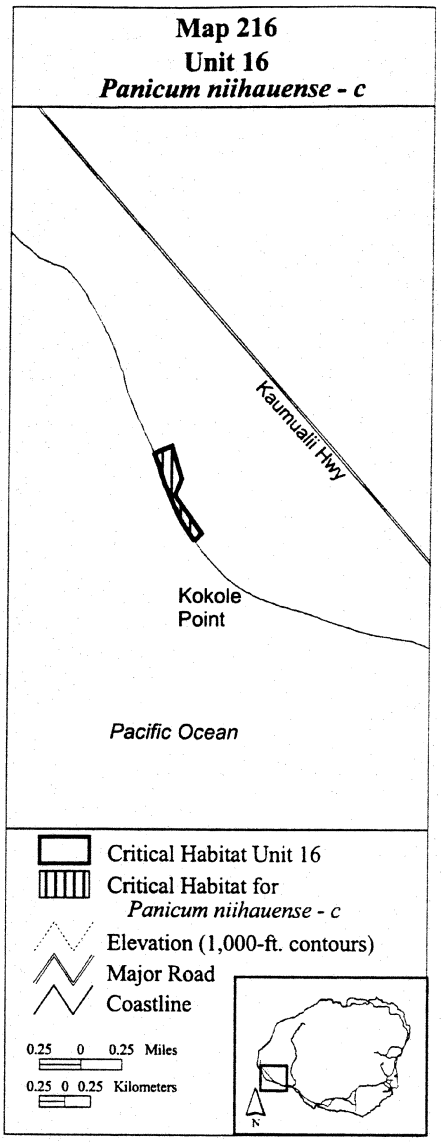


(cccxlviii) Kauai 15—*Panicum niihauense*—b (16 ha; 39 ac)

(A) [Reserved]

(B) Map 215 follows:





(cccxlix) Kauai 16—*Panicum niihauense*—c (11 ha; 28 ac)

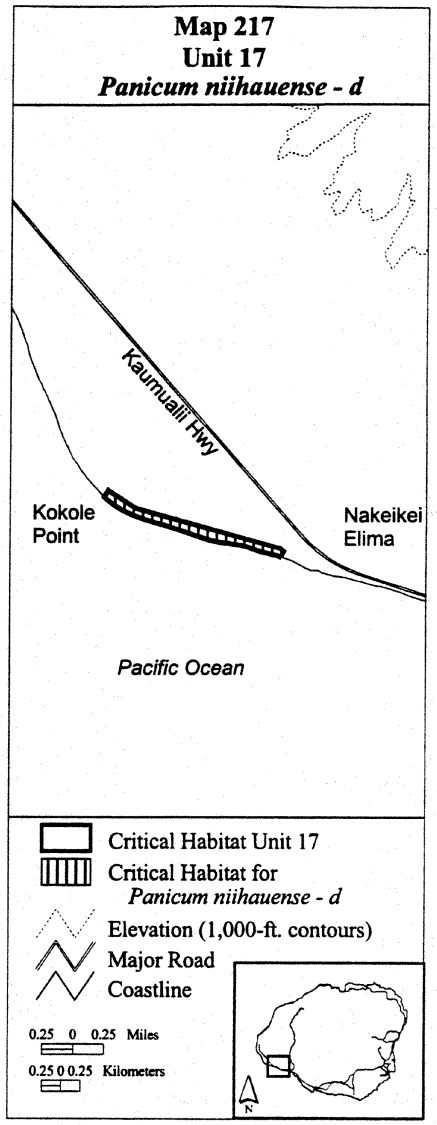
(A) [Reserved]

(B) Map 216 follows:

(cccl) Kauai 17—*Panicum niihauense*—d (28 ha; 68 ac)

(A) [Reserved]

(B) Map 217 follows:



(cccli) Kauai 18—*Chamaesyce remyi* var. *kauaiensis*–f

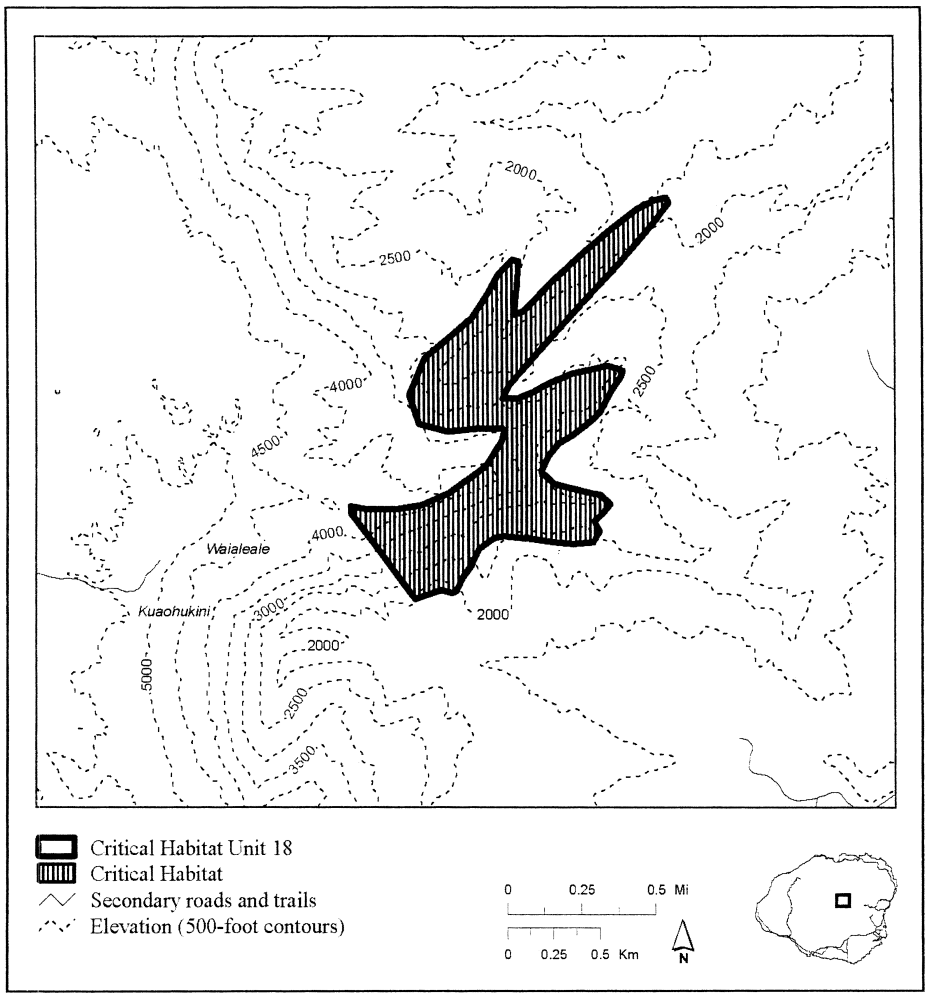
(A) This is a unit of the Wet Cliff ecosystem and consists of 296 ac (120 ha). This unit is also critical habitat for Kauai 18–*Chamaesyce remyi* var. *remyi*–k, Kauai 18–*Cyanea dolichopoda*–d, Kauai 18–*Cyrtandra oenobarba*–f, Kauai 18–*Cyrtandra paliku*–d, Kauai 18–*Dubautia plantaginea* ssp. *magnifolia*–d, Kauai 18–*Lysimachia iniki*–d, Kauai 18–*Lysimachia pendens*–d, Kauai 18–*Lysimachia venosa*–d, and Kauai 18–*Platydesma rostrata*–k (see paragraphs (a)(1)(ccclii), (a)(1)(cccliii), (a)(1)(ccccliv), (a)(1)(ccclv), (a)(1)(ccclvi), (a)(1)(ccclvii), (a)(1)(ccclviii), (a)(1)(ccclix), and (a)(1)(ccclx), respectively, of this section).

(B) Map 217a follows:

Map 217a

Kauai 18–*Chamaesyce remyi* var. *kauaiensis*–f, Kauai 18–*Chamaesyce remyi* var. *remyi*–k, Kauai 18–*Cyanea dolichopoda*–d, Kauai 18–*Cyrtandra oenobarba*–f, Kauai 18–*Cyrtandra paliku*–d, Kauai 18–*Dubautia plantaginea* ssp. *magnifolia*–d, Kauai 18–*Lysimachia iniki*–d, Kauai 18–*Lysimachia pendens*–d, Kauai 18–*Lysimachia venosa*–d, Kauai 18–*Platydesma rostrata*–k

Wet Cliff



(ccclii) Kauai 18–*Chamaesyce remyi* var. *remyi*–k

(A) [Reserved]

(B) See paragraph (a)(1)(cccli)(B) of this section for the map of this unit.

(cccliii) Kauai 18–*Cyanea dolichopoda*–d

(A) [Reserved]

(B) See paragraph (a)(1)(cccli)(B) of this section for the map of this unit.

(ccccliv) Kauai 18–*Cyrtandra oenobarba*–f

(A) [Reserved]

(B) See paragraph (a)(1)(cccli)(B) of this section for the map of this unit.

(ccclv) Kauai 18–*Cyrtandra paliku*–d

(A) [Reserved]

(B) See paragraph (a)(1)(cccli)(B) of this section for the map of this unit.

(ccclvi) Kauai 18–*Dubautia plantaginea* ssp. *magnifolia*–d

(A) [Reserved]

(B) See paragraph (a)(1)(cccli)(B) of this section for the map of this unit.

(ccclvii) Kauai 18–*Lysimachia iniki*–d

(A) [Reserved]

(B) See paragraph (a)(1)(cccli)(B) of this section for the map of this unit.

(ccclviii) Kauai 18–*Lysimachia pendens*–d

(A) [Reserved]

(B) See paragraph (a)(1)(cccli)(B) of this section for the map of this unit.

(ccclix) Kauai 18–*Lysimachia venosa*–d

(A) [Reserved]

(B) See paragraph (a)(1)(cccli)(B) of this section for the map of this unit.

(ccclx) Kauai 18–*Platydesma rostrata*–k

(A) [Reserved]

(B) See paragraph (a)(1)(cccli)(B) of this section for the map of this unit.

(ccclxi) Kauai 19–*Chamaesyce remyi* var. *kauaiensis*–g

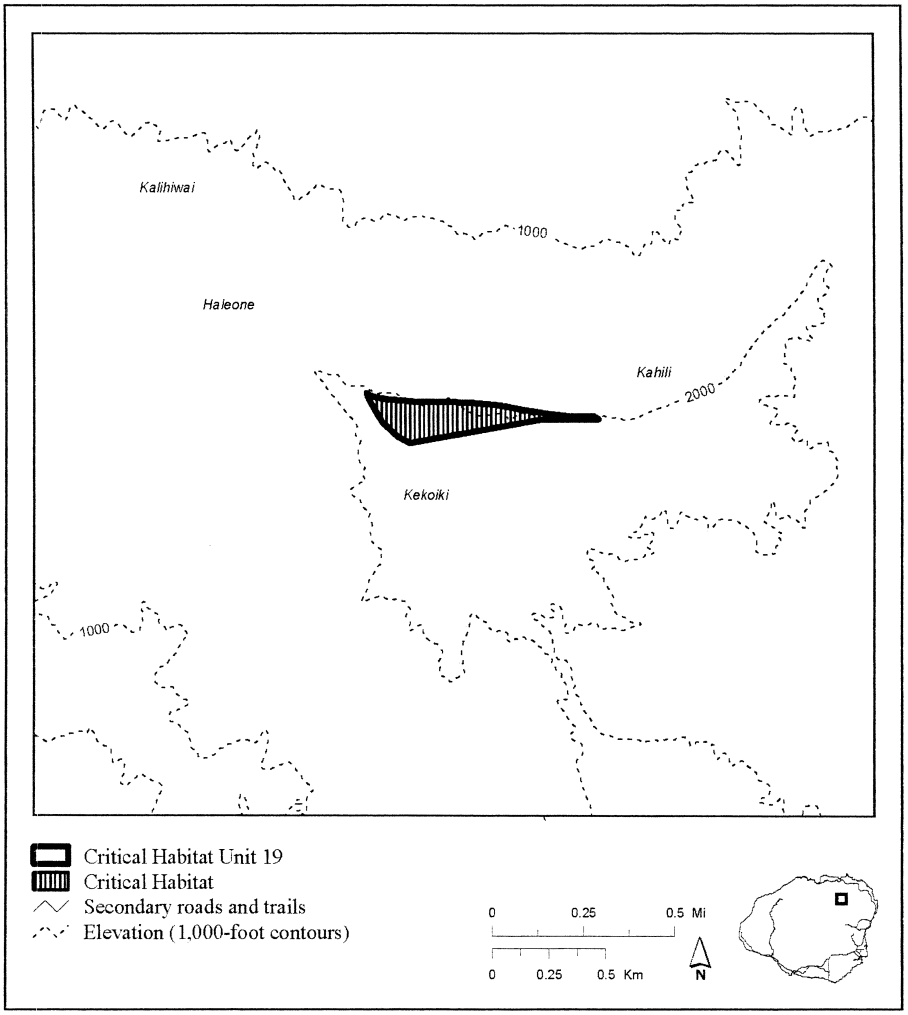
(A) This is a unit of the Wet Cliff ecosystem and consists of 23 ac (9 ha). This unit is also critical habitat for Kauai 19–*Chamaesyce remyi* var. *remyi*–l, Kauai 19–*Cyanea dolichopoda*–e, Kauai 19–*Cyrtandra oenobarba*–g, Kauai 19–*Cyrtandra paliku*–e, Kauai 19–*Dubautia plantaginea* ssp. *magnifolia*–e, Kauai 19–*Lysimachia iniki*–e, Kauai 19–*Lysimachia pendens*–e, Kauai 19–*Lysimachia venosa*–e, and Kauai 19–*Platydesma rostrata*–l (see paragraphs (a)(1)(ccclxii), (a)(1)(ccclxiii), (a)(1)(ccclxiv), (a)(1)(ccclxv), (a)(1)(ccclxvi), (a)(1)(ccclxvii), (a)(1)(ccclxviii), (a)(1)(ccclxix), and (a)(1)(ccclxx), respectively, of this section).

(B) Map 217b follows:

Map 217b

Kauai 19–*Chamaesyce remyi* var. *kauaiensis*–g, Kauai 19–*Chamaesyce remyi* var. *remyi*–l, Kauai 19–*Cyanea dolichopoda*–e, Kauai 19–*Cyrtandra oenobarba*–g, Kauai 19–*Cyrtandra paliku*–e, Kauai 19–*Dubautia plantaginea* ssp. *magnifolia*–e, Kauai 19–*Lysimachia iniki*–e, Kauai 19–*Lysimachia pendens*–e, Kauai 19–*Lysimachia venosa*–e, Kauai 19–*Platydesma rostrata*–l

Wet Cliff



(ccclxii) Kauai 19–*Chamaesyce remyi* var. *remyi*–l

(A) [Reserved]

(B) See paragraph (a)(1)(ccclxi)(B) of this section for the map of this unit.

(ccclxiii) Kauai 19–*Cyanea dolichopoda*–e

(A) [Reserved]

(B) See paragraph (a)(1)(ccclxi)(B) of this section for the map of this unit.

(ccclxiv) Kauai 19–*Cyrtandra oenobarba*–g

(A) [Reserved]

(B) See paragraph (a)(1)(ccclxi)(B) of this section for the map of this unit.

(ccclxv) Kauai 19–*Cyrtandra paliku*–e

(A) [Reserved]

(B) See paragraph (a)(1)(ccclxi)(B) of this section for the map of this unit.

(ccclxvi) Kauai 19–*Dubautia plantaginea* ssp. *magnifolia*–e

(A) [Reserved]

(B) See paragraph (a)(1)(ccclxi)(B) of this section for the map of this unit.

(ccclxvii) Kauai 19–*Lysimachia iniki*–e

(A) [Reserved]

(B) See paragraph (a)(1)(ccclxi)(B) of this section for the map of this unit.

(ccclxviii) Kauai 19–*Lysimachia pendens*–e

(A) [Reserved]

(B) See paragraph (a)(1)(ccclxi)(B) of this section for the map of this unit.

(ccclxix) Kauai 19–*Lysimachia venosa*–e

(A) [Reserved]

(B) See paragraph (a)(1)(ccclxi)(B) of this section for the map of this unit.

(ccclxx) Kauai 19–*Platydesma rostrata*–l

(A) [Reserved]

(B) See paragraph (a)(1)(ccclxi)(B) of this section for the map of this unit.

(ccclxxi) Kauai 20–*Chamaesyce remyi* var. *kauaiensis*–h

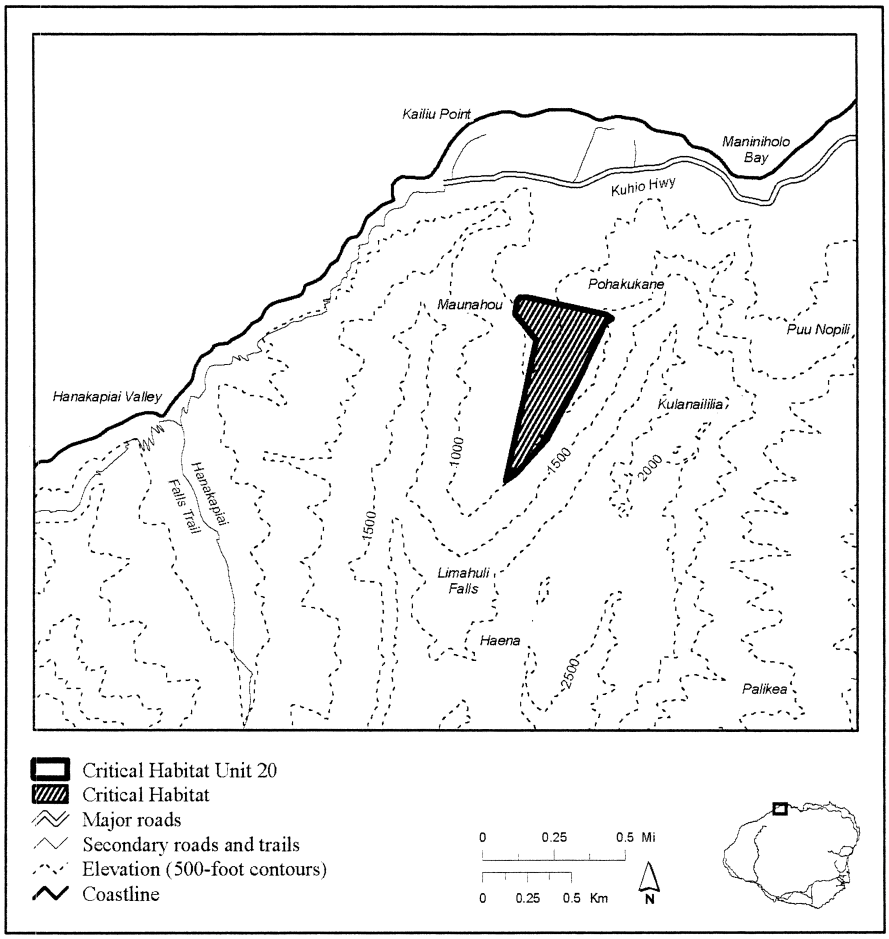
(A) This is a unit of the Lowland Wet ecosystem and consists of 65 ac (26 ha). This unit is also critical habitat for Kauai 20–*Chamaesyce remyi* var. *remyi*–m, Kauai 20–*Charpentiera densiflora*–e, Kauai 20–*Cyanea eleeleensis*–c, Kauai 20–*Cyanea kolekoleensis*–c, Kauai 20–*Cyanea kuhihewa*–c, Kauai 20–*Cyrtandra oenobarba*–h, Kauai 20–*Dubautia imbricata* ssp. *imbricata*–c, Kauai 20–*Labordia helleri*–h, Kauai 20–*Melicope paniculata*–c, Kauai 20–*Melicope puberula*–e, Kauai 20–*Phyllostegia renovans*–e, Kauai 20–*Platydesma rostrata*–m, Kauai 20–*Stenogyne kealiae*–e, Kauai 20–*Tetraplasandra bisattenuata*–e, and Kauai 20–*Tetraplasandra flynnii*–f, (see paragraphs (a)(1)(ccclxxii), (a)(1)(ccclxxiii), (a)(1)(ccclxxiv), (a)(1)(ccclxxv), (a)(1)(ccclxxvi), (a)(1)(ccclxxvii), (a)(1)(ccclxxviii), (a)(1)(ccclxxix), (a)(1)(ccclxxx), (a)(1)(ccclxxxi), (a)(1)(ccclxxxii), (a)(1)(ccclxxxiii), (a)(1)(ccclxxxiv), (a)(1)(ccclxxxv), and (a)(1)(ccclxxxvi), respectively, of this section).

(B) Map 217c follows:

Map 217c

Kauai 20–*Chamaesyce remyi* var. *kauaiensis*–h, Kauai 20–*Chamaesyce remyi* var. *remyi*–m, Kauai 20–*Charpentiera densiflora*–e, Kauai 20–*Cyanea eleeleensis*–c, Kauai 20–*Cyanea kolekoleensis*–c, Kauai 20–*Cyanea kuhihewa*–c, Kauai 20–*Cyrtandra oenobarba*–h, Kauai 20–*Dubautia imbricata* ssp. *imbricata*–c, Kauai 20–*Labordia helleri*–h, Kauai 20–*Melicope paniculata*–c, Kauai 20–*Melicope puberula*–e, Kauai 20–*Phyllostegia renovans*–e, Kauai 20–*Platydesma rostrata*–m, Kauai 20–*Stenogyne kealiae*–e, Kauai 20–*Tetraplasandra bisattenuata*–e, Kauai 20–*Tetraplasandra flynnii*–f

Lowland Wet



(ccclxxii) Kauai 20–*Chamaesyce remyi* var. *remyi*–m

(A) [Reserved]

(B) See paragraph (a)(1)(ccclxxi)(B) of this section for the map of this unit.

(ccclxxiii) Kauai 20–*Charpentiera densiflora*–e

(A) [Reserved]

(B) See paragraph (a)(1)(ccclxxi)(B) of this section for the map of this unit.

(ccclxxiv) Kauai 20–*Cyanea eleeleensis*–c

(A) [Reserved]

(B) See paragraph (a)(1)(ccclxxi)(B) of this section for the map of this unit.

(ccclxxv) Kauai 20–*Cyanea kolekoleensis*–c

(A) [Reserved]

(B) See paragraph (a)(1)(ccclxxi)(B) of this section for the map of this unit.

(ccclxxvi) Kauai 20–*Cyanea kuhihewa*–c

(A) [Reserved]

(B) See paragraph (a)(1)(ccclxxi)(B) of this section for the map of this unit.

(ccclxxvii) Kauai 20–*Cyrtandra oenobarba*–h

(A) [Reserved]

(B) See paragraph (a)(1)(ccclxxi)(B) of this section for the map of this unit.

(ccclxxviii) Kauai 20–*Dubautia imbricata* ssp. *imbricata*–c

(A) [Reserved]

(B) See paragraph (a)(1)(ccclxxi)(B) of this section for the map of this unit.

(ccclxxix) Kauai 20–*Labordia helleri*–h

(A) [Reserved]

(B) See paragraph (a)(1)(ccclxxi)(B) of this section for the map of this unit.

(ccclxxx) Kauai 20–*Melicope paniculata*–c

(A) [Reserved]

(B) See paragraph (a)(1)(ccclxxi)(B) of this section for the map of this unit.

(ccclxxxi) Kauai 20–*Melicope puberula*–e

(A) [Reserved]

(B) See paragraph (a)(1)(ccclxxi)(B) of this section for the map of this unit.

(ccclxxxii) Kauai 20–*Phyllostegia renovans*–e

(A) [Reserved]

(B) See paragraph (a)(1)(ccclxxi)(B) of this section for the map of this unit.

(ccclxxxiii) Kauai 20–*Platydesma rostrata*–m

(A) [Reserved]

(B) See paragraph (a)(1)(ccclxxi)(B) of this section for the map of this unit.

(ccclxxxiv) Kauai 20–*Stenogyne kealiae*–e

(A) [Reserved]

(B) See paragraph (a)(1)(ccclxxi)(B) of this section for the map of this unit.

(ccclxxxv) Kauai 20–*Tetraplasandra bisattenuata*–e

(A) [Reserved]

(B) See paragraph (a)(1)(ccclxxi)(B) of this section for the map of this unit.

(ccclxxxvi) Kauai 20–*Tetraplasandra flynnii*–f

(A) [Reserved]

(B) See paragraph (a)(1)(ccclxxi)(B) of this section for the map of this unit.

(ccclxxxvii) Kauai 21–*Chamaesyce remyi* var. *remyi*–n

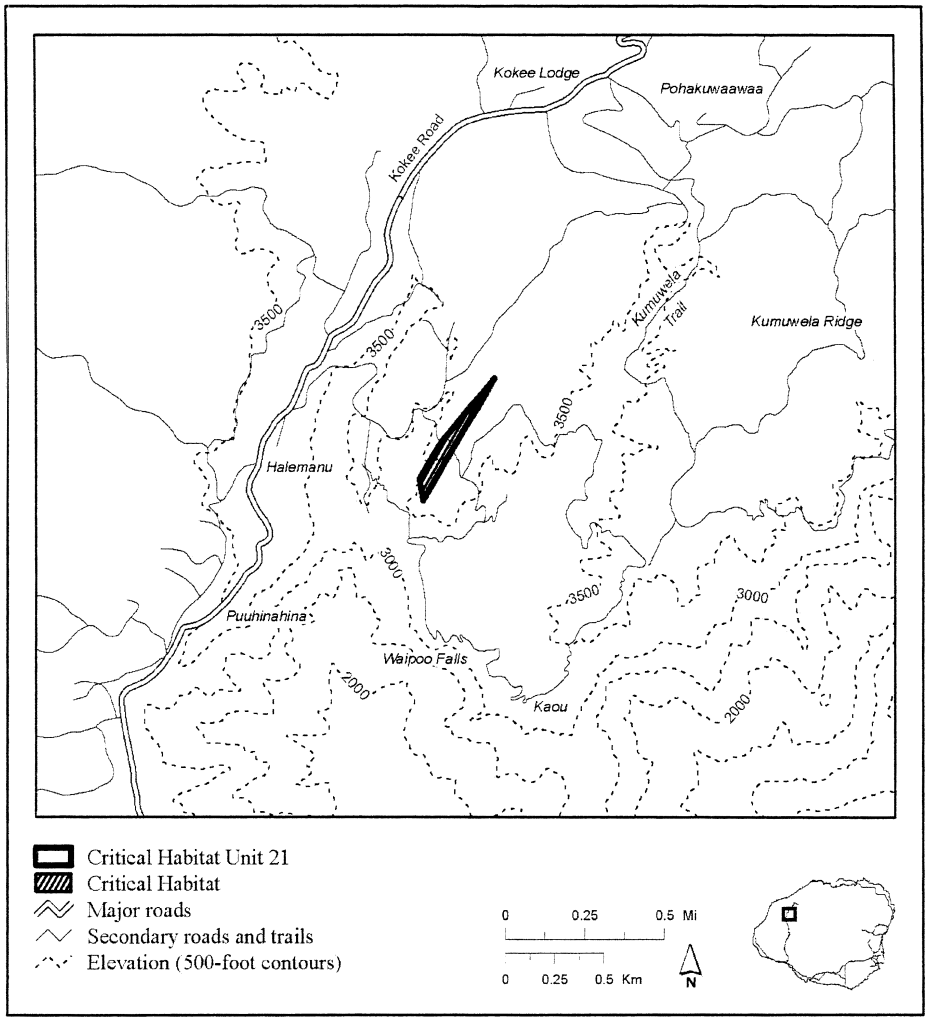
(A) This is a unit of the Montane Mesic ecosystem and consists of 8 ac (3 ha). This unit is also critical habitat for Kauai 21–*Diellia mannii*–b, Kauai 21–*Labordia helleri*–i, Kauai 21–*Myrsine knudsenii*–b, Kauai 21–*Myrsine mezii*–d, Kauai 21–*Platydesma rostrata*–n, Kauai 21–*Psychotria grandiflora*–d, Kauai 21–*Stenogyne kealiae*–f, and Kauai 21–*Tetraplasandra flynnii*–g (see paragraphs (a)(1)(ccclxxxviii), (a)(1)(ccclxxxix), (a)(1)(cccxc), (a)(1)(cccxci), (a)(1)(cccxcii), (a)(1)(cccxciii), (a)(1)(cccxciv), and (a)(1)(cccxcv), respectively, of this section).

(B) Map 217d follows:

Map 217d

Kauai 21–*Chamaesyce remyi* var. *remyi*–n, Kauai 21–*Diellia mannii*–b, Kauai 21–*Labordia helleri*–i, Kauai 21 –*Myrsine knudsenii*–b, Kauai 21–*Myrsine mezii*–d, Kauai 21–*Platydesma rostrata*–n, Kauai 21–*Psychotria grandiflora*–d, Kauai 21–*Stenogyne kealiae*–f, Kauai 21–*Tetraplasandra flynnii*–g

Montane Mesic



(ccclxxxviii) Kauai 21–*Diellia mannii*–b

(A) [Reserved]

(B) See paragraph (a)(1)(ccclxxxvii)(B) of this section for the map of this unit.

(ccclxxxix) Kauai 21–*Labordia helleri*–i

(A) [Reserved]

(B) See paragraph (a)(1)(ccclxxxvii)(B) of this section for the map of this unit.

(cccxc) Kauai 21–*Myrsine knudsenii*–b

(A) [Reserved]

(B) See paragraph (a)(1)(ccclxxxvii)(B) of this section for the map of this unit.

(cccxci) Kauai 21–*Myrsine mezii*–d

(A) [Reserved]

(B) See paragraph (a)(1)(ccclxxxvii)(B) of this section for the map of this unit.

(cccxcii) Kauai 21–*Platydesma rostrata*–o

(A) [Reserved]

(B) See paragraph (a)(1)(ccclxxxvii)(B) of this section for the map of this unit.

(cccxciii) Kauai 21–*Psychotria grandiflora*–d

(A) [Reserved]

(B) See paragraph (a)(1)(ccclxxxvii)(B) of this section for the map of this unit.

(cccxciv) Kauai 21–*Stenogyne kealiae*–f

(A) [Reserved]

(B) See paragraph (a)(1)(ccclxxxvii)(B) of this section for the map of this unit.

(cccxcv) Kauai 21–*Tetraplasandra flynnii*–g

(A) [Reserved]

(B) See paragraph (a)(1)(ccclxxxvii)(B) of this section for the map of this unit.

(cccxcvi) Kauai 22–*Chamaesyce remyi* var. *remyi*–o

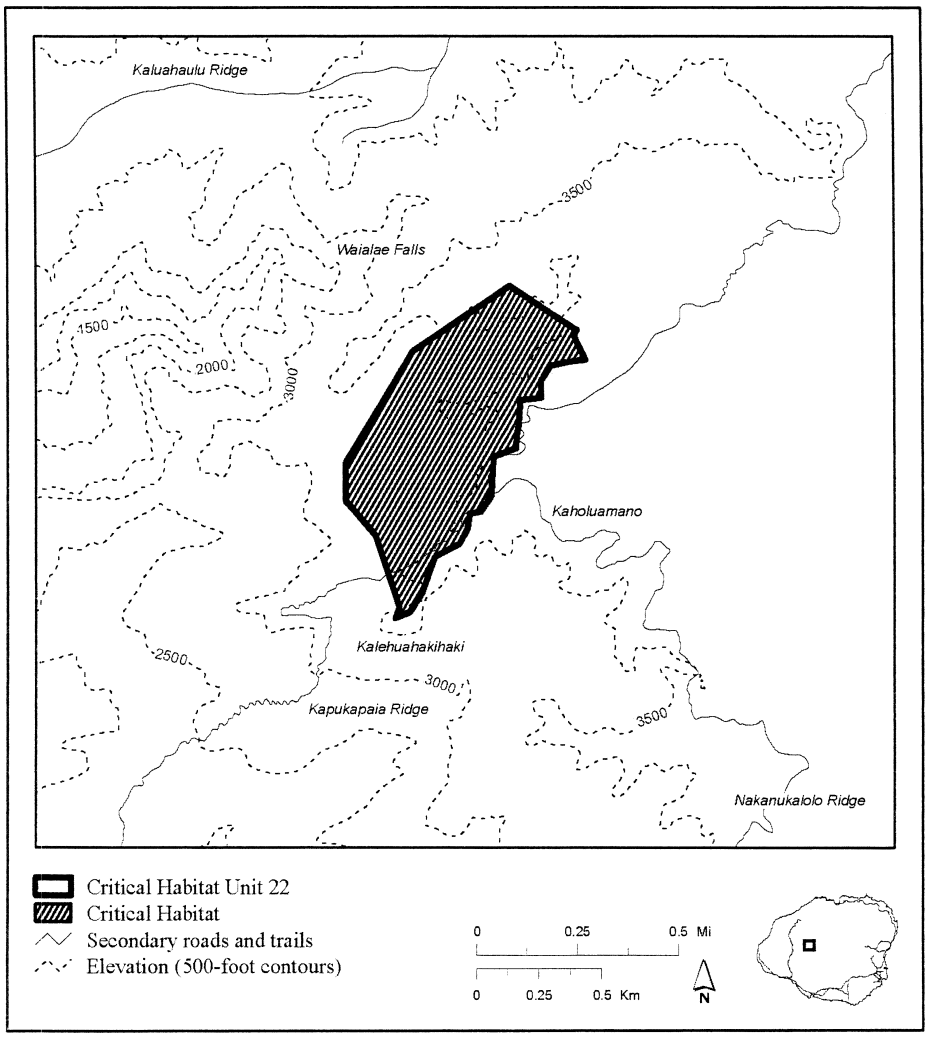
(A) This is a unit of the Montane Mesic ecosystem and consists of 139 ac (56 ha). This unit is also critical habitat for Kauai 22–*Diellia mannii*–c, Kauai 22–*Labordia helleri*–j, Kauai 22–*Myrsine knudsenii*–c, Kauai 22–*Myrsine mezii*–e, Kauai 22–*Platydesma rostrata*–o, Kauai 22–*Psychotria grandiflora*–e, Kauai 22–*Stenogyne kealiae*–g, and Kauai 22–*Tetraplasandra flynnii*–h (see paragraphs (a)(1)(cccxcvii), (a)(1)(cccxcviii), (a)(1)(cccxcix), (a)(1)(cd), (a)(1)(cdi), (a)(1)(cdii), (a)(1)(cdiii), and (a)(1)(cdiv), respectively, of this section).

(B) Map 217e follows:

Map 217e

Kauai 22–*Chamaesyce remyi* var. *remyi*–o, Kauai 22–*Diellia mannii*–c, Kauai 22–*Labordia helleri*–j, Kauai 22–*Myrsine knudsenii*–c, Kauai 22–*Myrsine mezii*–e, Kauai 22–*Platydesma rostrata*–o, Kauai 22–*Psychotria grandiflora*–e, Kauai 22–*Stenogyne kealiae*–g, Kauai 22–*Tetraplasandra flynnii*–h

Montane Mesic



(cccxcvii) Kauai 22–*Diellia mannii*–c

(A) [Reserved]

(B) See paragraph (a)(1)(cccxcvi)(B) of this section for the map of this unit.

(cccxcviii) Kauai 22–*Labordia helleri*–j

(A) [Reserved]

(B) See paragraph (a)(1)(cccxcvi)(B) of this section for the map of this unit.

(cccxcix) Kauai 22–*Myrsine knudsenii*–c

(A) [Reserved]

(B) See paragraph (a)(1)(cccxcvi)(B) of this section for the map of this unit.

(cd) Kauai 22–*Myrsine mezii*–e

(A) [Reserved]

(B) See paragraph (a)(1)(cccxcvi)(B) of this section for the map of this unit.

(cdi) Kauai 22–*Platydesma rostrata*–o

(A) [Reserved]

(B) See paragraph (a)(1)(cccxcvi)(B) of this section for the map of this unit.

(cdii) Kauai 22–*Psychotria grandiflora*–e

(A) [Reserved]

(B) See paragraph (a)(1)(cccxcvi)(B) of this section for the map of this unit.

(cdiii) Kauai 22–*Stenogyne kealiae*–g

(A) [Reserved]

(B) See paragraph (a)(1)(cccxcvi)(B) of this section for the map of this unit.

(cdiv) Kauai 22–*Tetraplasandra flynnii*–h

(A) [Reserved]

(B) See paragraph (a)(1)(cccxcvi)(B) of this section for the map of this unit.

(cdv) Kauai 23–*Astelia waialealae*–c

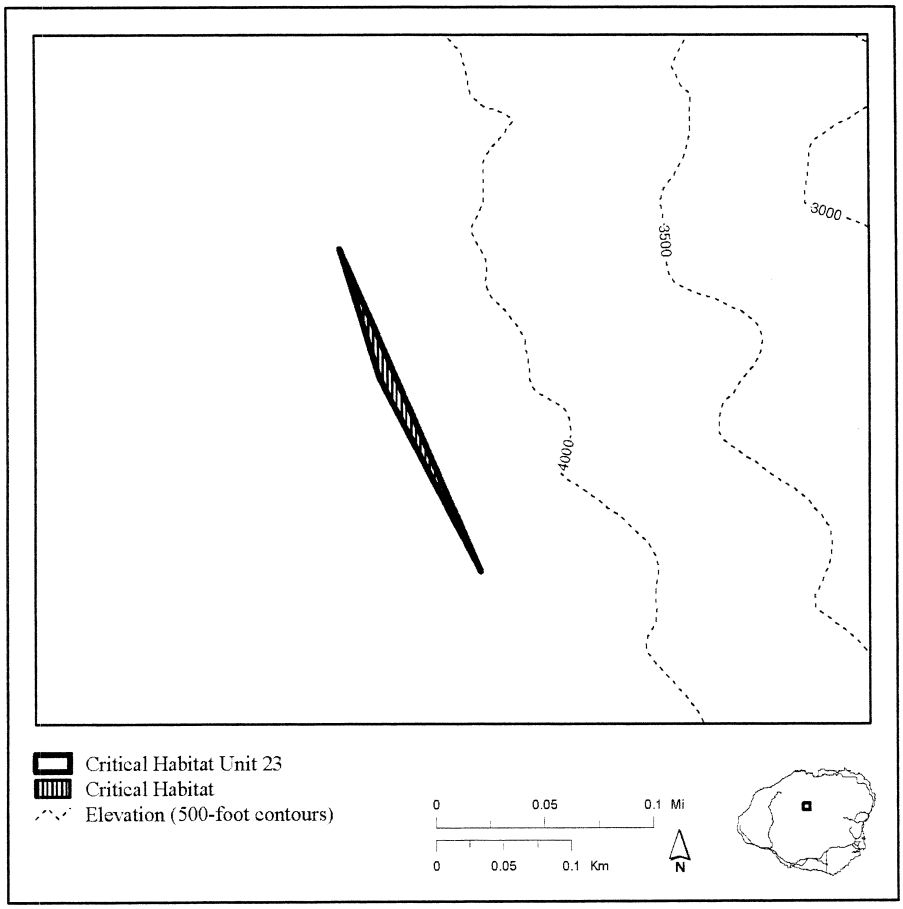
(A) This is a unit of the Montane Wet ecosystem and consists of 0.4 ac (0.2 ha). This unit is also critical habitat for Kauai 23–*Chamaesyce remyi* var. *remyi*–p, Kauai 23–*Dryopteris crinalis* var. *podosorus*–c, Kauai 23–*Dubautia kalalauensis*–c, Kauai 23–*Dubautia waialealae*–c, Kauai 23–*Geranium kauaiense*–c, Kauai 23–*Keysseria erici*–c, Kauai 23–*Keysseria helenae*–c, Kauai 23–*Labordia helleri*–k, Kauai 23–*Labordia pumila*–c, Kauai 23–*Lysimachia daphnoides*–c, Kauai 23–*Melicope degeneri*–c, Kauai 23–*Melicope puberula*–f, Kauai 23–*Myrsine mezii*–f, Kauai 23–*Phyllostegia renovans*–f, Kauai 23–*Platydesma rostrata*–p, Kauai 23–*Psychotria grandiflora*–f, and Kauai 23–*Tetraplasandra flynnii*–i (see paragraphs (a)(1)(cdvi), (a)(1)(cdvii), (a)(1)(cdviii), (a)(1)(cdix), (a)(1)(cdx), (a)(1)(cdxi), (a)(1)(cdxii), (a)(1)(cdxiii), (a)(1)(cdxiv), (a)(1)(cdxv), (a)(1)(cdxvi), (a)(1)(cdxvii), (a)(1)(cdxviii), (a)(1)(cdxix), (a)(1)(cdxx), (a)(1)(cdxxi), and (a)(1)(cdxxii), respectively, of this section).

(B) Map 217f follows:

Map 217f

Kauai 23–*Astelia waialealae*–c, Kauai 23–*Chamaesyce remyi* var. *remyi*–p, Kauai 23–*Dryopteris crinalis* var. *podosorus*–c, Kauai 23–*Dubautia kalalauensis*–c, Kauai 23–*Dubautia waialealae*–c, Kauai 23–*Geranium kauaiense*–c, Kauai 23–*Keysseria erici*–c, Kauai 23–*Keysseria helenae*–c, Kauai 23–*Labordia helleri*–k, Kauai 23–*Labordia pumila*–c, Kauai 23–*Lysimachia daphnoides*–c, Kauai 23–*Melicope degeneri*–c, Kauai 23–*Melicope puberula*–f, Kauai 23–*Myrsine mezii*–f, Kauai 23–*Phyllostegia renovans*–f, Kauai 23–*Platydesma rostrata*–p, Kauai 23–*Psychotria grandiflora*–f, Kauai 23–*Tetraplasandra flynnii*–i

Montane Wet



(cdvi) Kauai 23–*Chamaesyce remyi* var. *remyi*–p

(A) [Reserved]

(B) See paragraph (a)(1)(cdv)(B) of this section for the map of this unit.

(cdvii) Kauai 23–*Dryopteris crinalis* var. *podosorus*–c

(A) [Reserved]

(B) See paragraph (a)(1)(cdv)(B) of this section for the map of this unit.

(cdviii) Kauai 23–*Dubautia kalalauensis*–c

(A) [Reserved]

(B) See paragraph (a)(1)(cdv)(B) of this section for the map of this unit.

(cdix) Kauai 23–*Dubautia waialealae*–c

(A) [Reserved]

(B) See paragraph (a)(1)(cdv)(B) of this section for the map of this unit.

(cdx) Kauai 23–*Geranium kauaiense*–c

(A) [Reserved]

(B) See paragraph (a)(1)(cdv)(B) of this section for the map of this unit.

(cdxi) Kauai 23–*Keysseria erici*–c

(A) [Reserved]

(B) See paragraph (a)(1)(cdv)(B) of this section for the map of this unit.

(cdxii) Kauai 23–*Keysseria helenae*–c

(A) [Reserved]

(B) See paragraph (a)(1)(cdv)(B) of this section for the map of this unit.

(cdxiii) Kauai 23–*Labordia helleri*–k

(A) [Reserved]

(B) See paragraph (a)(1)(cdv)(B) of this section for the map of this unit.

(cdxiv) Kauai 23–*Labordia pumila*–c

(A) [Reserved]

(B) See paragraph (a)(1)(cdv)(B) of this section for the map of this unit.

(cdxv) Kauai 23–*Lysimachia daphnoides*–c

(A) [Reserved]

(B) See paragraph (a)(1)(cdv)(B) of this section for the map of this unit.

(cdxvi) Kauai 23–*Melicope degeneri*–c

(A) [Reserved]

(B) See paragraph (a)(1)(cdv)(B) of this section for the map of this unit.

(cdxvii) Kauai 23–*Melicope puberula*–f

(A) [Reserved]

(B) See paragraph (a)(1)(cdv)(B) of this section for the map of this unit.

(cdxviii) Kauai 23–*Myrsine mezii*–f

(A) [Reserved]

(B) See paragraph (a)(1)(cdv)(B) of this section for the map of this unit.

(cdxix) Kauai 23–*Phyllostegia renovans*–f

(A) [Reserved]

(B) See paragraph (a)(1)(cdv)(B) of this section for the map of this unit.

(cdxx) Kauai 23–*Platydesma rostrata*–p

(A) [Reserved]

(B) See paragraph (a)(1)(cdv)(B) of this section for the map of this unit.

(cdxxi) Kauai 23–*Psychotria grandiflora*–f

(A) [Reserved]

(B) See paragraph (a)(1)(cdv)(B) of this section for the map of this unit.

(cdxxii) Kauai 23–*Tetraplasandra flynnii*–i

(A) [Reserved]

(B) See paragraph (a)(1)(cdv)(B) of this section for the map of this unit.

(cdxxiii) Kauai 24–*Astelia waialealae*–d

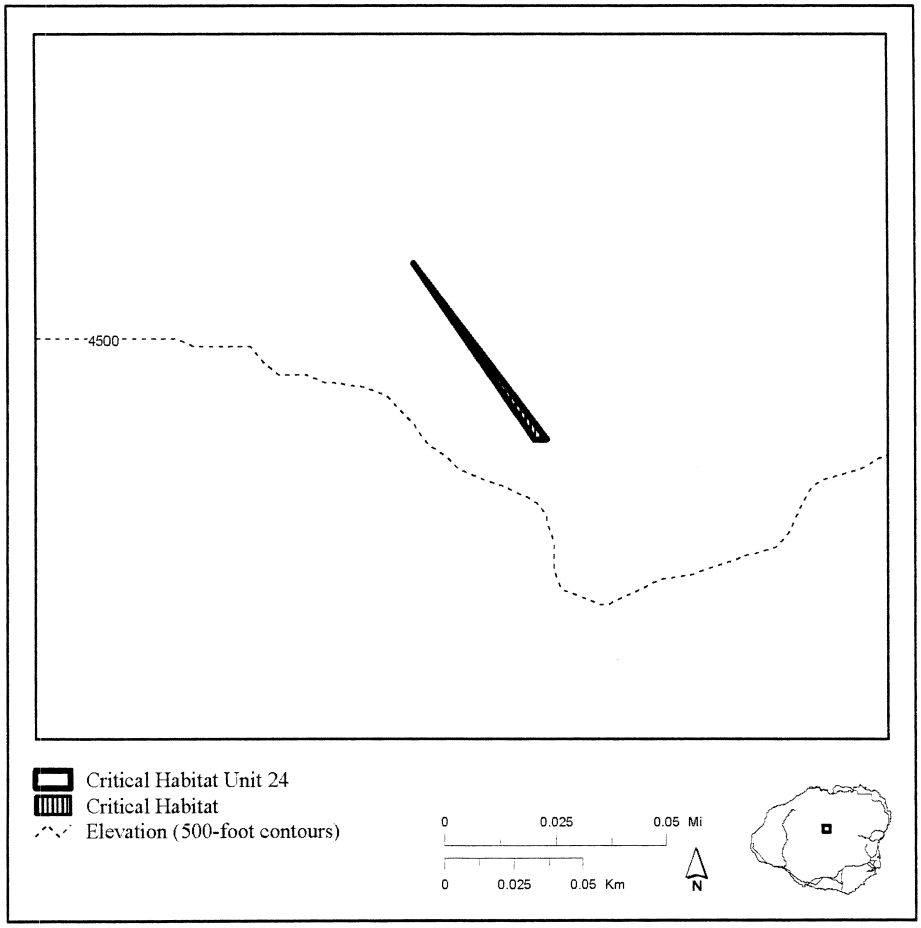
(A) This is a unit of the Montane Wet ecosystem and consists of 0.04 ac (0.01 ha). This unit is also critical habitat for Kauai 24–*Chamaesyce remyi* var. *remyi*–q, Kauai 24–*Dryopteris crinalis* var. *podosorus*–d, Kauai 24–*Dubautia kalalauensis*–d, Kauai 24–*Dubautia waialealae*–d, Kauai 24–*Geranium kauaiense*–d, Kauai 24–*Keysseria erici*–d, Kauai 24–*Keysseria helenae*–d, Kauai 24–*Labordia helleri*–l, Kauai 24–*Labordia pumila*–d, Kauai 24–*Lysimachia daphnoides*–d, Kauai 24–*Melicope degeneri*–d, Kauai 24–*Melicope puberula*–g, Kauai 24–*Myrsine mezii*–g, Kauai 24–*Phyllostegia renovans*–g, Kauai 24–*Platydesma rostrata*–q, Kauai 24–*Psychotria grandiflora*–g, and Kauai 24–*Tetraplasandra flynnii*–j (see paragraphs (a)(1)(cdxxiv), (a)(1)(cdxxv), (a)(1)(cdxxvi), (a)(1)(cdxxvii), (a)(1)(cdxxviii), (a)(1)(cdxxix), (a)(1)(cdxxx), (a)(1)(cdxxxi), (a)(1)(cdxxxii), (a)(1)(cdxxxiii), (a)(1)(cdxxxiv), (a)(1)(cdxxxv), (a)(1)(cdxxxvi), (a)(1)(cdxxxvii), (a)(1)(cdxxxviii), (a)(1)(cdxxxix), and (a)(1)(cdxl), respectively, of this section).

(B) Map 217g follows:

Map 217g

Kauai 24–*Astelia waialealae*–d, Kauai 24–*Chamaesyce remyi* var. *remyi*–q, Kauai 24–*Dryopteris crinalis* var. *podosorus*–d, Kauai 24–*Dubautia kalalauensis*–d, Kauai 24–*Dubautia waialealae*–d, Kauai 24–*Geranium kauaiense*–d, Kauai 24–*Keysseria erici*–d, Kauai 24–*Keysseria helenae*–d, Kauai 24–*Labordia helleri*–l, Kauai 24–*Labordia pumila*–d, Kauai 24–*Lysimachia daphnoides*–d, Kauai 24–*Melicope degeneri*–d, Kauai 24–*Melicope puberula*–g, Kauai 24–*Myrsine mezii*–g, Kauai 24–*Phyllostegia renovans*–g, Kauai 24–*Platydesma rostrata*–q, Kauai 24–*Psychotria grandiflora*–g, Kauai 24–*Tetraplasandra flynnii*–j

Montane Wet



(cdxxiv) Kauai 24–*Chamaesyce remyi* var. *remyi*–q

(A) [Reserved]

(B) See paragraph (a)(1)(cdxxiii)(B) of this section for the map of this unit.

(cdxxv) Kauai 24–*Dryopteris crinalis* var. *podosorus*–d

(A) [Reserved]

(B) See paragraph (a)(1)(cdxxiii)(B) of this section for the map of this unit.

(cdxxvi) Kauai 24–*Dubautia kalalauensis*–d

(A) [Reserved]

(B) See paragraph (a)(1)(cdxxiii)(B) of this section for the map of this unit.

(cdxxvii) Kauai 24–*Dubautia waialealae*–d

(A) [Reserved]

(B) See paragraph (a)(1)(cdxxiii)(B) of this section for the map of this unit.

(cdxxviii) Kauai 24–*Geranium kauaiense*–e

(A) [Reserved]

(B) See paragraph (a)(1)(cdxxiii)(B) of this section for the map of this unit.

(cdxxix) Kauai 24–*Keysseria erici*–d

(A) [Reserved]

(B) See paragraph (a)(1)(cdxxiii)(B) of this section for the map of this unit.

(cdxxx) Kauai 24–*Keysseria helenae*–d

(A) [Reserved]

(B) See paragraph (a)(1)(cdxxiii)(B) of this section for the map of this unit.

(cdxxxi) Kauai 24–*Labordia helleri*–l

(A) [Reserved]

(B) See paragraph (a)(1)(cdxxiii)(B) of this section for the map of this unit.

(cdxxxii) Kauai 24–*Labordia pumila*–d

(A) [Reserved]

(B) See paragraph (a)(1)(cdxxiii)(B) of this section for the map of this unit.

(cdxxxiii) Kauai 24–*Lysimachia daphnoides*–d

(A) [Reserved]

(B) See paragraph (a)(1)(cdxxiii)(B) of this section for the map of this unit.

(cdxxxiv) Kauai 24–*Melicope degeneri*–d

(A) [Reserved]

(B) See paragraph (a)(1)(cdxxiii)(B) of this section for the map of this unit.

(cdxxxv) Kauai 24–*Melicope puberula*–g

(A) [Reserved]

(B) See paragraph (a)(1)(cdxxiii)(B) of this section for the map of this unit.

(cdxxxvi) Kauai 24–*Myrsine mezii*–g

(A) [Reserved]

(B) See paragraph (a)(1)(cdxxiii)(B) of this section for the map of this unit.

(cdxxxvii) Kauai 24–*Phyllostegia renovans*–g

(A) [Reserved]

(B) See paragraph (a)(1)(cdxxiii)(B) of this section for the map of this unit.

(cdxxxviii) Kauai 24–*Platydesma rostrata*–q

(A) [Reserved]

(B) See paragraph (a)(1)(cdxxiii)(B) of this section for the map of this unit.

(cdxxxix) Kauai 24–*Psychotria grandiflora*–g

(A) [Reserved]

(B) See paragraph (a)(1)(cdxxiii)(B) of this section for the map of this unit.

(cdxl) Kauai 24–*Tetraplasandra flynnii*–j

(A) [Reserved]

(B) See paragraph (a)(1)(cdxxiii)(B) of this section for the map of this unit.

(cdxli) Kauai 25–*Astelia waialealae*–e

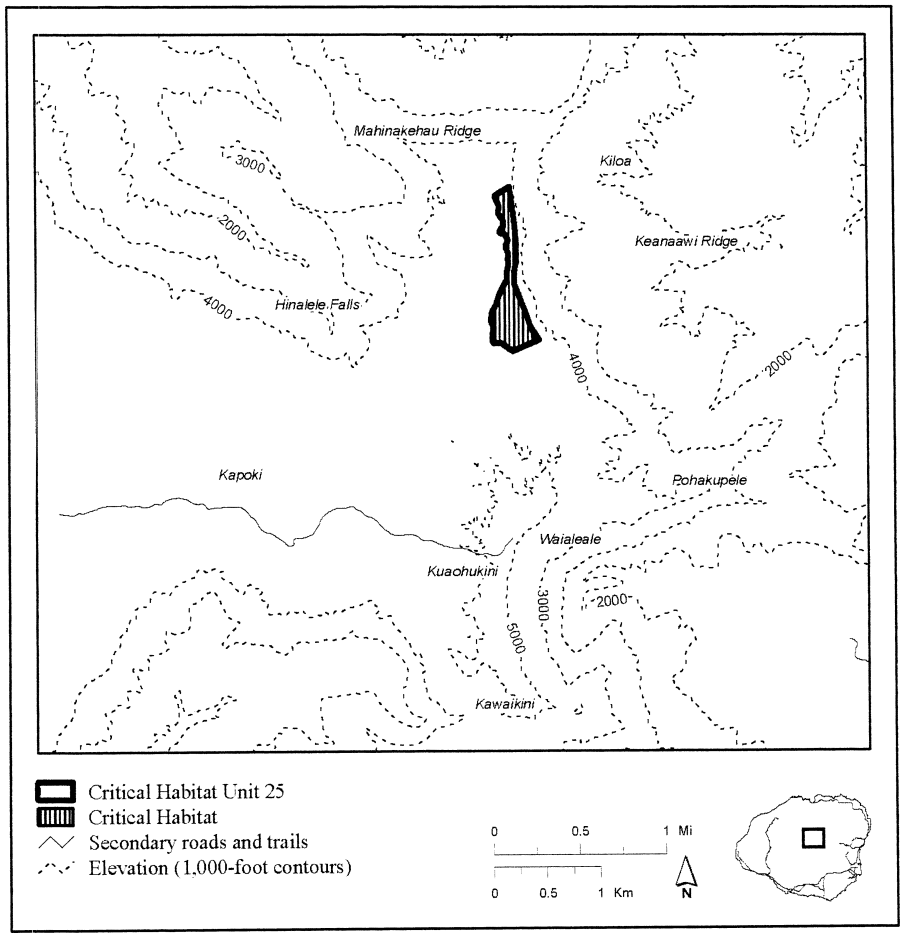
(A) This is a unit of the Montane Wet ecosystem and consists of 64 ac (26 ha). This unit is also critical habitat for Kauai 25–*Chamaesyce remyi* var. *remyi*–r, Kauai 25–*Dryopteris crinalis* var. *podosorus*–e, Kauai 25–*Dubautia kalalauensis*–e, Kauai 25–*Dubautia waialealae*–e, Kauai 25–*Geranium kauaiense*–e, Kauai 25–*Keysseria erici*–e, Kauai 25–*Keysseria helenae*–e, Kauai 25–*Labordia helleri*–m, Kauai 25–*Labordia pumila*–e, Kauai 25–*Lysimachia daphnoides*–e, Kauai 25–*Melicope degeneri*–e, Kauai 25–*Melicope puberula*–h, Kauai 25–*Myrsine mezii*–h, Kauai 25–*Phyllostegia renovans*–h, Kauai 25–*Platydesma rostrata*–r, Kauai 25–*Psychotria grandiflora*–h, and Kauai 25–*Tetraplasandra flynnii*–k (see paragraphs (a)(1)(cdxlii), (a)(1)(cdxliii), (a)(1)(cdxliv), (a)(1)(cdxlv), (a)(1)(cdxlvi), (a)(1)(cdxlvii), (a)(1)(cdxlviii), (a)(1)(cdxlix), (a)(1)(cdl), (a)(1)(cdli), (a)(1)(cdlii), (a)(1)(cdliii), (a)(1)(cdliv), (a)(1)(cdlv), (a)(1)(cdlvi), (a)(1)(cdlvii), and (a)(1)(cdlviii), respectively, of this section).

(B) Map 217h follows:

Map 217h

Kauai 25–*Astelia waialealae*–e, Kauai 25–*Chamaesyce remyi* var. *remyi*–r, Kauai 25–*Dryopteris crinalis* var. *podosorus*–e, Kauai 25–*Dubautia kalalauensis*–e, Kauai 25–*Dubautia waialealae*–e, Kauai 25–*Geranium kauaiense*–e, Kauai 25–*Keysseria erici*–e, Kauai 25–*Keysseria helenae*–e, Kauai 25–*Labordia helleri*–m, Kauai 25–*Labordia pumila*–e, Kauai 25–*Lysimachia daphnoides*–e, Kauai 25–*Melicope degeneri*–e, Kauai 25–*Melicope puberula*–h, Kauai 25–*Myrsine mezii*–h, Kauai 18–*Phyllostegia renovans*–h, Kauai 25–*Platydesma rostrata*–r, Kauai 25–*Psychotria grandiflora*–h, Kauai 25–*Tetraplasandra flynnii*–k

Montane Wet



(cdxlii) Kauai 25–*Chamaesyce remyi* var. *remyi*–r

(A) [Reserved]

(B) See paragraph (a)(1)(cdxli)(B) of this section for the map of this unit.

(cdxliii) Kauai 25–*Dryopteris crinalis* var. *podosorus*–e

(A) [Reserved]

(B) See paragraph (a)(1)(cdxli)(B) of this section for the map of this unit.

(cdxliv) Kauai 25–*Dubautia kalalauensis*–d

(A) [Reserved]

(B) See paragraph (a)(1)(cdxli)(B) of this section for the map of this unit.

(cdxlv) Kauai 25–*Dubautia waialealae*–e

(A) [Reserved]

(B) See paragraph (a)(1)(cdxli)(B) of this section for the map of this unit.

(cdxlvi) Kauai 25–*Geranium kauaiense*–f

(A) [Reserved]

(B) See paragraph (a)(1)(cdxli)(B) of this section for the map of this unit.

(cdxlvii) Kauai 25–*Keysseria erici*–e

(A) [Reserved]

(B) See paragraph (a)(1)(cdxli)(B) of this section for the map of this unit.

(cdxlviii) Kauai 25–*Keysseria helenae*–e

(A) [Reserved]

(B) See paragraph (a)(1)(cdxli)(B) of this section for the map of this unit.

(cdxlix) Kauai 25–*Labordia helleri*–m

(A) [Reserved]

(B) See paragraph (a)(1)(cdxli)(B) of this section for the map of this unit.

(cdl) Kauai 25–*Labordia pumila*–e

(A) [Reserved]

(B) See paragraph (a)(1)(cdxli)(B) of this section for the map of this unit.

(cdli) Kauai 25–*Lysimachia daphnoides*–e

(A) [Reserved]

(B) See paragraph (a)(1)(cdxli)(B) of this section for the map of this unit.

(cdlii) Kauai 25–*Melicope degeneri*–e

(A) [Reserved]

(B) See paragraph (a)(1)(cdxli)(B) of this section for the map of this unit.

(cdliii) Kauai 25–*Melicope puberula*–h

(A) [Reserved]

(B) See paragraph (a)(1)(cdxli)(B) of this section for the map of this unit.

(cdliv) Kauai 25–*Myrsine mezii*–h

(A) [Reserved]

(B) See paragraph (a)(1)(cdxli)(B) of this section for the map of this unit.

(cdlv) Kauai 25–*Phyllostegia renovans*–h

(A) [Reserved]

(B) See paragraph (a)(1)(cdxli)(B) of this section for the map of this unit.

(cdlvi) Kauai 25–*Platydesma rostrata*–r

(A) [Reserved]

(B) See paragraph (a)(1)(cdxli)(B) of this section for the map of this unit.

(cdlvii) Kauai 25–*Psychotria grandiflora*–h

(A) [Reserved]

(B) See paragraph (a)(1)(cdxli)(B) of this section for the map of this unit.

(cdlviii) Kauai 25–*Tetraplasandra flynnii*–k

(A) [Reserved]

(B) See paragraph (a)(1)(cdxli)(B) of this section for the map of this unit.

(cdlix) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR KAUAI

Unit name	Species occupied	Species unoccupied
Kauai 1—*Ischaemum byrone*—a	*Ischaemum byrone*	
Kauai 2—*Ischaemum byrone*—b	.....	*Ischaemum byrone*
Kauai 3—*Ischaemum byrone*—c	*Ischaemum byrone.*	
Kauai 4—*Adenophorus periens*—a	*Adenophorus periens*	
Kauai 4—*Chamaesyce remyi* var. *kauaiensis*—a	.....	*Chamaesyce remyi* var. *kauaiensis*
Kauai 4—*Chamaesyce remyi* var. *remyi*—a	.....	*Chamaesyce remyi* var. *remyi*
Kauai 4—*Cyanea asarifolia*—a	*Cyanea asarifolis*	
Kauai 4—*Cyanea dolichopoda*—a	.....	*Cyanea dolichopoda*
Kauai 4—*Cyanea recta*—a	*Cyanea recta*	
Kauai 4—*Cyanea recta*—b	*Cyanea recta*	
Kauai 4—*Cyanea remyi*—a	*Cyanea remyi*	
Kauai 4—*Cyrtandra cyaneoides*—a	*Cyrtandra cyaneoides*	
Kauai 4—*Cyrtandra limahuliensis*—a	*Cyrtandra limahuliensis*	
Kauai 4—*Cyrtandra limahuliensis*—b	*Cyrtandra limahuliensis*	
Kauai 4—*Cyrtandra oenobarba*–a	.....	Cyrtandra oenobarba
Kauai 4—*Cyrtandra paliku*–a	*Cyrtandra paliku*	Cyrtandra paliku
Kauai 4—*Dubautia plantaginea* ssp. *magnifolia*–a	.....	*Dubautia plantaginea* ssp. *magnifolia*
Kauai 4—*Hibiscus clayi*—a	.....	*Hibiscus clayi*
Kauai 4—*Hibiscus clayi*—b	.....	*Hibiscus clayi*
Kauai 4—*Hibiscus clayi*—c	.....	*Hibiscus clayi*
Kauai 4—*Hibiscus clayi*—d	.....	*Hibiscus clayi*
Kauai 4—*Hibiscus clayi*—e	.....	*Hibiscus clayi*
Kauai 4—*Labordia lydgatei*—a	*Labordia lydgatei*	
Kauai 4—*Lysimachia iniki*–a	.....	Lysimachia iniki

(cdlix) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR KAUAI—Continued

Unit name	Species occupied	Species unoccupied
Kauai 4—*Lysimachia pendens*–a	...	Lysimachia pendens
Kauai 4—*Lysimachia venosa*–a	...	*Lysimachia venosa*
Kauai 4—*Phyllostegia wawrana*—a	*Phyllostegia wawrana*	
Kauai 4—*Platydesma rostrata*–a	...	Platydesma rostrata
Kauai 5—*Hibiscus clayi*—f	*Hibiscus clayi*	
Kauai 5—*Munroidendron racemosum*—a	*Munroidendron racemosum*	
Kauai 6—*Brighamia insignis*—a	*Brighamia insignis*	
Kauai 7—*Brighamia insignis*—b	*Brighamia insignis*	
Kauai 7—*Canavalia napaliensis*–a	...	Canavalia napaliensis
Kauai 7—*Chamaesyce eleanoriae*–a	...	Chamaesyce eleanoriae
Kauai 7—*Chamaesyce remyi* var. *remyi*–b	*Chamaesyce remyi* var. *remyi*	*Chamaesyce remyi* var. *remyi*
Kauai 7—*Charpentiera densiflora*–a	...	Charpentiera densiflora
Kauai 7—*Delissea rhytidosperma*—a	*Delissea rhytidosperma*	
Kauai 7—*Doryopteris angelica*–a	...	Doryopteris angelica
Kauai 7—*Dubautia kenwoodii*–a	...	*Dubautia kenwoodii*
Kauai 7—*Isodendrion longifolium*—a	*Isodendrion longifolium*	
Kauai 7—*Labordia helleri*–a	...	Labordia helleri
Kauai 7—*Lipochaeta micrantha*—a	*Lipochaeta micrantha*	
Kauai 7—*Melicope haupuensis*—a	...	*Melicope haupuensis*
Kauai 7—*Munroidendron racemosum*—b	*Munroidendron racemosum*	
Kauai 7—*Myrsine linearifolia*—a	...	*Myrsine linearifolia*
Kauai 7—*Peucedanum sandwicense*—a	*Peucedanum sandwicense*	
Kauai 7—*Pittosporum napaliense*–a	...	Pittosporum napaliense
Kauai 7—*Platydesma rostrata*–b	...	Platydesma rostrata
Kauai 7—*Psychotria hobdyi*–a	...	Psychotria hobdyi
Kauai 7—*Pteralyxia kauaiensis*—a	*Pteralyxia kauaiensis*	
Kauai 7—*Schiedea nuttallii*—a	*Schiedea nuttallii*	
Kauai 7—*Tetraplasandra bisattenuata*–a	*Tetraplasandra bisattenuata*	Tetraplasandra bisattenuata
Kauai 8—*Sesbania tomentosa*—a	...	*Sesbania tomentosa*
Kauai 9—*Schiedea spergulina* var. *leiopoda*—a	*Schiedea spergulina* var. *leiopoda*	
Kauai 10—*Adenophorus periens*—b	*Adenophorus periens*	
Kauai 10—*Astelia waialealae*–a	*Astelia waialealae*	Astelia waialealae
Kauai 10—*Bonamia menziesii*—a	*Bonamia menziesii*	
Kauai 10—*Chamaesyce remyi* var. *kauaiensis*–b	...	*Chamaesyce remyi* var. *kauaiensis*
Kauai 10—*Chamaesyce remyi* var. *kauaiensis*–c	*Chamaesyce remyi* var. *kauaiensis*	*Chamaesyce remyi* var. *kauaiensis*
Kauai 10—*Chamaesyce remyi* var. *remyi*–c	*Chamaesyce remyi* var. *remyi*	*Chamaesyce remyi* var. *remyi*
Kauai 10—*Chamaesyce remyi* var. *remyi*–d	*Chamaesyce remyi* var. *remyi*	*Chamaesyce remyi* var. *remyi*
Kauai 10—*Chamaesyce remyi* var. *remyi*–e	...	*Chamaesyce remyi* var. *remyi*
Kauai 10—*Charpentiera densiflora*–b	...	Charpentiera densiflora
Kauai 10—*Cyanea asarifolia*—b	*Cyanea asarifolia*	
Kauai 10—*Cyanea dolichopoda*–b	...	*Cyanea dolichopoda*
Kauai 10—*Cyanea eleeleensis*–a	...	*Cyanea eleeleensis*
Kauai 10—*Cyanea kolekoleensis*–a	...	*Cyanea kolekoleensis*
Kauai 10—*Cyanea kuhihewa*–a	...	*Cyanea kuhihewa*
Kauai 10—*Cyanea remyi*—b	*Cyanea remyi*	
Kauai 10—*Cyanea undulata*—a	*Cyanea undulata*	
Kauai 10—*Cyrtandra limahuliensis*—c	*Cyrtandra limahuliensis*	
Kauai 10—*Cyrtandra oenobarba*–b	*Cyrtandra oenobarba*	Cyrtandra oenobarba
Kauai 10—*Cyrtandra oenobarba*–c	*Cyrtandra oenobarba*	Cyrtandra oenobarba
Kauai 10—*Cyrtandra paliku*–b	...	Cyrtandra paliku
Kauai 10—*Dryopteris crinalis* var. *podosorus*–a	*Dryopteris crinalis* var. *podosorus*	*Dryopteris crinalis* var. *podosorus*
Kauai 10—*Dubautia imbricata* ssp. *imbricata*–a	*Dubautia imbricata* ssp. *imbricata*	*Dubautia imbricata* ssp. *imbricata*
Kauai 10—*Dubautia kalalauensis*–a	...	Dubautia kalalauensis
Kauai 10—*Dubautia pauciflorula*—a	*Dubautia pauciflorula*	
Kauai 10—*Dubautia plantaginea* ssp. *magnifolia*–b	*Dubautia plantaginea* ssp. *magnifolia*	*Dubautia plantaginea* ssp. *magnifolia*
Kauai 10—*Dubautia waialealae*–a	*Dubautia waialealae*	Dubautia waialealae
Kauai 10—*Exocarpos luteolus*—a	*Exocarpos luteolus*	
Kauai 10—*Geranium kauaiense*–a	*Geranium kauaiense*	Geranium kauaiense
Kauai 10—*Hesperomannia lydgatei*—a	*Hesperomannia lydgatei*	
Kauai 10—*Isodendrion longifolium*—b	*Isodendrion longifolium*	
Kauai 10—*Keysseria erici*–a	*Keysseria erici*	Keysseria erici
Kauai 10—*Keysseria helenae*–a	*Keysseria helenae*	Keysseria helenae
Kauai 10—*Labordia helleri*–b	*Labordia helleri*	Labordia helleri
Kauai 10—*Labordia helleri*–c	...	Labordia helleri
Kauai 10—*Labordia lydgatei*—b	*Labordia lydgatei*	
Kauai 10—*Labordia pumila*–a	*Labordia pumila*	Labordia pumila

(cdlix) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR KAUAI—Continued

Unit name	Species occupied	Species unoccupied
Kauai 10—*Labordia tinifolia* var. *wahiawaensis*—a	*Labordia tinifolia* var. *wahiawaensis.*	
Kauai 10—*Lysimachia daphnoides*–a	*Lysimachia daphnoides*	Lysimachia daphnoides
Kauai 10—*Lysimachia filifolia*—a	*Lysimachia filifolia*	
Kauai 10—*Lysimachia iniki*–b	*Lysimachia iniki*	Lysimachia iniki
Kauai 10—*Lysimachia pendens*–b	*Lysimachia pendens*	Lysimachia pendens
Kauai 10—*Lysimachia venosa*–b		*Lysimachia venosa*
Kauai 10—*Melicope degeneri*–a	*Melicope paniculata*	Melicope paniculata
Kauai 10—*Melicope paniculata*–a	*Melicope paniculata*	Melicope paniculata
Kauai 10—*Melicope puberula*–a	*Melicope puberula*	Melicope puberula
Kauai 10—*Melicope puberula*–b		Melicope puberula
Kauai 10—*Myrsine linearifolia*—b	*Myrsine linearifolia*	
Kauai 10—*Myrsine mezii*–a	*Myrsine mezii*	Myrsine mezii
Kauai 10—*Huperzia nutans*—a		*Huperzia nutans*
Kauai 10—*Phyllostegia renovans*–a	*Phyllostegia renovans*	Phyllostegia renovans
Kauai 10—*Phyllostegia renovans*–b	*Phyllostegia renovans*	Phyllostegia renovans
Kauai 10—*Plantago princeps*—a	*Plantago princeps*	
Kauai 10—*Platydesma rostrata*–c	*Platydesma rostrata*	Platydesma rostrata
Kauai 10—*Platydesma rostrata*–d	*Platydesma rostrata*	Platydesma rostrata
Kauai 10—*Platydesma rostrata*–e	*Platydesma rostrata*	Platydesma rostrata
Kauai 10—*Psychotria grandiflora*–a		Psychotria grandiflora
Kauai 10—*Pteralyxia kauaiensis*—b	*Pteralyxia kauaiensis*	
Kauai 10—*Stenogyne kealiae*–a		Stenogyne kealiae
Kauai 10—*Tetraplasandra bisattenuata*–b	*Tetraplasandra bisattenuata*	Tetraplasandra bisattenuata
Kauai 10—*Tetraplasandra flynnii*–a		*Tetraplasandra flynnii*
Kauai 10—*Tetraplasandra flynnii*–b		*Tetraplasandra flynnii*
Kauai 10—*Viola helenae*—a	*Viola helenae*	
Kauai 10—*Viola kauaiensis* var. *wahiawaensis*—a	*Viola kauaiensis* var. *wahiawaensis.*	
Kauai 11—*Adenophorus periens*—c	*Adenophorus periens*	
Kauai 11—*Adenophorus periens*—d	*Adenophorus periens*	
Kauai 11—*Alectryon macrococcus*—a	*Alectryon macrococcus*	
Kauai 11—*Alectryon macrococcus*—b	*Alectryon macrococcus*	
Kauai 11—*Alsinidendron lychnoides*—a	*Alsinidendron lychnoides*	
Kauai 11—*Alsinidendron lychnoides*—b	11—*Alsinidendron lychnoides*—a	
Kauai 11—*Alsinidendron lychnoides*—c		*Alsinidendron lychnoides*
Kauai 11—*Alsinidendron viscosum*—a	*Alsinidendron viscosum*	
Kauai 11—*Alsinidendron viscosum*—b	*Alsinidendron viscosum*	
Kauai 11—*Alsinidendron viscosum*—c	*Alsinidendron viscosum*	
Kauai 11—*Alsinidendron viscosum*—d	*Alsinidendron viscosum*	
Kauai 11—*Astelia waialealae*–b	*Astelia waialealae*	Astelia waialealae
Kauai 11—*Bonamia menziesii*—b	*Bonamia menziesii*	
Kauai 11—*Brighamia insignis*—c	*Brighamia insignis*	
Kauai 11—*Canavalia napaliensis*–b	*Canavalia napaliensis*	Canavalia napaliensis
Kauai 11—*Schenkia sebaeoides*—a	*Schenkia sebaeoides*	
Kauai 11—*Chamaesyce eleanoriae*–b	*Chamaesyce eleanoriae*	Chamaesyce eleanoriae
Kauai 11—*Chamaesyce eleanoriae*–c	*Chamaesyce eleanoriae*	Chamaesyce eleanoriae
Kauai 11—*Chamaesyce halemanui*—a		*Chamaesyce halemanui*
Kauai 11—*Chamaesyce halemanui*—b	*Chamaesyce halemanui*	
Kauai 11—*Chamaesyce halemanui*—c	*Chamaesyce halemanui*	
Kauai 11—*Chamaesyce remyi* var. *kauaiensis*–d	*Chamaesyce remyi* var. *kauaiensis*	*Chamaesyce remyi* var. *kauaiensis*
Kauai 11—*Chamaesyce remyi* var. *kauaiensis*–e		*Chamaesyce remyi* var. *kauaiensis*
Kauai 11—*Chamaesyce remyi* var. *remyi*–f	*Chamaesyce remyi* var. *remyi*	*Chamaesyce remyi* var. *remyi*
Kauai 11—*Chamaesyce remyi* var. *remyi*–g	*Chamaesyce remyi* var. *remyi*	*Chamaesyce remyi* var. *remyi*
Kauai 11—*Chamaesyce remyi* var. *remyi*–h	*Chamaesyce remyi* var. *remyi*	*Chamaesyce remyi* var. *remyi*
Kauai 11—*Chamaesyce remyi* var. *remyi*–i	*Chamaesyce remyi* var. *remyi*	*Chamaesyce remyi* var. *remyi*
Kauai 11—*Chamaesyce remyi* var. *remyi*–j	*Chamaesyce remyi* var. *remyi*	*Chamaesyce remyi* var. *remyi*
Kauai 11—*Charpentiera densiflora*–c	*Charpentiera densiflora*	Charpentiera densiflora
Kauai 11—*Charpentiera densiflora*–d	*Charpentiera densiflora*	Charpentiera densiflora
Kauai 11—*Ctenitis squamigera*—a		*Ctenitis squamigera*
Kauai 11—*Cyanea dolichopoda*–c		*Cyanea dolichopoda*
Kauai 11—*Cyanea eleeleensis*–b		*Cyanea eleeleensis*
Kauai 11—*Cyanea kolekoleensis*–b		*Cyanea kolekoleensis*
Kauai 11—*Cyanea kuhihewa*–b		*Cyanea kuhihewa*
Kauai 11—*Cyanea recta*—c	*Cyanea recta*	
Kauai 11—*Cyanea recta*—d		*Cyanea recta*
Kauai 11—*Cyanea remyi*—c	*Cyanea remyi*	
Kauai 11—*Cyanea remyi*—d	*Cyanea remyi*	
Kauai 11—*Cyperus trachysanthos*—a	*Cyperus trachysanthos*	

(cdlix) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR KAUAI—Continued

Unit name	Species occupied	Species unoccupied
Kauai 11—*Cyrtandra cyaneoides*—b	*Cyrtandra cyaneoides*	
Kauai 11—*Cyrtandra cyaneoides*—c	*Cyrtandra cyaneoides*	
Kauai 11—*Cyrtandra limahuliensis*—d	*Cyrtandra limahuliensis*	
Kauai 11—*Cyrtandra limahuliensis*—e	*Cyrtandra limahuliensis*	
Kauai 11—*Cyrtandra oenobarba*–d	*Cyrtandra oenobarba*	Cyrtandra oenobarba
Kauai 11—*Cyrtandra oenobarba*–e		Cyrtandra oenobarba
Kauai 11—*Cyrtandra paliku*–c		Cyrtandra paliku
Kauai 11—*Delissea rhytidosperma*—b	*Delissea rhytidosperma*	
Kauai 11—*Delissea rhytidosperma*—c		*Delissea rhytidosperma*
Kauai 11—*Delissea rivularis*—a	*Delissea rivularis*	
Kauai 11—*Delissea undulata*—a		*Delissea undulata*
Kauai 11—*Delissea undulata*—b	*Delissea undulata*	
Kauai 11—*Asplenium dielerectum*—a		*Asplenium dielerectum*
Kauai 11—*Diellia mannii*–a	*Diellia mannii*	Diellia mannii
Kauai 11—*Diellia pallida*—a	*Diellia pallida*	
Kauai 11—*Diellia pallida*—b	*Diellia pallida*	
Kauai 11—*Diplazium molokaiense*—a		*Diplazium molokaiense*
Kauai 11—*Doryopteris angelica*–b	*Doryopteris angelica*	Doryopteris angelica
Kauai 11—*Dryopteris crinalis* var. *podosorus*–b	*Dryopteris crinalis* var. *podosorus*	*Dryopteris crinalis* var. *podosorus*
Kauai 11—*Dubautia imbricata* ssp. *imbricata*–b		*Dubautia imbricata* ssp. *imbricata*
Kauai 11—*Dubautia kalalauensis*–b	*Dubautia kalalauensis*	Dubautia kalalauensis
Kauai 11—*Dubautia kenwoodii*–b		*Dubautia kenwoodii*
Kauai 11—*Dubautia latifolia*—1		*Dubautia latifolia*
Kauai 11—*Dubautia latifolia*—b	*Dubautia latifolia*	
Kauai 11—*Dubautia latifolia*—c	*Dubautia latifolia*	
Kauai 11—*Dubautia plantaginea* ssp. *magnifolia*–c		*Dubautia plantaginea* ssp. *magnifolia*
Kauai 11—*Dubautia waialealae*–b	*Dubautia waialealae*	Dubautia waialealae
Kauai 11—*Euphorbia haeleeleana*—a	*Euphorbia haeleeleana*	
Kauai 11—*Euphorbia haeleeleana*—b	*Euphorbia haeleeleana*	
Kauai 11—*Euphorbia haeleeleana*—c	*Euphorbia haeleeleana*	
Kauai 11—*Exocarpos luteolus*—b	*Exocarpos luteolus*	
Kauai 11—*Exocarpos luteolus*—c	*Exocarpos luteolus*	
Kauai 11—*Exocarpos luteolus*—d	*Exocarpos luteolus*	
Kauai 11—*Exocarpos luteolus*—e	*Exocarpos luteolus*	
Kauai 11—*Flueggea neowawraea*—a		*Flueggea neowawraea*
Kauai 11—*Flueggea neowawraea*—b	*Flueggea neowawraea*	
Kauai 11—*Flueggea neowawraea*—c	*Flueggea neowawraea*	
Kauai 11—*Flueggea neowawraea*—d	*Flueggea neowawraea*	
Kauai 11—*Flueggea neowawraea*—e	*Flueggea neowawraea*	
Kauai 11—*Flueggea neowawraea*—f	*Flueggea neowawraea*	
Kauai 11—*Geranium kauaiense*–b	*Geranium kauaiense*	Geranium kauaiense
Kauai 11—*Gouania meyenii*—a		*Gouania meyenii*
Kauai 11—*Gouania meyenii*—b	*Gouania meyenii*	
Kauai 11—*Gouania meyenii*—c		*Gouania meyenii*
Kauai 11—*Hedyotis cookiana*—a	*Hedyotis cookiana*	
Kauai 11—*Heduptos st.-johnii*—a	*Heduptos st.-johnii*	
Kauai 11—*Hesperomannia lydgatei*—b	*Hesperomannia lydgatei*	
Kauai 11—*Hesperomannia lydgatei*—e	*Hesperomannia lydgatei*	
Kauai 11—*Hibiscadelphus woodii*—a	*Hibiscadelphus woodii*	
Kauai 11—*Hibiscadelphus woodii*—b	*Hibiscadelphus woodii*	
Kauai 11—*Hibiscus waimeae* ssp. *hannerae*—a	*Hibiscus waimeae* ssp. *hannerae*	
Kauai 11—*Ischaemum byrone*—d		*Ischaemum byrone*
Kauai 11—*Isodendrion laurifolium*—a	*Isodendrion laurifolium*	
Kauai 11—*Isodendrion laurifolium*—b	*Isodendrion laurifolium*	
Kauai 11—*Isodendrion longifolium*—c	*Isodendrion longifolium*	
Kauai 11—*Isodendrion longifolium*—d	*Isodendrion longifolium*	
Kauai 11—*Isodendrion longifolium*—e	*Isodendrion longifolium*	
Kauai 11—*Keysseria erici*–b	*Keysseria erici*	Keysseria erici
Kauai 11—*Keysseria helenae*–b	*Keysseria helenae*	Keysseria helenae
Kauai 11—*Kokia kauaiensis*—a	*Kokia kauaiensis*	
Kauai 11—*Kokia kauaiensis*—b	*Kokia kauaiensis*	
Kauai 11—*Kokia kauaiensis*—c	*Kokia kauaiensis*	
Kauai 11—*Kokia kauaiensis*—d	*Kokia kauaiensis*	
Kauai 11—*Labordia helleri*–d	*Labordia helleri*	Labordia helleri
Kauai 11—*Labordia helleri*–e	*Labordia helleri*	Labordia helleri
Kauai 11—*Labordia helleri*–f	*Labordia helleri*	Labordia helleri
Kauai 11—*Labordia helleri*–g	*Labordia helleri*	Labordia helleri
Kauai 11—*Labordia lydgatei*—c	*Labordia lydgatei*	

(cdlix) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR KAUAI—Continued

Unit name	Species occupied	Species unoccupied
Kauai 11—*Labordia lydgatei*—d	*Labordia lydgatei*	
Kauai 11—*Labordia lydgatei*—e	*Labordia lydgatei*	
Kauai 11—*Labordia pumila*–b	*Labordia pumila*	Labordia pumila
Kauai 11—*Lipochaeta fauriei*—a		*Lipochaeta fauriei*
Kauai 11—*Lipochaeta fauriei*—b	*Lipochaeta fauriei*	
Kauai 11—*Lipochaeta micrantha*—b	*Lipochaeta micrantha*	
Kauai 11—*Lobelia niihauensis*—a		*Lobelia niihauensis*
Kauai 11—*Lobelia niihauensis*—b	*Lobelia niihauensis*	
Kauai 11—*Lysimachia daphnoides*–b	*Lysimachia daphnoides*	Lysimachia daphnoides
Kauai 11—*Lysimachia iniki*–c		Lysimachia iniki
Kauai 11—*Lysimachia pendens*–c		Lysimachia pendens
Kauai 11—*Lysimachia scopulensis*–a	*Lysimachia scopulensis*	Lysimachia scopulensis
Kauai 11—*Lysimachia venosa*–c		*Lysimachia venosa*
Kauai 11—*Cyperus pennatiformis*—a		*Cyperus pennatiformis*
Kauai 11—*Melicope degeneri*–b	*Melicope degeneri*	Melicope degeneri
Kauai 11—*Melicope haupuensis*—b	*Melicope haupuensis*	
Kauai 11—*Melicope haupuensis*—c	*Melicope haupuensis*	
Kauai 11—*Melicope knudsenii*—a	*Melicope knudsenii*	
Kauai 11—*Melicope knudsenii*—b	*Melicope knudsenii*	
Kauai 11—*Melicope pallida*—a	*Melicope pallida*	
Kauai 11—*Melicope pallida*—b	*Melicope pallida*	
Kauai 11—*Melicope paniculata*–b	*Melicope paniculata*	Melicope paniculata
Kauai 11—*Melicope puberula*–c	*Melicope puberula*	Melicope puberula
Kauai 11—*Melicope puberula*–d	*Melicope puberula*	Melicope puberula
Kauai 11—*Munroidendron racemosum*—c	*Munroidendron racemosum*	
Kauai 11—*Munroidendron racemosum*—d	*Munroidendron racemosum*	
Kauai 11—*Myrsine knudsenii*–a	*Myrsine knudsenii*	Myrsine knudsenii
Kauai 11—*Myrsine linearifolia*—c	*Myrsine linearifolia*	
Kauai 11—*Myrsine linearifolia*—d	*Myrsine linearifolia*	
Kauai 11—*Myrsine linearifolia*—e	*Myrsine linearifolia*	
Kauai 11—*Myrsine linearifolia*—f	*Myrsine linearifolia*	
Kauai 11—*Myrsine mezii*–b	*Myrsine mezii*	Myrsine mezii
Kauai 11—*Myrsine mezii*–c		Myrsine mezii
Kauai 11—*Nothocestrum peltatum*—a		*Nothocestrum peltatum*
Kauai 11—*Nothocestrum peltatum*—b	*Nothocestrum peltatum*	
Kauai 11—*Nothocestrum peltatum*—c	*Nothocestrum peltatum*	
Kauai 11—*Peucedanum sandwicense*—b	*Peucedanum sandwicense*	
Kauai 11—*Peucedanum sandwicense*—c	*Peucedanum sandwicense*	
Kauai 11—*Phyllostegia knudsenii*—a	*Phyllostegia knudsenii*	
Kauai 11—*Phyllostegia renovans*–c	*Phyllostegia renovans*	Phyllostegia renovans
Kauai 11—*Phyllostegia renovans*–d	*Phyllostegia renovans*	Phyllostegia renovans
Kauai 11—*Phyllostegia waimeae*—a	*Phyllostegia waimeae*	
Kauai 11—*Phyllostegia wawrana*—b	*Phyllostegia wawrana*	
Kauai 11—*Phyllostegia wawrana*—c	*Phyllostegia wawrana*	
Kauai 11—*Phyllostegia wawrana*—d	*Phyllostegia wawrana*	
Kauai 11—*Pittosporum napaliense*–b	*Pittosporum napaliense*	Pittosporum napaliense
Kauai 11—*Plantago princeps*—b	*Plantago princeps*	
Kauai 11—*Plantago princeps*—c		*Plantago princeps*
Kauai 11—*Plantago princeps*—d	*Plantago princeps*	
Kauai 11—*Platanthera holochila*—a	*Platanthera holochila*	
Kauai 11—*Platydesma rostrata*–f	*Platydesma rostrata*	Platydesma rostrata
Kauai 11—*Platydesma rostrata*–g	*Platydesma rostrata*	Platydesma rostrata
Kauai 11—*Platydesma rostrata*–h	*Platydesma rostrata*	Platydesma rostrata
Kauai 11—*Platydesma rostrata*–i		Platydesma rostrata
Kauai 11—*Platydesma rostrata*–j	*Platydesma rostrata*	Platydesma rostrata
Kauai 11—*Poa mannii*—a		*Poa mannii*
Kauai 11—*Poa mannii*—b	*Poa mannii*	
Kauai 11—*Poa mannii*—c		*Poa mannii*
Kauai 11—*Poa mannii*—d	*Poa mannii*	
Kauai 11—*Poa sandvicensis*—a	*Poa sandvicensis*	
Kauai 11—*Poa sandvicensis*—b	*Poa sandvicensis*	
Kauai 11—*Poa siphonoglossa*—a	*Poa siphonoglossa*	
Kauai 11—*Poa siphonoglossa*—b	*Poa siphonoglossa*	
Kauai 11—*Psychotria grandiflora*–b	*Psychotria grandiflora*	Psychotria grandiflora
Kauai 11—*Psychotria grandiflora*–c	*Psychotria grandiflora*	Psychotria grandiflora
Kauai 11—*Psychotria hobdyi*–b	*Psychotria hobdyi*	Psychotria hobdyi
Kauai 11—*Pteralyxia kauaiensis*—c	*Pteralyxia kauaiensis*	
Kauai 11—*Pteralyxia kauaiensis*—d	*Pteralyxia kauaiensis*	
Kauai 11—*Pteralyxia kauaiensis*—e	*Pteralyxia kauaiensis*	
Kauai 11—*Pteralyxia kauaiensis*—f	*Pteralyxia kauaiensis*	
Kauai 11—*Pteralyxia kauaiensis*—g	*Pteralyxia kauaiensis*	
Kauai 11—*Remya kauaiensis*—a	*Remya kauaiensis*	

(cdlix) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR KAUAI—Continued

Unit name	Species occupied	Species unoccupied
Kauai 11—*Remya kauaiensis*—b	*Remya kauaiensis*	
Kauai 11—*Remya kauaiensis*—c	*Remya kauaiensis*	
Kauai 11—*Remya kauaiensis*—d	*Remya kauaiensis*	
Kauai 11—*Remya kauaiensis*—e	*Remya kauaiensis*	
Kauai 11—*Remya montgomeryi*—a		*Remya montgomeryi*
Kauai 11—*Remya montgomeryi*—b	*Remya montgomeryi*	
Kauai 11—*Remya montgomeryi*—c	*Remya montgomeryi*	
Kauai 11—*Schiedea apokremnos*—a	*Schiedea apokremnos*	
Kauai 11—*Schiedea apokremnos*—b	*Schiedea apokremnos*	
Kauai 11—*Schiedea apokremnos*—c	*Schiedea apokremnos*	
Kauai 11—*Schiedea attenuata*–a	*Schiedea attenuata*	Schiedea attenuata
Kauai 11—*Schiedea helleri*—a		*Schiedea helleri*
Kauai 11—*Schiedea helleri*—b	*Schiedea helleri*	
Kauai 11—*Schiedea helleri*—c	*Schiedea helleri*	
Kauai 11—*Schiedea kauaiensis*—a		*Schiedea kauaiensis*
Kauai 11—*Schiedea kauaiensis*—c	*Schiedea kauaiensis*	
Kauai 11—*Schiedea kauaiensis*—c	*Schiedea kauaiensis*	
Kauai 11—*Schiedea kauaiensis*—d		*Schiedea kauaiensis*
Kauai 11—*Schiedea membranacea*—a	*Schiedea membranacea*	
Kauai 11—*Schiedea membranacea*—b	*Schiedea membranacea*	
Kauai 11—*Schiedea membranacea*—c	*Schiedea membranacea*	
Kauai 11—*Schiedea membranacea*—d	*Schiedea membranacea*	
Kauai 11—*Schiedea spergulina* var. *spergulina*—a	*Schiedea spergulina* var. *spergulina.*	
Kauai 11—*Schiedea spergulina* var. *spergulina*—b	*Schiedea spergulina* var. *spergulina.*	
Kauai 11—*Schiedea stellarioides*—a	*Schiedea stellarioides*	
Kauai 11—*Schiedea stellarioides*—b		*Schiedea stellarioides*
Kauai 11—*Solanum sandwicense*—a	*Solanum sandwicense*	
Kauai 11—*Solanum sandwicense*—b		*Solanum sandwicense*
Kauai 11—*Spermolepis hawaiiensis*—a	*Spermolepis hawaiiensis*	
Kauai 11—*Stenogyne campanulata*—a	*Stenogyne campanulata*	
Kauai 11—*Stenogyne kealiae*–b	*Stenogyne kealiae*	Stenogyne kealiae
Kauai 11—*Stenogyne kealiae*–c	*Stenogyne kealiae*	Stenogyne kealiae
Kauai 11—*Stenogyne kealiae*–d	*Stenogyne kealiae*	Stenogyne kealiae
Kauai 11—*Tetraplasandra bisattenuata*–c		Tetraplasandra bisattenuata
Kauai 11—*Tetraplasandra bisattenuata*–d		Tetraplasandra bisattenuata
Kauai 11—*Tetraplasandra flynnii*–c	*Tetraplasandra flynnii*	Tetraplasandra flynnii
Kauai 11—*Tetraplasandra flynnii*–d		Tetraplasandra flynnii
Kauai 11—*Tetraplasandra flynnii*–e	*Tetraplasandra flynnii*	*Tetraplasandra flynnii*
Kauai 11—*Wilkesia hobdyi*—a	*Wilkesia hobdyi*	
Kauai 11—*Xylosma crenatum*—a	*Xylosma crenatum*	
Kauai 11—*Zanthoxylum hawaiiense*—a	*Zanthoxylum hawaiiense*	
Kauai 12—*Nothocestrum peltatum*—d	*Nothocestrum peltatum*	
Kauai 12—*Remya kauaiensis*—f		*Remya kauaiensis*
Kauai 12—*Xylosma crenatum*—b		*Xylosma crenatum*
Kauai 13—*Lipochaeta waimeaensis*—a	*Lipochaeta waimeaensis*	
Kauai 13—*Schiedea spergulina* var. *spergulina*—c		*Schiedea spergulina* var. *spergulina*
Kauai 13—*Spermolepis hawaiiensis*—b	*Spermolepis hawaiiensis*	
Kauai 14—*Panicum niihauense*—a	*Panicum niihauense*	
Kauai 14—*Sesbania tomentosa*—b	*Sesbania tomentosa*	
Kauai 15—*Panicum niihauense*—b		*Panicum niihauense*
Kauai 16—*Panicum niihauense*—c		*Panicum niihauense*
Kauai 17—*Panicum niihauense*—d		*Panicum niihauense*
Kauai 18—*Chamaesyce remyi* var. *kauaiensis*–f	*Chamaesyce remyi* var. *kauaiensis*	*Chamaesyce remyi* var. *kauaiensis*
Kauai 18—*Chamaesyce remyi* var. *remyi*–k		*Chamaesyce remyi* var. *remyi*
Kauai 18—*Cyanea dolichopoda*–d		*Cyanea dolichopoda*
Kauai 18—*Cyrtandra oenobarba*–f	*Cyrtandra oenobarba*	Cyrtandra oenobarba
Kauai 18—*Cyrtandra paliku*–d		Cyrtandra paliku
Kauai 18—*Dubautia plantaginea* ssp. *magnifolia*–d	*Dubautia plantaginea* ssp. *magnifolia*	Dubautia plantaginea ssp. *magnifolia*
Kauai 18—*Lysimachia iniki*–d	*Lysimachia iniki*	Lysimachia iniki
Kauai 18—*Lysimachia pendens*–d	*Lysimachia pendens*	Lysimachia pendens
Kauai 18—*Lysimachia venosa*–d		*Lysimachia venosa*
Kauai 18—*Platydesma rostrata*–k	*Platydesma rostrata*	Platydesma rostrata
Kauai 19—*Chamaesyce remyi* var. *kauaiensis*–g		*Chamaesyce remyi* var. *kauaiensis*
Kauai 19—*Chamaesyce remyi* var. *remyi*–l		*Chamaesyce remyi* var. *remyi*
Kauai 19—*Cyanea dolichopoda*–e		*Cyanea dolichopoda*
Kauai 19—*Cyrtandra oenobarba*–g		Cyrtandra oenobarba

(cdlix) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR KAUAI—Continued

Unit name	Species occupied	Species unoccupied
Kauai 19—*Cyrtandra paliku*–e	*Cyrtandra paliku*	Cyrtandra paliku
Kauai 19—*Dubautia plantaginea* ssp. *magnifolia*–e		*Dubautia plantaginea* ssp. *magnifolia*
Kauai 19—*Lysimachia iniki*–e		Lysimachia iniki
Kauai 19—*Lysimachia pendens*–e		Lysimachia pendens
Kauai 19—*Lysimachia venosa*–e		*Lysimachia venosa*
Kauai 19—*Platydesma rostrata*–l		Platydesma rostrata
Kauai 20—*Chamaesyce remyi* var. *kauaiensis*–h		*Chamaesyce remyi* var. *kauaiensis*
Kauai 20—*Chamaesyce remyi* var. *remyi*–m	*Chamaesyce remyi* var. *remyi*	Chamaesyce remyi var. *remyi*
Kauai 20—*Charpentiera densiflora*–e	*Charpentiera densiflora*	Charpentiera densiflora
Kauai 20—*Cyanea eleeleensis*–c		*Cyanea eleeleensis*
Kauai 20—*Cyanea kolekoleensis*–c		*Cyanea kolekoleensis*
Kauai 20—*Cyanea kuhihewa*–c		*Cyanea kuhihewa*
Kauai 20—*Cyrtandra oenobarba*–h		Cyrtandra oenobarba
Kauai 20—*Dubautia imbricata* ssp. *imbricata*–c	*Dubautia imbricata* ssp. *imbricata*	Dubautia imbricata ssp. *imbricata*
Kauai 20—*Labordia helleri*–h	*Labordia helleri*	Labordia helleri
Kauai 20—*Melicope paniculata*–c		Melicope paniculata
Kauai 20—*Melicope puberula*–e		Melicope puberula
Kauai 20—*Phyllostegia renovans*–e	*Phyllostegia renovans*	Phyllostegia renovans
Kauai 20—*Platydesma rostrata*–m		Platydesma rostrata
Kauai 20—*Stenogyne kealiae*–e		Stenogyne kealiae
Kauai 20—*Tetraplasandra bisattenuata*–e		Tetraplasandra bisattenuata
Kauai 20—*Tetraplasandra flynii*–f		Tetraplasandra flynii
Kauai 21—*Chamaesyce remyi* var. *remyi*–n		Chamaesyce remyi var. *remyi*
Kauai 21—*Diellia mannii*–b	*Diellia mannii*	Diellia mannii
Kauai 21—*Labordia helleri*–i		Labordia helleri
Kauai 21—*Myrsine knudsenii*–b		Myrsine knudsenii
Kauai 21—*Myrsine mezii*–d		Myrsine mezii
Kauai 21—*Platydesma rostrata*–n		Platydesma rostrata
Kauai 21—*Psychotria grandiflora*–d		Psychotria grandiflora
Kauai 21—*Stenogyne kealiae*–f		Stenogyne kealiae
Kauai 21—*Tetraplasandra flynnii*–g		Tetraplasandra flynnii
Kauai 22—*Chamaesyce remyi* var. *remyi*–o		Chamaesyce remyi var. *remyi*
Kauai 22—*Diellia mannii*–c		Diellia mannii
Kauai 22—*Labordia helleri*–j		Labordia helleri
Kauai 22—*Myrsine knudsenii*–c		Myrsine knudsenii
Kauai 22—*Myrsine mezii*–e	*Myrsine mezii*	Myrsine mezii
Kauai 22—*Platydesma rostrata*–o		Platydesma rostrata
Kauai 22—*Psychotria grandiflora*–e		Psychotria grandiflora
Kauai 22—*Stenogyne kealiae*–g		Stenogyne kealiae
Kauai 22—*Tetraplasandra flynnii*–h		Tetraplasandra flynnii
Kauai 23—*Astelia waialealae*–c	*Astelia waialealae*	Astelia waialealae
Kauai 23—*Chamaesyce remyi* var. *remyi*–p	*Chamaesyce remyi* var. *remyi*	Chamaesyce remyi var. *remyi*
Kauai 23—*Dryopteris crinalis* var. *podosorus*–c	*Dryopteris crinalis* var. *podosorus*	Dryopteris crinalis var. *podosorus*
Kauai 23—*Dubautia kalalauensis*–c		Dubautia kalalauensis
Kauai 23—*Dubautia waialealae*–c	*Dubautia waialealae*	Dubautia waialealae
Kauai 23—*Geranium kauaiense*–c	*Geranium kauaiense*	Geranium kauaiense
Kauai 23—*Keysseria erici*–c	*Keysseria erici*	Keysseria erici
Kauai 23—*Keysseria helenae*–c	*Keysseria helenae*	Keysseria helenae
Kauai 23—*Labordia helleri*–k	*Labordia helleri*	Labordia helleri
Kauai 23—*Labordia pumila*–c	*Labordia pumila*	Labordia pumila
Kauai 23—*Lysimachia daphnoides*–c	*Lysimachia daphnoides*	Lysimachia daphnoides
Kauai 23—*Melicope degeneri*–c	*Melicope degeneri*	Melicope degeneri
Kauai 23—*Melicope puberula*–f	*Melicope puberula*	Melicope puberula
Kauai 23—*Myrsine mezii*–f	*Myrsine mezii*	Myrsine mezii
Kauai 23—*Phyllostegia renovans*–f	*Phyllostegia renovans*	Phyllostegia renovans
Kauai 23—*Platydesma rostrata*–p	*Platydesma rostrata*	Platydesma rostrata
Kauai 23—*Psychotria grandiflora*–f		Psychotria grandiflora
Kauai 23—*Tetraplasandra flynnii*–i		Tetraplasandra flynnii
Kauai 24—*Astelia waialealae*–d	*Astelia waialealae*	Astelia waialealae
Kauai 24—*Chamaesyce remyi* var. *remyi*–q	*Chamaesyce remyi* var. *remyi*	Chamaesyce remyi var. *remyi*
Kauai 24—*Dryopteris crinalis* var. *podosorus*–d	*Dryopteris crinalis* var. *podosorus*	Dryopteris crinalis var. *podosorus*
Kauai 24—*Dubautia kalalauensis*–d		Dubautia kalalauensis
Kauai 24—*Dubautia waialealae*–d	*Dubautia waialealae*	Dubautia waialealae
Kauai 24—*Geranium kauaiense*–d	*Geranium kauaiense*	Geranium kauaiense
Kauai 24—*Keysseria erici*–d	*Keysseria erici*	Keysseria erici
Kauai 24—*Keysseria helenae*–d	*Keysseria helenae*	Keysseria helenae
Kauai 24—*Labordia helleri*–l	*Labordia helleri*	Labordia helleri

(cdlix) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR KAUAI—Continued

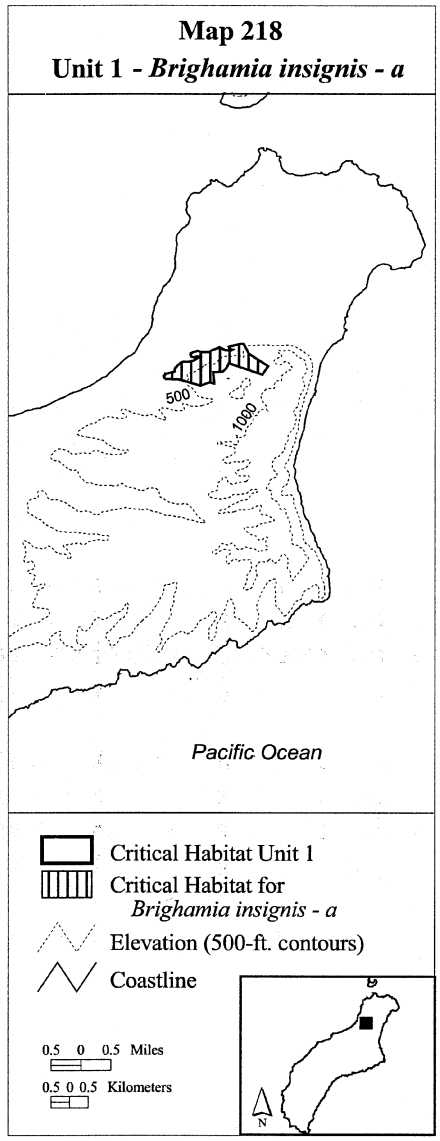
Unit name	Species occupied	Species unoccupied
Kauai 24—*Labordia pumila*–d	*Labordia pumila*	Labordia pumila
Kauai 24—*Lysimachia daphnoides*–d	*Lysimachia daphnoides*	Lysimachia daphnoides
Kauai 24—*Melicope degeneri*–d	*Melicope degeneri*	Melicope degeneri
Kauai 24—*Melicope puberula*–g	*Melicope puberula*	Melicope puberula
Kauai 24—*Myrsine mezii*–g	*Myrsine mezii*	Myrsine mezii
Kauai 24—*Phyllostegia renovans*–g	*Phyllostegia renovans*	Phyllostegia renovans
Kauai 24—*Platydesma rostrata*–q	*Platydesma rostrata*	Platydesma rostrata
Kauai 24—*Psychotria grandiflora*–g	.....	Psychotria grandiflora
Kauai 24—*Tetraplasandra flynnii*–j	.....	Tetraplasandra flynnii
Kauai 25—*Astelia waialealae*–e	*Astelia waialealae*	Astelia waialealae
Kauai 25—*Chamaesyce remyi* var. *remyi*–r	*Chamaesyce remyi* var. *remyi*	Chamaesyce remyi var. *remyi*
Kauai 25—*Dryopteris crinalis* var. *podosorus*–e	*Dryopteris crinalis* var. *podosorus*	Dryopteris crinalis var. *podosorus*
Kauai 25—*Dubautia kalalauensis*–e	.....	Dubautia kalalauensis
Kauai 25—*Dubautia waialealae*–e	*Dubautia waialealae*	Dubautia waialealae
Kauai 25—*Geranium kauaiense*–e	*Geranium kauaiense*	Geranium kauaiense
Kauai 25—*Keysseria erici*–e	*Keysseria erici*	Keysseria erici
Kauai 25—*Keysseria helenae*–e	*Keysseria helenae*	Keysseria helenae
Kauai 25—*Labordia helleri*–m	*Labordia helleri*	Labordia helleri
Kauai 25—*Labordia pumila*–e	*Labordia pumila*	Labordia pumila
Kauai 25—*Lysimachia daphnoides*–e	*Lysimachia daphnoides*	Lysimachia daphnoides
Kauai 25—*Melicope degeneri*–e	*Melicope degeneri*	Melicope degeneri
Kauai 25—*Melicope puberula*–h	*Melicope puberula*	Melicope puberula
Kauai 25—*Myrsine mezii*–h	*Myrsine mezii*	Myrsine mezii
Kauai 25—*Phyllostegia renovans*–h	*Phyllostegia renovans*	Phyllostegia renovans
Kauai 25—*Platydesma rostrata*–r	*Platydesma rostrata*	Platydesma rostrata
Kauai 25—*Psychotria grandiflora*–h	.....	Psychotria grandiflora
Kauai 25—*Tetraplasandra flynnii*–k	.....	Tetraplasandra flynnii

(2) *Niihau.* Critical habitat units are described below. Coordinates in UTM Zone 4 with units in meters using North American Datum of 1983 (NAD83). The following map shows the general location of the one critical habitat unit designated on the island of Niihau.

(i) Niihau 1—*Brighamia insignis*—a (144 ha; 357 ac)

(A) [Reserved]

(B) Map 218 follows:



(ii) Table of Protected Species Within Each Critical Habitat Unit for Niihau

Unit name	Species occupied	Species unoccupied
Niihau 1—*Brighamia insignis*—a	*Brighamia insignis*	

(b) *Plants on Kauai and Niihau; Constituent elements.* (1) *Flowering plants.*

FAMILY AMARANATHACEAE: ***Charpentiera densiflora*** (PAPALA)

Kauai 7–*Charpentiera densiflora*–a, Kauai 10–*Charpentiera densiflora*–b, Kauai 11–*Charpentiera densiflora*–c, Kauai 11–*Charpentiera densiflora*–d, and Kauai 20–*Charpentiera densiflora*–e, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Charpentiera densiflora* on Kauai.

(i) In units Kauai 7–*Charpentiera densiflora*–a, and Kauai 11–*Charpentiera densiflora*–c, the primary constituent elements of critical habitat are:

(A) Elevation: Less than 3,000 ft (914 m).

(B) Annual precipitation: 50 to 75 inches (127 to 190 centimeters).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Kauai 10–*Charpentiera densiflora*–b, Kauai 11–*Charpentiera densiflora*–d, and Kauai 20–*Charpentiera densiflora*–e, the primary constituent elements of critical habitat are:

(A) Elevation: Less than 3,000 ft (914 m).

(B) Annual precipitation: Greater than 75 inches (190 centimeters).

(C) Substrate: Clays, ashbeds, deep well-drained soils, lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

FAMILY APIACEAE: ***Peucedanum sandwicense*** (MAKOU)

Kauai 7—*Peucedanum sandwicense*—a, Kauai 11—*Peucedanum sandwicense*—b, and Kauai 11—*Peucedanum sandwicense*—c, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Peucedanum sandwicense* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Cliff habitats in mixed shrub coastal dry cliff communities or diverse mesic forest and containing one or more of the following associated native plant species: *Acacia koa*, *Artemisia australis*, *Bidens* spp., *Brighamia insignis*, *Carex meyenii*, *Chamaesyce celastroides*, *Diospyros* spp., *Dodonaea viscosa*, *Eragrostis variabilis*, *Hibiscus kokio*, *Lobelia niihauensis*, *Metrosideros polymorpha*, *Panicum lineale*, *Psydrax odorata*, *Psychotria* spp., or *Wilkesia* spp.; and

(ii) Elevations between 119 and 1,232 m (391 and 4,041 ft).

FAMILY APIACEAE: ***Spermolepis hawaiiensis*** (NCN)

Kauai 11—*Spermolepis hawaiiensis*—a, Kauai 13—*Spermolepis hawaiiensis*—b, and Kauai 13—*Spermolepis hawaiiensis*—c, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Spermolepis hawaiiensis* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) *Metrosideros polymorpha* forests or *Dodonaea viscosa* lowland dry shrubland and containing one or more of the following associated plant species: *Bidens sandvicensis*, *Doryopteris* spp., *Eragrostis variabilis*, *Erythrina sandwicensis*, *Lipochaeta* spp., *Schiedea spergulina*, or *Sida fallax;* and

(ii) Elevations between 56 and 662 m (184 and 2,172 ft).

FAMILY APOCYNACEAE: ***Pteralyxia kauaiensis*** (KAULU)

Kauai 7—*Pteralyxia kauaiensis*—a, Kauai 10—*Pteralyxia kauaiensis*—b, Kauai 11—*Pteralyxia kauaiensis*—c, Kauai 11—*Pteralyxia kauaiensis*—d, Kauai 11—*Pteralyxia kauaiensis*—e, Kauai 11—*Pteralyxia kauaiensis*—f, and Kauai 11—*Pteralyxia kauaiensis*—g, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Pteralyxia kauaiensis* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Diverse mesic or *Diospyros sandwicensis* mixed mesic forests with *Pisonia* spp. and containing one or more of the following associated plant species: *Acacia koa*, *Alectryon macrococcus*, *Alphitonia ponderosa*, *Antidesma platyphyllum* var. *hillebrandii*, *Bobea brevipes*, *Carex* spp., *Charpentiera elliptica*, *Claoxylon sandwicense*, *Cyanea* spp., *Dianella sandwicensis*, *Diospyros* spp., *Dodonaea viscosa*, *Diplazium sandwichianum*, *Euphorbia haeleeleana*, *Freycinetia arborea*, *Gahnia* spp., *Gardenia remyi*, *Hedyotis terminalis*, *Hibiscus kokio*, *Kokia kauaiensis*, *Leptecophylla tameiameiae*, *Metrosideros polymorpha*, *Myrsine lanaiensis*, *Neraudia* spp., *Nesoluma polynesicum*, *Nestegis sandwicensis*, *Peperomia* spp., *Pisonia sandwicensis*, *Pipturus* spp., *Pleomele aurea*, *Poa sandvicensis*, *Pouteria sandwicensis*, *Pritchardia* spp., *Psydrax odorata*, *Psychotria* spp., *Rauvolfia sandwicensis*, *Santalum freycinetianum* var. *pyrularium*, *Schiedea* spp., *Syzygium sandwicensis*, *Tetraplasandra* spp., *Xylosma hawaiiense*, or *Zanthoxylum dipetalum;* and

(ii) Elevations between 127 and 1,563 m (418 and 5,128 ft).

FAMILY ARALIACEAE: ***Munroidendron racemosum*** (NCN)

Kauai 5—*Munroidendron racemosum*—a, Kauai 7—*Munroidendron racemosum*—b, Kauai 11—*Munroidendron racemosum*—c, and Kauai 11—*Munroidendron racemosum*—d, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Munroidendron racemosum* on Kauai. Within these units the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep exposed cliffs or ridge slopes in coastal or lowland mesic forest and containing one or more of the following associated plant species: *Bobea brevipes*, *Brighamia insignis*, *Canavalia napaliensis*, *Diospyros sandwicensis*, *Diospyros hillebrandii*, *Nestegis sandwicensis*, *Pisonia sandwicensis*, *Pisonia umbellifera*, *Pleomele aurea*, *Pouteria sandwicensis*, *Psychotria* spp., *Psydrax odorata*, *Rauvolfia sandwicensis*, *Schiedea* spp., *Sida fallax*, or *Tetraplasandra* spp.; and

(ii) Elevations between 11 and 938 m (37 and 3,077 ft).

FAMILY ARALIACEAE: ***Tetraplasandra bisattenuata*** (NCN)

Kauai 7–*Tetraplasandra bisattenuata*–a, Kauai 10–*Tetraplasandra bisattenuata*–b, Kauai 11–*Tetraplasandra bisattenuata*–c, Kauai 11–*Tetraplasandra bisattenuata*–d, and Kauai 20–*Tetraplasandra bisattenuata*–e, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Tetraplasandra bisattenuata* on Kauai.

(i) In units Kauai 7–*Tetraplasandra bisattenuata*–a, and Kauai 11–*Tetraplasandra bisattenuata*–c, the primary constituent elements of critical habitat are:

(A) Elevation: Less than 3,000 ft (914 m).

(B) Annual precipitation: 50 to 75 inches (127 to 190 centimeters).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Kauai 10–*Tetraplasandra bisattenuata*–b, Kauai 11–*Tetraplasandra bisattenuata*–d, and Kauai 20–*Tetraplasandra bisattenuata*–e, the primary constituent elements of critical habitat are:

(A) Elevation: Less than 3,000 ft (914 m).

(B) Annual precipitation: Greater than 75 inches (190 centimeters).

(C) Substrate: Clays, ashbeds, deep well-drained soils, lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

FAMILY ARALIACEAE: ***Tetraplasandra flynnii*** (NCN)

Kauai 10–*Tetraplasandra flynnii*–a, Kauai 10–*Tetraplasandra flynnii*–b, Kauai 11–*Tetraplasandra flynnii*–c, Kauai 11–*Tetraplasandra flynnii*–d, Kauai 11–*Tetraplasandra flynnii*–e, Kauai 20–*Tetraplasandra flynnii*–f, Kauai 21–*Tetraplasandra flynnii*–g, Kauai 22–*Tetraplasandra flynnii*–h, Kauai 23–*Tetraplasandra flynnii*–i, Kauai 24–*Tetraplasandra flynnii*–j, and Kauai 25–*Tetraplasandra flynnii*–k, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Tetraplasandra flynnii* on Kauai.

(i) In units Kauai 11–*Tetraplasandra flynnii*–e, Kauai 21–*Tetraplasandra flynnii*–g, and Kauai 22–*Tetraplasandra flynnii*–h, the primary constituent elements of critical habitat are:

(A) Elevation: 3,000 to 5,243 ft (914 to 1,598 m).

(B) Annual precipitation: 50 to 75 inches (127 to 190 centimeters).

(C) Substrate: Weathered aa lava flows, rocky mucks, thin silty loams, deep volcanic ash soils.

(D) Canopy: *Acacia*, *Metrosideros*, *Psychotria*, *Tetraplasandra*, *Zanthoxylum*.

(E) Subcanopy: *Cheirodendron*, *Coprosma*, *Kadua*, *Ilex*, *Myoporum*, *Myrsine*.

(F) Understory: *Bidens*, *Dryopteris*, *Leptecophylla*, *Poa*, *Scaevola*, *Sophora*.

(ii) In units Kauai 10–*Tetraplasandra flynnii*–a, Kauai 11–*Tetraplasandra flynnii*–c, Kauai 23–*Tetraplasandra flynnii*–i, Kauai 24–*Tetraplasandra flynnii*–j, and Kauai 25–*Tetraplasandra flynnii*–k, the primary constituent elements of critical habitat are:

(A) Elevation: 3,000 to 5,243 ft (914 to 1,598 m).

(B) Annual precipitation: Greater than 75 inches (190 centimeters).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(iii) In units Kauai 10–*Tetraplasandra flynii*–b, Kauai 11–*Tetraplasandra flynii*–d, and Kauai 20–*Tetraplasandra flynnii*–f, the primary constituent elements of critical habitat are:

(A) Elevation: Less than 3,000 ft (914 m).

(B) Annual precipitation: Greater than 75 inches (190 centimeters).

(C) Substrate: Clays, ashbeds, deep well-drained soils, lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

FAMILY ASTELIACEAE: ***Astelia waialealae*** (PAINIU)

Kauai 10–*Astelia waialealae*–a, Kauai 11–*Astelia waialealae*–b, Kauai 23–*Astelia waialealae*–c, Kauai 24–*Astelia waialealae*–d, and Kauai 25–*Astelia waialealae*–e, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Astelia waialealae* on Kauai. Within these units, the primary constituent elements of critical habitat are:

(i) Elevation: 3,000 to 5,243 ft (914 to 1,598 m).

(ii) Annual precipitation: Greater than 75 inches (190 centimeters).

(iii) Substrate: Well-developed soils, montane bogs.

(iv) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(v) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(vi) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(vii) Hummocks in bogs.

FAMILY ASTERACEAE: ***Dubautia imbricata*** SSP. *imbricata* (NAENAE)

Kauai 10–*Dubautia imbricata* ssp. *imbricata*–a, Kauai 11–*Dubautia imbricata* ssp. *imbricata*–b, and Kauai 20–*Dubautia imbricata* ssp. *imbricata*–c, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Dubautia imbricata* ssp. *imbricata* on Kauai. Within these units, the primary constituent elements of critical habitat are:

(i) Elevation: Less than 3,000 ft (914 m).

(ii) Annual precipitation: Greater than 75 inches (190 centimeters).

(iii) Substrate: Clays, ashbeds, deep well-drained soils, lowland bogs.

(iv) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(v) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(vi) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

FAMILY ASTERACEAE: ***Dubautia kalalauensis*** (NAENAE)

Kauai 10–*Dubautia kalalauensis*–a, Kauai 11–*Dubautia kalalauensis*–b, Kauai 23–*Dubautia kalalauensis*–c, Kauai 24–*Dubautia kalalauensis*–d, and Kauai 25–*Dubautia kalalauensis*–e, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Dubautia kalalauensis* on Kauai. Within these units, the primary constituent elements of critical habitat are:

(i) Elevation: 3,000 to 5,243 ft (914 to 1,598 m).

(ii) Annual precipitation: Greater than 75 inches (190 centimeters).

(iii) Substrate: Well-developed soils, montane bogs.

(iv) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(v) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(vi) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

FAMILY ASTERACEAE: ***Dubautia kenwoodii*** (NAENAE)

Kauai 7–*Dubautia kenwoodii*–a and Kauai 11–*Dubautia kenwoodii*–b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Dubautia kenwoodii* on Kauai. Within these units, the primary constituent elements of critical habitat are:

(i) Elevation: Less than 3,000 ft (914 m).

(ii) Annual precipitation: 50 to 75 inches (127 to 190 centimeters).

(iii) Substrate: Shallow soils, little to no herbaceous layer.

(iv) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(v) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(vi) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

FAMILY ASTERACEAE: ***Dubautia latifolia*** (NAENAE)

Kauai 11—*Dubautia latifolia—a*, *Kauai 11—Dubautia latifolia*—b, and Kauai 11—*Dubautia latifolia*—c, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Dubautia latifolia* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Gentle or steep slopes on well drained soil in semi-open or closed, diverse montane mesic forest dominated by *Acacia koa* and/or *Metrosideros polymorpha* and containing one or more of the following native plant species: *Alphitonia ponderosa*, *Antidesma platyphyllum*, *Bobea* spp., *Claoxylon sandwicense*, *Coprosma waimeae*, *Cyrtandra* spp., *Dicranopteris linearis*, *Diplazium sandwichianum*, *Dodonaea viscosa*, *Elaeocarpus bifidus*, *Hedyotis terminalis*, *Ilex anomala*, *Melicope anisata*, *Nestegis sandwicensis*, *Pleomele aurea*, *Pouteria sandwicensis*, *Psychotria mariniana*, *Scaevola* spp., or *Xylosma* spp.; and

(ii) Elevations between 545 and 1,277 m (1,786 and 4,189 ft).

FAMILY ASTERACEAE: ***Dubautia pauciflorula*** (NAENAE)

Kauai 10—*Dubautia pauciflorul*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Dubautia pauciflorula* on Kauai. Within this unit,

the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) *Metrosideros polymorpha-Dicranopteris linearis* lowland wet forest within stream drainages containing one or more of the following associated native plant species: *Antidesma platyphyllum, Broussaisia arguta, Cheirodendron* spp., *Dubautia laxa, Embelia pacifica, Hesperomannia lydgatei, Labordia waialealae, Melicope* spp., *Nothoperanema rubiginosa, Pritchardia* spp., *Psychotria* spp., *Sadleria* spp., *Scaevola mollis, Syzygium sandwicensis,* or *Tetraplasandra* spp.; and

(ii) Elevations between 564 and 1,094 m (1,849 and 3,587 ft).

FAMILY ASTERACEAE: ***Dubautia plantaginea*** SSP. *magnifolia* (NAENAE)

Kauai 4–*Dubautia plantaginea* ssp. *magnifolia*–a, Kauai 10–*Dubautia plantaginea* ssp. *magnifolia*–b, Kauai 11–*Dubautia plantaginea* ssp. *magnifolia*–c, Kauai 18–*Dubautia plantaginea* ssp. *magnifolia*–d, and Kauai 19–*Dubautia plantaginea* ssp. *magnifolia*–e, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Dubautia plantaginea* ssp. *magnifolia* on Kauai. Within these units, the primary constituent elements of critical habitat are:

(i) Annual precipitation: Greater than 75 inches (190 centimeters).

(ii) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(iii) Subcanopy: *Broussaisia, Cheirodendron, Leptecophylla, Metrosideros.*

(iv) Understory: Ferns, Bryophytes, *Coprosoma, Dubautia, Kadua, Peperomia.*

FAMILY ASTERACEAE: ***Dubautia waialealae*** (NAENAE)

Kauai 10–*Dubautia waialealae*–a, Kauai 11–*Dubautia waialealae*–b, Kauai 23–*Dubautia waialealae*–c, Kauai 24–*Dubautia waialealae*–d, and Kauai 25–*Dubautia waialealae*–e, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Dubautia waialealae* on Kauai. Within these units, the primary constituent elements of critical habitat are:

(i) Elevation: 3,000 to 5,243 ft (914 to 1,598 m).

(ii) Annual precipitation: Greater than 75 inches (190 centimeters).

(iii) Substrate: Well-developed soils, montane bogs.

(iv) Canopy: *Acacia, Charpentiera, Cheirodendron, Metrosideros.*

(v) Subcanopy: *Broussaisia, Cibotium, Eurya, Ilex, Myrsine.*

(vi) Understory: Ferns, *Carex, Coprosma, Leptecophylla, Oreobolus, Rhynchospora, Vaccinium.*

(vii) Bogs.

FAMILY ASTERACEAE: ***Hesperomannia lydgatei*** (NCN)

Kauai 10—*Hesperomannia lydgatei*—a, Kauai 11—*Hesperomannia lydgatei*—b, and Kauai 11—*Hesperomannia lydgatei*—c, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Hesperomannia lydgatei* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Stream banks and forested slopes in rich brown soil and silty clay in *Metrosideros polymorpha* or *Metrosideros polymorpha-Dicranopteris linearis* lowland wet forest and containing one or more of the following associated native plant species: *Adenophorus periens, Antidesma platyphyllum, Broussaisia arguta, Cheirodendron* spp., *Cyanea* spp., *Dubautia knudsenii, Dubautia laxa, Dubautia pauciflorula, Dubautia raillardioides, Elaphoglossum* spp., *Freycinetia arborea, Hedyotis terminalis, Labordia lydgatei, Machaerina angustifolia, Peperomia* spp., *Pritchardia* spp., *Psychotria hexandra,* or *Syzygium sandwicensis;* and

(ii) Elevations between 207 and 1,344 m (680 and 4,409 ft).

FAMILY ASTERACEAE: ***Keysseria erici*** (NCN)

Kauai 10–*Keysseria erici*–a, Kauai 11–*Keysseria erici*–b, Kauai 23–*Keysseria erici*–c, Kauai 24–*Keysseria erici*–d, and Kauai 25–*Keysseria erici*–e, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Keysseria erici* on Kauai.

Within these units, the primary constituent elements of critical habitat are:

(i) Elevation: 3,000 to 5,243 ft (914 to 1,598 m).

(ii) Annual precipitation: Greater than 75 inches (190 centimeters).

(iii) Substrate: Well-developed soils, montane bogs.

(iv) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(v) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(vi) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(vii) Bogs.

FAMILY ASTERACEAE: ***Keysseria helenae*** (NCN)

Kauai 10–*Keysseria helenae*–a, Kauai 11–*Keysseria helenae*–b, Kauai 23–*Keysseria helenae*–c, Kauai 24–*Keysseria helenae*–d, and Kauai 25–*Keysseria helenae*–e, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Keysseria helenae* on Kauai. Within these units, the primary constituent elements of critical habitat are:

(i) Elevation: 3,000 to 5,243 ft (914 to 1,598 m).

(ii) Annual precipitation: Greater than 75 inches (190 centimeters).

(iii) Substrate: Well-developed soils, montane bogs.

(iv) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(v) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(vi) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(vii) Bogs.

FAMILY ASTERACEAE: ***Lipochaeta fauriei*** (NEHE)

Kauai 11—*Lipochaeta fauriei*—a, and Kauai 11—*Lipochaeta fauriei*—b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Lipochaeta fauriei* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Moderate shade to full sun on the sides of steep gulches in diverse lowland mesic forests and containing one or more of the following native species: *Acacia koa*, *Carex meyenii*, *Carex wahuensis*, *Dicranopteris linearis*, *Diospyros* spp., *Dodonaea viscosa*, *Euphorbia haeleeleana*, *Hibiscus waimeae*, *Kokia kauaiensis*, *Myrsine lanaiensis*, *Nestegis sandwicensis*, *Pleomele aurea*, *Psychotria greenwelliae*, *Psychotria mariniana*, *or Sapindus oahuensis;* and

(ii) Elevations between 438 and 948 m (1,438 and 3,108 ft).

FAMILY ASTERACEAE: ***Lipochaeta micrantha*** (NEHE)

Kauai 7—*Lipochaeta micrantha*—a, and Kauai 11—*Lipochaeta micrantha*—b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Lipochaeta micrantha* on Kauai. Within these units the currently known primary constituent elements of critical habitat for *Lipochaeta micrantha* are the habitat components provided by:

(i) Cliffs, ridges, stream banks, or slopes in mesic to wet mixed communities and containing one or more of the following associated native plant species: *Acacia koa*, *Antidesma* spp., *Artemisia australis*, *Bidens sandvicensis*, *Bobea* spp., *Chamaesyce celastroides* var. *hanapepensis*, *Diospyros* spp., *Dodonaea viscosa*, *Eragrostis grandis*, *Eragrostis variabilis*, *Hibiscus kokio*, *Lepidium bidentatum*, *Lobelia niihauensis*, *Melicope* spp., *Metrosideros polymorpha*, *Neraudia kauaiensis*, *Nototrichium* spp., *Pipturus* spp., *Plectranthus parviflorus*, *Pleomele aurea*, *Psydrax odorata*, *Rumex albescens*, *Sida fallax*, or *Xylosma hawaiiense;* and

(ii) Elevations between 127 and 1,090 m (418 and 3,574 ft).

FAMILY ASTERACEAE: ***Lipochaeta waimeaensis*** (NEHE)

Kauai 13—*Lipochaeta waimeaensis*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Lipochaeta waimeaensis* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Precipitous, shrub-covered gulches in diverse lowland forest and containing one or more of the following associated native plant species: *Artemisia australis*, *Chamaesyce celastroides*, *Dodonaea viscosa*, *Lipochaeta connata*, *Santalum freycinetianum*, *Schiedea spergulina*, or *Panicum* spp.; and

(ii) Elevations between 44 and 409 m (145 and 1,340 ft).

FAMILY ASTERACEAE: ***Remya kauaiensis*** (NCN)

Kauai 11—*Remya kauaiensis*—a, Kauai 11—*Remya kauaiensis*—b, Kauai 11—*Remya kauaiensis*—c, Kauai 11—*Remya kauaiensis*—d, Kauai 11—*Remya kauaiensis*—e, and Kauai 12—*Remya kauaiensis*—f, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Remya kauaiensis* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep, north or northeast-facing slopes in *Acacia koa-Metrosideros* polymorpha lowland mesic forest and containing one or more of the following associated native plant species: *Chamaesyce* spp., *Claoxylon sandwicense*, *Dianella sandwicensis*, *Diospyros* spp., *Dodonaea viscosa*, *Hedyotis terminalis*, *Melicope* spp., *Nestegis sandwicensis*, *Pouteria sandwicensis*, *Psychotria* spp., *Schiedea* spp., or *Tetraplasandra* spp.; and

(ii) Elevations between 560 and 1,249 m (1,836 and 4,097 ft).

FAMILY ASTERACEAE: ***Remya montgomeryi*** (NCN)

Kauai 11—*Remya montgomeryi*—a, Kauai 11—*Remya montgomeryi*—b, and Kauai 11—*Remya montgomeryi*—c, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Remya montgomeryi* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep, north or northeast-facing slopes or cliffs in transitional wet or *Metrosideros polymorpha*-dominated mixed mesic forest and containing one or more of the following associated native plant species: *Artemisia australis*, *Bobea* spp., *Boehmeria grandis*, *Cheirodendron* spp., *Claoxylon sandwicense*, *Cyrtandra* spp., *Dubautia* spp., *Ilex anomala*, *Lepidium serra*, *Lysimachia* spp., *Myrsine linearifolia*, *Nototrichium* spp., *Pleomele aurea*, *Poa mannii*, *Sadleria* spp., *Scaevola* spp., *Stenogyne campanulata*, *Tetraplasandra* spp., or *Zanthoxylum dipetalum;* and

(ii) Elevations between 336 and 1,345 m (1,102 and 4,411 ft).

FAMILY ASTERACEAE: ***Wilkesia hobdyi*** (DWARF ILIAU)

Kauai 11—*Wilkesia hobdyi*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Wilkesia hobdyi* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Coastal dry cliffs or very dry ridges containing one or more of the following associated native plant species: *Artemisia australis*, *Dodonaea viscosa*, *Eragrostis variabilis*, *Hibiscus kokio* ssp. *saint johnianus*, *Lipochaeta connata*, *Lobelia niihauensis*, *Myoporum sandwicense*, *Peperomia blanda*, *Peperomia* spp., *Peperomia tetraphylla*, *Peucedanum sandwicense*, *Psydrax odorata*, *Sida fallax*, *Waltheria indica*, or *Wilkesia gymnoxiphium;* and

(ii) Elevations between 12 and 685 m (40 and 2,246 ft).

FAMILY CAMPANULACEAE: ***Brighamia insignis*** (OLULU)

Kauai 6—*Brighamia insignis*—a, Kauai 7—*Brighamia insignis*—b, and Kauai 11—*Brighamia insignis*—c identified in the legal descriptions in paragraph (a)(1) of this section, and Niihau 1—*Brighamia insignis*—a, identified in the legal description in paragraph (a)(2) of this section, constitute critical habitat for *Brighamia insignis* on Kauai and Niihau. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Rocky ledges with little soil or steep sea cliffs in lowland dry grasslands or shrublands with annual rainfall that is usually less than 170 cm (65

in) and containing one or more of the following native plant species: *Artemisia australis*, *Chamaesyce celastroides*, *Eragrostis variabilis*, *Heteropogon contortus*, *Hibiscus kokio*, *Hibiscus kokio* ssp. *saintjohnianus*, *Lepidium serra*, *Lipochaeta succulenta*, *Munroidendron racemosum*, or *Sida fallax;* and

(ii) Elevations between 0 and 748 m (0 and 2,453 ft).

FAMILY CAMPANULACEAE: ***Cyanea asarifolia*** (HAHA)

Kauai 4—*Cyanea asarifolia*—a, and Kauai 10—*Cyanea asarifolia*—b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Cyanea asarifolia* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Pockets of soil on sheer wet rock cliffs and waterfalls in lowland wet forests and containing one or more of the following native plant species: *Bidens* spp., *Dubautia plantaginea*, *Hedyotis centranthoides*, *Hedyotis elatior*, *Lysimachia filifolia*, *Machaerina angustifolia*, *Metrosideros polymorpha*, or *Panicum lineale;* and

(ii) Elevations between 182 and 1,212 m (597 and 3,976 ft).

FAMILY CAMPANULACEAE: ***Cyanea dolichopoda*** (HAHA)

Kauai 4–*Cyanea dolichopoda*–a, Kauai 10–*Cyanea dolichopoda*–b, Kauai 11–*Cyanea dolichopoda*–c, Kauai 18–*Cyanea dolichopoda*–d, and Kauai 19–*Cyanea dolichopoda*–e, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Cyanea dolichopoda* on Kauai. Within these units, the primary constituent elements of critical habitat are:

(i) Annual precipitation: Greater than 75 inches (190 centimeters).

(ii) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(iii) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(iv) Understory: Ferns, Bryophytes, *Coprosoma*, *Dubautia*, *Kadua*, *Peperomia*.

FAMILY CAMPANULACEAE: ***Cyanea eleeleensis*** (HAHA)

Kauai 10–*Cyanea eleeleensis*–a, Kauai 11–*Cyanea eleeleensis*–b, and Kauai 20–*Cyanea eleeleensis*–c, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Cyanea eleeleensis* on Kauai. Within these units, the primary constituent elements of critical habitat are:

(i) Elevation: Less than 3,000 ft (914 m).

(ii) Annual precipitation: Greater than 75 inches (190 centimeters).

(iii) Substrate: Clays, ashbeds, deep well-drained soils, lowland bogs.

(iv) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(v) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(vi) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

FAMILY CAMPANULACEAE: ***Cyanea kolekoleensis*** (HAHA)

Kauai 10–*Cyanea kolekoleensis*–a, Kauai 11–*Cyanea kolekoleensis*–b, and Kauai 20–*Cyanea kolekoleensis*–c, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Cyanea kolekoleensis* on Kauai. Within these units, the primary constituent elements of critical habitat are:

(i) Elevation: Less than 3,000 ft (914 m).

(ii) Annual precipitation: Greater than 75 inches (190 centimeters).

(iii) Substrate: Clays, ashbeds, deep well-drained soils, lowland bogs.

(iv) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(v) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(vi) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

FAMILY CAMPANULACEAE: ***Cyanea kuhihewa*** (HAHA)

Kauai 10–*Cyanea kuhihewa*–a, Kauai 11–*Cyanea kuhihewa*–b, and Kauai 20–*Cyanea kuhihewa*–c, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Cyanea kuhihewa* on Kauai. Within

these units, the primary constituent elements of critical habitat are:

(i) Elevation: Less than 3,000 ft (914 m).

(ii) Annual precipitation: Greater than 75 inches (190 centimeters).

(iii) Substrate: Clays, ashbeds, deep well-drained soils, lowland bogs.

(iv) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(v) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(vi) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

FAMILY CAMPANULACEAE: ***Cyanea recta*** (HAHA)

Kauai 4—*Cyanea recta*—a, Kauai 4—*Cyanea recta*—b, Kauai 11—*Cyanea recta*—c, and Kauai 11—*Cyanea recta*—d, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Cyanea recta* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Gulches or slopes in lowland wet or mesic *Metrosideros polymorpha* forest or shrubland and containing one or more of the following native plant species: *Antidesma platyphyllum*, *Cheirodendron platyphyllum*, *Cibotium* spp., *Dicranopteris linearis*, *Diplazium* spp., or *Psychotria* spp.; and

(ii) Elevations between 297 and 1,345 m (975 and 4,411 ft).

FAMILY CAMPANULACEAE: ***Cyanea remyi*** (HAHA)

Kauai 4—*Cyanea remyi*—a, Kauai 10—*Cyanea remyi*—b, Kauai 11—*Cyanea remyi*—c, and Kauai 11—*Cyanea remyi*—d, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Cyanea remyi* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Narrow drainages and wet stream banks in lowland wet forest or shrubland and containing one or more of the following native plant species: various grammitid and filmy ferns (Grammitidaceae and Hymenophyllaceae), *Adenophorus* spp., *Antidesma platyphyllum*, *Bidens* spp., *Broussaisia arguta*, *Cheirodendron* spp., *Cyrtandra* spp., *Diplazium sandwichianum*, *Eragrostis grandis*, *Freycinetia arborea*, *Hedyotis terminalis*, *Machaerina angustifolia*, *Metrosideros polymorpha*, *Perrottetia sandwicensis*, *Pipturus* spp., *Psychotria hexandra*, *Syzygium sandwicensis*, *Thelypteris* spp., *Touchardia latifolia*, or *Urera glabra;* and

(ii) Elevations between 219 and 1,089 m (719 and 3,571 ft).

FAMILY CAMPANULACEAE: ***Cyanea undulata*** (HAHA)

Kauai 10—*Cyanea undulata*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Cyanea undulata* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Narrow drainages and wet stream banks in *Metrosideros polymorpha* dry to montane wet forest or shrubland and containing one or more of the following associated native species: various grammitid and filmy ferns (Grammitidaceae and Hymenophyllaceae), *Adenophorus* spp., *Antidesma platyphyllum*, *Bidens* spp., *Broussaisia arguta*, *Cheirodendron* spp., *Diplazium sandwichianum*, *Dryopteris glabra*, *Eragrostis grandis*, *Freycinetia arborea*, *Machaerina angustifolia*, *Mariscus* spp., *Melicope feddei*, *Perrottetia sandwicensis*, *Pipturus* spp., *Psychotria hexandra*, *Psychotria mariniana*, *Sadleria pallida*, *Sadleria squarrosa*, *Smilax melastomifolia*, *Sphenomeris chinensis*, *Syzygium sandwicensis*, or *Thelypteris* spp.; and

(ii) Elevations between 375 and 1,046 m (1,231 and 3,430 ft).

FAMILY CAMPANULACEAE: ***Delissea rhytidosperma*** (NO COMMON NAME)

Kauai 7—*Delissea rhytidosperma*—a, Kauai 11—*Delissea rhytidosperma*—b, and Kauai 11—*Delissea rhytidosperma*—c, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Delissea rhytidosperma* on Kauai. Within these units, the currently known primary

constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Well-drained soils with medium or fine-textured subsoil in Diospyros diverse lowland mesic forests or diverse *Metrosideros polymorpha-Acacia koa* forests and containing one or more of the following native species: *Adenophorus* spp., *Cyanea* spp., *Dianella sandwicensis*, *Diospyros sandwicensis*, *Dodonaea viscosa*, *Doodia kunthiana*, *Euphorbia haeleeleana*, grammitid ferns (Grammitidaceae), *Hedyotis* spp., *Leptecophylla tameiameiae*, *Microlepia strigosa*, *Nestegis sandwicensis*, *Pisonia* spp., *Psychotria hobdyi*, or *Pteralyxia kauaiensis;* and

(ii) Elevations between 167 and 895 m (547 and 2,935 ft).

FAMILY CAMPANULACEAE: ***Delissea rivularis*** (OHA)

Kauai 11—*Delissea rivularis*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Delissea rivularis* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep slopes near streams in *Metrosideros polymorpha-Cheirodendron trigynum* montane wet or mesic forest and containing one or more of the following native plant species: *Boehmeria grandis*, *Broussaisia arguta*, *Carex* spp., *Coprosma* spp., *Diplazium sandwichianum*, *Dubautia knudsenii*, *Hedyotis foggiana*, *Ilex anomala*, *Machaerina angustifolia*, *Melicope anisata*, *Melicope clusiifolia*, *Pipturus* spp., *Psychotria hexandra*, or *Sadleria* spp.; and

(ii) Elevations between 823 and 1,307 m (2,701 and 4,286 ft).

FAMILY CAMPANULACEAE: ***Delissea undulata*** (NCN)

Kauai 11—*Delissea undulata*—a, and Kauai 11—*Delissea undulata*—b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Delissea undulata* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Dry or open *Acacia koa-Metrosideros polymorpha* mesic forests or *Alphitonia ponderosa* montane forest and containing one or more of the following native plant species: *Diospyros sandwicensis*, *Dodonaea viscosa*, *Doodia kunthiana*, *Eragrostis variabilis*, *Euphorbia haeleeleana*, *Kokia kauaiensis*, *Microlepia strigosa*, *Panicum* spp., *Pleomele aurea*, *Psychotria mariniana*, *Psychotria greenwelliae*, or *Santalum freycinetianum*; and

(ii) Elevations between 139 and 1,006 m (456 and 3,299 ft).

FAMILY CAMPANULACEAE: ***Lobelia niihauensis*** (NCN)

Kauai 11—*Lobelia niihauensis*—a, and Kauai 11—*Lobelia niihauensis*—b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Lobelia niihauensis* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Exposed mesic mixed shrubland or coastal dry cliffs and containing one or more of the following associated native plant species: *Artemisia australis*, *Bidens sandvicensis*, *Chamaesyce celastroides*, *Charpentiera* spp., *Eragrostis variabilis*, *Hibiscus kokio* ssp. *saint-johnianus*, *Lipochaeta connata* var. *acris*, *Lythrum* spp., *Nototrichium* spp., *Plectranthus parviflorus*, *Schiedea apokremnos*, or *Wilkesia hobdyi*; and

(ii) Elevations between 36 and 888 m (117 and 2,911 ft).

FAMILY CARYOPHYLLACEAE: ***Alsinidendron lychnoides*** (KUAWAWAENOHU)

Kauai 11—*Alsinidendron lychnoides*—a, Kauai 11—*Alsinidendron lychnoides*—b, and Kauai 11—*Alsinidendron lychnoides*—c, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Alsinidendron lychnoides* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep riparian clay or silty soil banks in montane wet forests dominated by *Metrosideros polymorpha* and *Cheirodendron* spp., or by *Metrosideros polymorpha* and *Dicranopteris linearis* and containing one or more of the following native plant species: *Asplenium* spp., *Astelia* spp., *Broussaisia arguta*, *Carex* spp., *Cyrtandra* spp., *Diplazium sandwichianum*, *Elaphoglossum* spp., *Hedyotis terminalis*, *Machaerina* spp., *Peperomia* spp., or *Vaccinium* spp.; and

(ii) Elevations between 828 and 1,344 m (2,715 and 4,408 ft).

FAMILY CARYOPHYLLACEAE: ***Alsinidendron viscosum*** (NCN)

Kauai 11—*Alsinidendron viscosum*—a, Kauai 11—*Alsinidendron viscosum*—b, Kauai 11—*Alsinidendron viscosum*—c, and Kauai 11—*Alsinidendron viscosum*—d, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Alsinidendron viscosum* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep slopes in *Acacia koa-Metrosideros polymorpha* lowland and montane mesic forest and containing one or more of the following native plant species: *Alyxia oliviformis*, *Asplenium polyodon*, *Bidens cosmoides*, *Bobea* spp., *Carex meyenii*, *Carex wahuensis*, *Coprosma* spp., *Dianella sandwicensis*, *Dodonaea viscosa*, *Doodia kunthiana*, *Dryopteris glabra*, *Dryopteris unidentata*, *Dryopteris wallichiana*, *Dubautia laevigata*, *Gahnia* spp., *Ilex anomala*, *Melicope* spp., *Panicum nephelophilum*, *Pleomele aurea*, *Psychotria* spp., *Pteridium aquilinum* var. *decompositum*, *Schiedea stellarioides*, or *Vaccinium dentatum*; and

(ii) Elevations between 754 and 1,224 m (2,474 and 4,016 ft).

FAMILY CARYOPHYLLACEAE: ***Schiedea apokremnos*** (MAOLIOLI)

Kauai 11—*Schiedea apokremnos*—a, Kauai 11—*Schiedea apokremnos*—b, and Kauai 11—*Schiedea apokremnos*—c, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Schiedea apokremnos* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Crevices of near-vertical basalt coastal cliff faces in sparse dry coastal cliff shrub vegetation and containing one or more of the following associated native plant species: *Artemisia australis*, *Bidens* spp., *Carex meyenii*, *Chamaesyce celastroides*, *Eragrostis variabilis*, *Lepidium serra*, *Lipochaeta connata*, *Lobelia niihauensis*, *Myoporum sandwicense*, *Peperomia* spp., *Pleomele aurea*, *Psydrax odorata*, or *Wilkesia* spp.; and

(ii) Elevations between 11 and 538 m (35 and 1,765 ft).

FAMILY CARYOPHYLLACEAE: ***Schiedea attenuata*** (NCN)

Kauai 11–*Schiedea attenuata*–a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Schiedea attenuata* on Kauai. Within this unit, the primary constituent elements of critical habitat are:

(i) Annual precipitation: Less than 75 inches (190 centimeters).

(ii) Substrate: Greater than 65 degree slope, rocky talus.

(iii) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(iv) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

FAMILY CARYOPHYLLACEAE: ***Schiedea helleri*** (NCN)

Kauai 11—*Schiedea helleri*—a, Kauai 11—S*chiedea helleri*—b, and Kauai 11—*Schiedea helleri*—c, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Schiedea helleri* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Ridges and steep cliffs in closed *Metrosideros polymorpha-Dicranopteris linearis* montane wet forest, *M. polymorpha-Cheirodendron* spp. montane wet forest, or *Acacia koa-M. polymorpha* montane mesic forest and containing one or more of the following associated native plant species: *Broussaisia arguta*, *Cheirodendron* spp., *Cibotium* spp., *Cyanea* spp., *Dianella sandwicensis*,

Dubautia spp., *Elaeocarpus bifidus*, *Hedyotis terminalis*, *Melicope* spp., *Myrsine* spp., *Poa sandvicensis*, *Scaevola procera*, *Syzygium sandwicensis*, or *Viola wailenalenae*; and

(ii) Elevations between 664 and 1,361 m (2,178 and 4,464 ft).

FAMILY CARYOPHYLLACEAE: ***Schiedea kauaiensis*** (NCN)

Kauai 11—*Schiedea kauaiensis*—a, Kauai 11—*Schiedea kauaiensis*—b, Kauai 11—*Schiedea kauaiensis*—c, and Kauai 11—*Schiedea kauaiensis—d*, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Schiedea kauaiensis* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep slopes in diverse mesic to wet *Acacia koa-Metrosideros polymorpha* forest and containing one or more of the following associated plant species: *Alphitonia ponderosa*, *Cryptocarya mannii*, *Diospyros* spp., *Dodonaea viscosa*, *Euphorbia haeleeleana*, *Exocarpos luteolus*, *Leptocophylla tameiameiae*, *Microlepia strigosa*, *Nestegis sandwicensis*, *Peucedanum sandwicense*, *Pisonia* spp., *Psychotria* spp., or *Psydrax odorata*; and

(ii) Elevations between 117 and 1,290 m (385 and 4,232 ft).

FAMILY CARYOPHYLLACEAE: ***Schiedea membranacea*** (NCN)

Kauai 11—*Schiedea membranacea*—a, Kauai 11—*Schiedea membranacea*—b, Kauai 11—*Schiedea membranacea*—c, and Kauai 11—*Schiedea membranacea*—d, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Schiedea membranacea* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Cliffs or cliff bases in mesic or wet habitats in lowland or montane shrubland or forest communities dominated by *Acacia koa*, *Pipturus* spp. and *Metrosideros polymorpha* or Urticaceae shrubland on talus slopes and containing one or more of the following associated native plant species: *Alphitonia ponderosa*, *Alyxia oliviformis*, *Asplenium* spp., *Athyrium sandwicensis*, *Bobea brevipes*, *Boehmeria grandis*, *Cyrtandra* spp., *Diplazium sandwichianum*, *Dodonaea viscosa*, *Eragrostis variabilis*, *Hedyotis terminalis*, *Hibiscus waimeae*, *Joinvillea ascendens* ssp. *ascendens*, *Labordia helleri*, *Lepidium serra*, *Lysimachia kalalauensis*, *Machaerina angustifolia*, *Mariscus pennatiformis*, *Melicope* spp., *Myrsine* spp., *Perrottetia sandwicensis*, *Pisonia* spp., *Pleomele aurea*, *Poa mannii*, *Poa sandvicensis*, *Pouteria sandwicensis*, *Psychotria* spp., *Psydrax odorata*, *Remya kauaiensis*, *Sadleria cyatheoides*, *Scaevola procera*, *Thelypteris cyatheoides*, *Thelypteris sandwicensis*, or *Touchardia latifolia*; and

(ii) Elevations between 423 and 1,259 m (1,386 and 4,131 ft).

FAMILY CARYOPHYLLACEAE: ***Schiedea nuttallii*** (NCN)

Kauai 7—*Schiedea nuttallii*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Schiedea nuttallii* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Cliffs in lowland diverse mesic forest dominated by *Metrosideros polymorpha* and containing one or more of the following associated native plant species: *Antidesma platyphyllum* var. *hillebrandii*, *Bidens valida*, *Chamaesyce celastroides*, *Eragrostis variabilis*, *Hedyotis acuminata*, *Hedyotis fluviatilis*, *Heteropogon contortus*, *Lepidium* spp., *Lobelia niihauensis*, *Psychotria* spp., *Perrottetia sandwicensis*, or *Pisonia* spp.; and

(ii) Elevations between 127 and 702 m (418 and 2,303 ft).

FAMILY CARYOPHYLLACEAE: ***Schiedea spergulina*** VAR. ***leiopoda*** (NCN)

Kauai 9—*Schiedea spergulina* var. *leiopoda*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Schiedea spergulina* var. *leiopoda* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not

limited to, the habitat components provided by:

(i) Bare rock outcrops or sparsely vegetated portions of rocky cliff faces or cliff bases in diverse lowland dry to mesic forests and containing one or more of the following native plant species: *Acacia koa*, *Artemisia australis*, *Bidens sandvicensis*, *Carex meyenii*, *Chamaesyce celastroides*, *Dianella sandwicensis*, *Doryopteris* spp., *Eragrostis variabilis*, *Erythrina sandwicensis*, *Gahnia* spp., *Heliotropium* spp., *Lepidium serra*, *Lipochaeta connata*, *Microlepia strigosa*, *Nestegis sandwicensis*, *Nototrichium sandwicense*, *Panicum lineale*, *Peucedanum sandwicense*, or *Wilkesia gymnoxiphium*; and

(ii) Elevations between 21 and 90 m (69 and 294 ft).

FAMILY CARYOPHYLLACEAE: ***Schiedea spergulina*** VAR. ***spergulina*** (NCN)

Kauai 11—*Schiedea spergulina* var. *spergulina*—a, Kauai 11—*Schiedea spergulina* var. *spergulina*—b, and Kauai 13—*Schiedea spergulina* var. *spergulina*—c, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Schiedea spergulina* var. *spergulina* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Bare rock outcrops or sparsely vegetated portions of rocky cliff faces or cliff bases in diverse lowland dry to mesic forests and containing one or more of the following associated plant species: *Acacia koa*, *Artemisia australis*, *Bidens sandvicensis*, *Carex meyenii*, *Chamaesyce celastroides*, *Dianella sandwicensis*, *Doryopteris* spp., *Eragrostis variabilis*, *Erythrina sandwicensis*, *Gahnia* spp., *Heliotropium* spp., *Lepidium serra*, *Lipochaeta connata*, *Microlepia strigosa*, *Nestegis sandwicensis*, *Nototrichium sandwicense*, *Panicum lineale*, *Peucedanum sandwicense*, or *Wilkesia gymnoxiphium*; and

(ii) Elevations between 145 and 829 m (474 and 2,718 ft).

FAMILY CARYOPHYLLACEAE: ***Schiedea stellarioides*** (LAULIHILIHI (=MAOLIOLI))

Kauai 11—*Schiedea stellarioides*—a, and Kauai 11—*Schiedea stellarioides*—b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Schiedea stellarioides* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep slopes in closed *Acacia koa-Metrosideros polymorpha* lowland or montane mesic forest or shrubland and containing one or more of the following native plant species: *Alsinidendron viscosum*, *Artemisia australis*, *Bidens cosmoides*, *Chenopodium* spp., *Dianella sandwicensis*, *Dodonaea viscosa*, *Mariscus* spp., *Melicope* spp., *Nototrichium sandwicense*, *Pipturus* spp., *Leptecophylla tameiameiae*, *Syzygium sandwicensis*, or *Zanthoxylum dipetalum*; and

(ii) Elevations between 376 and 1,251 m (1,135 and 4,102 ft).

FAMILY CONVOLVULACEAE: ***Bonamia menziesii*** (NCN)

Kauai 10—*Bonamia menziesii*—a, and Kauai 11—*Bonamia menziesii*—b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Bonamia menziesii* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Dry, mesic, or wet *Metrosideros polymorpha-Cheirodendron-Dicranopteris* forest and containing one or more of the following native plant species: *Antidesma platyphyllum*, *Alphitonia ponderosa*, *Acacia koa*, *Cyanea* spp., *Cyrtandra pickeringii*, *Cyrtandra limahuliensis*, *Dianella sandwicensis*, *Diospyros sandwicensis*, *Dodonaea viscosa*, *Dubautia knudsenii*, *Hedyotis terminalis*, *Isodendrion longifolium*, *Labordia hirtella*, *Melicope anisata*, *Melicope barbigera*, *Myoporum sandwicense*, *Nestegis sandwicensis*, *Pisonia* spp., *Pittosporum* spp., *Pouteria sandwicensis*, *Psychotria mariniana*, *Psychotria hexandra*, *Psydrax odorata*, *Sapindus oahuensis*, *Scaevola procera*, or *Syzygium sandwicensis*; and

(ii) Elevations between 566 and 1,127 m (1,858 and 3,695 ft).

FAMILY CYPERACEAE: ***Cyperus trachysanthos*** (PUUKAA)

Kauai 11—*Cyperus trachysanthos*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Cyperus trachysanthos* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Wet sites (mud flats, wet clay soil, or wet cliff seeps) on seepy flats or talus slopes and containing the native plant species *Taliparitі tiliaceum;* and

(ii) Elevations between 0 and 235 m (0 and 771 ft).

FAMILY CYPERACEAE: ***Cyperus pennatiformis*** (NCN)

Kauai 11—*Cyperus pennatiformis*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Cyperus pennatiformis* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Open sites in *Metrosideros polymorpha-Acacia koa* mixed mesic forest and containing one or more of the following associated native plant species: *Alsinidendron viscosum*, *Antidesma platyphyllum* var. *hillebrandii*, *Carex alligata*, *Cyperus laevigatus*, *Dianella sandwicensis*, *Diospyros hillebrandii*, *Diospyros sandwicensis*, *Dodonaea viscosa*, *Leptecophylla tameiameiae*, *Myrsine linearifolia*, *Nestegis sandwicensis*, *Panicum nephelophilum*, *Poa sandvicensis*, *Psydrax odorata*, *Schiedea stellarioides*, or endemic ferns; and

(ii) Elevations between 605 and 1,065 m (1,983 and 3,493 ft).

FAMILY EUPHORBIACEAE: ***Chamaesyce eleanoriae*** (AKOKO)

Kauai 7–*Chamaesyce eleanoriae*–a, Kauai 11–*Chamaesyce eleanoriae*–b, and Kauai 11–*Chamaesyce eleanoriae*–c, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Chamaesyce eleanoriae* on Kauai.

(i) In units Kauai 7–*Chamaesyce eleanoriae*–a and Kauai 11–*Chamaesyce eleanoriae*–b, the primary constituent elements of critical habitat are:

(A) Elevation: Less than 3,000 ft (914 m).

(B) Annual precipitation: 50 to 75 inches (127 to 190 centimeters).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In unit Kauai 11–*Chamaesyce eleanoriae*–c, the primary constituent elements of critical habitat are:

(A) Annual precipitation: Less than 75 inches (190 centimeters).

(B) Substrate: Greater than 65 degree slope, rocky talus.

(C) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(D) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

FAMILY EUPHORBIACEAE: ***Chamaesyce halemanui*** (NCN)

Kauai 11—*Chamaesyce halemanui*—a, Kauai 11—*Chamaesyce halemanui*—b, and Kauai 11—*Chamaesyce halemanui*—c, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Chamaesyce halemanui* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep slopes of gulches in mesic *Acacia koa* forests and containing one or more of the following native plant species: *Asplenium* spp., *Alphitonia ponderosa*, *Antidesma platyphyllum*, *Bobea brevipes*, *Carex meyenii*, *Carex wahuensis*, *Cheirodendron trigynum*, *Coprosma* spp., *Diospyros sandwicensis*, *Dodonaea viscosa*, *Elaeocarpus bifidus*, *Hedyotis terminalis*, *Kokia kauaiensis*, *Leptecophylla tameiameiae*, *Microlepia strigosa*, *Melicope haupuensis*, *Metrosideros polymorpha*, *Panicum nephelophilum*, *Pisonia* spp., *Pittosporum spp.*, *Pleomele aurea*, *Psychotria greenwelliae*, *Psychotria mariniana*, *Pouteria sandwicensis*, or *Santalum freycinetianum;* and

(ii) Elevations between 556 and 1,249 m (1,825 and 4,097 ft).

FAMILY EUPHORBIACEAE: ***Chamaesyce remyi*** VAR. *kauaiensis* (AKOKO)

Kauai 4–*Chamaesyce remyi* var. *kauaiensis*–a, Kauai 10–*Chamaesyce remyi* var. *kauaiensis*–b, Kauai 10–*Chamaesyce remyi* var. *kauaiensis*–c, Kauai 11–*Chamaesyce remyi* var. *kauaiensis*–d, Kauai 11–*Chamaesyce remyi* var. *kauaiensis*–e, Kauai 18–*Chamaesyce remyi* var. *kauaiensis*–f, Kauai 19–*Chamaesyce remyi* var. *kauaiensis*–g, and Kauai 20–*Chamaesyce remyi* var. *kauaiensis*–h, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Chamaesyce remyi* var. *kauaiensis* on Kauai.

(i) In units Kauai 10–*Chamaesyce remyi* var. *kauaiensis*–b, Kauai 11–*Chamaesyce remyi* var. *kauaiensis*–d, and Kauai 20–*Chamaesyce remyi* var. *kauaiensis*–h, the primary constituent elements of critical habitat are:

(A) Elevation: Less than 3,000 ft (914 m).

(B) Annual precipitation: Greater than 75 inches (190 centimeters).

(C) Substrate: Clays, ashbeds, deep well-drained soils, lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In units Kauai 4–*Chamaesyce remyi* var. *kauaiensis*–a, Kauai 10–*Chamaesyce remyi* var. *kauaiensis*–c, Kauai 11–*Chamaesyce remyi* var. *kauaiensis*–e, Kauai 18–*Chamaesyce remyi* var. *kauaiensis*–f, and Kauai 19–*Chamaesyce remyi* var. *kauaiensis*–g, the primary constituent elements of critical habitat are:

(A) Annual precipitation: Greater than 75 inches (190 centimeters).

(B) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(C) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(D) Understory: Ferns, Bryophytes, *Coprosoma*, *Dubautia*, *Kadua*, *Peperomia*.

FAMILY EUPHORBIACEAE: ***Chamaesyce remyi*** VAR. *remyi* (AKOKO)

Kauai 4–*Chamaesyce remyi* var. *remyi*–a, Kauai 7–*Chamaesyce remyi* var. *remyi*–b, Kauai 10–*Chamaesyce remyi* var. *remyi*–c, Kauai 10–*Chamaesyce remyi* var. *remyi*–d, Kauai 10–*Chamaesyce remyi* var. *remyi*–e, Kauai 11–*Chamaesyce remyi* var. *remyi*–f, Kauai 11–*Chamaesyce remyi* var. *remyi*–g, Kauai 11–*Chamaesyce remyi* var. *remyi*–h, Kauai 11–*Chamaesyce remyi* var. *remyi*–i, Kauai 11–*Chamaesyce remyi* var. *remyi*–j, Kauai 18–*Chamaesyce remyi* var. *remyi*–k, Kauai 19–*Chamaesyce remyi* var. *remyi*–l, Kauai 20–*Chamaesyce remyi* var. *remyi*–m, Kauai 21–*Chamaesyce remyi* var. *remyi*–n, Kauai 22–*Chamaesyce remyi* var. *remyi*–o, Kauai 23–*Chamaesyce remyi* var. *remyi*–p, Kauai 24–*Chamaesyce remyi* var. *remyi*–q, and Kauai 25–*Chamaesyce remyi* var. *remyi*–r, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Chamaesyce remyi* var. *remyi* on Kauai.

(i) In units Kauai 7–*Chamaesyce remyi* var. *remyi*–b and Kauai 11–*Chamaesyce remyi* var. *remyi*–g, the primary constituent elements of critical habitat are:

(A) Elevation: Less than 3,000 ft (914 m).

(B) Annual precipitation: 50 to 75 inches (127 to 190 centimeters).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Kauai 10–*Chamaesyce remyi* var. *remyi*–d, Kauai 11–*Chamaesyce remyi* var. *remyi*–h, and Kauai 20–*Chamaesyce remyi* var. *remyi*–m, the primary constituent elements of critical habitat are:

(A) Elevation: Less than 3,000 ft (914 m).

(B) Annual precipitation: Greater than 75 inches (190 centimeters).

(C) Substrate: Clays, ashbeds, deep well-drained soils, lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(iii) In units Kauai 11–*Chamaesyce remyi* var. *remyi*–j, Kauai 21–*Chamaesyce remyi* var. *remyi*–n, and Kauai 22–*Chamaesyce remyi* var. *remyi*–o, the primary constituent elements of critical habitat are:

(A) Elevation: 3,000 to 5,243 ft (914 to 1,598 m).

(B) Annual precipitation: 50 to 75 inches (127 to 190 centimeters).

(C) Substrate: Weathered aa lava flows, rocky mucks, thin silty loams, deep volcanic ash soils.

(D) Canopy: *Acacia*, *Metrosideros*, *Psychotria*, *Tetraplasandra*, *Zanthoxylum*.

(E) Subcanopy: *Cheirodendron*, *Coprosma*, *Kadua*, *Ilex*, *Myoporum*, *Myrsine*.

(F) Understory: *Bidens*, *Dryopteris*, *Leptecophylla*, *Poa*, *Scaevola*, *Sophora*.

(iv) In units Kauai 10–*Chamaesyce remyi* var. *remyi*–c, Kauai 11–*Chamaesyce remyi* var. *remyi*–f, Kauai 23–*Chamaesyce remyi* var. *remyi*–p, Kauai 24–*Chamaesyce remyi* var. *remyi*–q, and Kauai 25–*Chamaesyce remyi* var. *remyi*–r, the primary constituent elements of critical habitat are:

(A) Elevation: 3,000 to 5,243 ft (914 to 1,598 m).

(B) Annual precipitation: Greater than 75 inches (190 centimeters).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(v) In units Kauai 4–*Chamaesyce remyi* var. *remyi*–a, Kauai 10–*Chamaesyce remyi* var. *remyi*–e, Kauai 11–*Chamaesyce remyi* var. *remyi*–i, Kauai 18–*Chamaesyce remyi* var. *remyi*–k, and Kauai 19–*Chamaesyce remyi* var. *remyi*–l, the primary constituent elements of critical habitat are:

(A) Annual precipitation: Greater than 75 inches (190 centimeters).

(B) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(C) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(D) Understory: Ferns, Bryophytes, *Coprosoma*, *Dubautia*, *Kadua*, *Peperomia*.

FAMILY EUPHORBIACEAE: ***Euphorbia haeleeleana*** (AKOKO)

Kauai 11—*Euphorbia haeleeleana*—a, Kauai 11—*Euphorbia haeleeleana*—b, and Kauai 11—*Euphorbia haeleeleana*—c, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Euphorbia haeleeleana* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Lowland mixed mesic or dry *Diospyros* forest that is often codominated by *Metrosideros polymorpha* and *Alphitonia ponderosa* and containing one or more of the following native plant species: *Acacia koaia*, *Antidesma platyphyllum*, *Carex meyenii*, *Carex wahuensis*, *Claoxylon sandwicense*, *Diplazium sandwichianum*, *Dodonaea viscosa*, *Erythrina sandwicensis*, *Kokia kauaiensis*, *Pisonia sandwicensis*, *Pleomele aurea*, *Pouteria sandwicensis*, *Psychotria greenwelliae*, *Psychotria mariniana*, *Pteralyxia kauaiensis*, *Rauvolfia sandwicensis*, *Sapindus oahuensis*, *Tetraplasandra kavaiensis*, or *Xylosma* spp.; and

(ii) Elevations between 284 and 1,179 m (931 and 3,866 ft).

FAMILY EUPHORBIACEAE: ***Flueggea neowawraea*** (MEHAMEHAME)

Kauai 11—*Flueggea neowawraea*—a, Kauai 11—*Flueggea neowawraea*—b, Kauai 11—*Flueggea neowawraea*—c, Kauai 11—*Flueggea neowawraea*—d, Kauai 11—*Flueggea neowawraea*—e, and Kauai 11—*Flueggea neowawraea*—f, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Flueggea neowawraea* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Dry or mesic forests containing one or more of the following native plant species: *Alectryon macrococcus*, *Antidesma platyphyllum*, *Bidens*

sandvicensis, *Bobea timonioides*, *Caesalpinia kavaiensis*, *Charpentiera* spp., *Diospyros* spp., *Diplazium sandwichianum*, *Freycinetia arborea*, *Hibiscus* spp., *Isodendrion laurifolium*, *Kokia kauaiensis*, *Melicope* spp., *Metrosideros polymorpha*, *Munroidendron racemosum*, *Myrsine lanaiensis*, *Nesoluma polynesicum*, *Nestegis sandwicensis*, *Pittosporum* spp., *Pouteria sandwicensis*, *Pritchardia minor*, *Psychotria* spp., *Psydrax odorata*, *Pteralyxia kauaiensis*, *Rauvolfia sandwicensis*, *Streblus pendulinus*, *Tetraplasandra* spp., *Xylosma crenatum*, or *Xylosma hawaiiense;* and

(ii) Elevations between 210 and 1,178 m (689 and 3,865 ft).

FAMILY FABACEAE: ***Canavalia napaliensis*** (AWIKIWIKI)

Kauai 7–*Canavalia napaliensis*–a and Kauai 11–*Canavalia napaliensis*–b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Canavalia napaliensis* on Kauai. Within these units, the primary constituent elements of critical habitat are:

(i) Elevation: Less than 3,000 ft (914 m).

(ii) Annual precipitation: 50 to 75 inches (127 to 190 centimeters).

(iii) Substrate: Shallow soils, little to no herbaceous layer.

(iv) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(v) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(vi) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

FAMILY FABACEAE: ***Sesbania tomentosa*** (OHAI)

Kauai 8—*Sesbania tomentosa*—a, and Kauai 14—*Sesbania tomentosa*—b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Sesbania tomentosa* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Sandy beaches, dunes, or pond margins in coastal dry shrublands or mixed coastal dry cliffs, and containing one or more of the following associated native plant species: *Chamaesyce celastroides*, *Cuscuta sandwichiana*, *Dodonaea viscosa*, *Heteropogon contortus*, *Myoporum sandwicense*, *Nama sandwicensis*, *Scaevola sericea*, *Sida fallax*, *Sporobolus virginicus*, *Vitex rotundifolia*, or *Waltheria indica;* and

(ii) Elevations between 0 and 130 m (0 and 427 ft).

FAMILY FLACOURTIACEAE: ***Xylosma crenatum*** (NCN)

Kauai 11—*Xylosma crenatum*—a, and Kauai 12—*Xylosma crenatum*—b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Xylosma crenatum* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Diverse *Acacia koa-Metrosideros polymorpha* montane mesic or wet forest, or *Metrosideros polymorpha-Dicranopteris linearis* montane wet forest, and containing one or more of the following associated native plant species: *Athyrium sandwicensis*, *Cheirodendron* spp., *Claoxylon sandwicense*, *Coprosma* spp., *Cyanea* spp., *Diplazium sandwichianum*, *Dubautia knudsenii*, *Hedyotis* spp., *Ilex anomala*, *Lobelia yuccoides*, *Myrsine* spp., *Nestegis sandwicensis*, *Perrottetia sandwicensis*, *Pleomele aurea*, *Poa sandvicensis*, *Pouteria sandwicensis*, *Psychotria* spp., *Scaevola procera*, *Streblus pendulinus*, *Tetraplasandra* spp., *Touchardia latifolia*, or *Zanthoxylum dipetalum;* and

(ii) Elevations between 941 and 1,284 m (3,086 and 4,212 ft).

FAMILY GENTIANACEAE: ***Schenkia sebaeoides*** (AWIWI)

Kauai 11—*Schenkia sebaeoides*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Schenkia sebaeoides* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Volcanic or clay soils or on cliffs in arid coastal areas and containing

one or more of the following native plant species: *Artemisia* spp., *Bidens* spp., *Chamaesyce celastroides*, *Cyperus phleoides*, *Dodonaea viscosa*, *Fimbristylis cymosa*, *Heteropogon contortus*, *Jacquemontia ovalifolia*, *Lipochaeta* spp., *Lycium sandwicense*, *Lysimachia mauritiana*, *Melanthera integrifolia*, *Panicum fauriei*, *Panicum torridum*, *Scaevola sericea*, *Sida fallax*, or *Wikstroemia uva-ursi;* and

(ii) Elevations between 0 and 147 m (0 and 483 ft).

FAMILY GERANIACEAE: ***Geranium kauaiense*** (NOHOANU)

Kauai 10–*Geranium kauaiense*–a, Kauai 11–*Geranium kauaiense*–b, Kauai 23–*Geranium kauaiense*–c, Kauai 24–*Geranium kauaiense*–d, and Kauai 25–*Geranium kauaiense*–e, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Geranium kauaiense* on Kauai. Within these units, the primary constituent elements of critical habitat are:

(i) Elevation: 3,000 to 5,243 ft (914 to 1,598 m).

(ii) Annual precipitation: Greater than 75 inches (190 centimeters).

(iii) Substrate: Well-developed soils, montane bogs.

(iv) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(v) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(vi) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(vii) Bogs.

FAMILY GESNERIACEAE: ***Cyrtandra cyaneoides*** (MAPELE)

Kauai 4—*Cyrtandra cyaneoides*—a, Kauai 11—*Cyrtandra cyaneoides*—b, and Kauai 11—*Cyrtandra cyaneoides*—c, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Cyrtandra cyaneoides* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Talus rubble on steep slopes or cliffs with water seeps running below, near streams or waterfalls in lowland or montane wet forest or shrubland dominated by *Metrosideros polymorpha* or a mixture of *Metrosideros polymorpha*, *Cheirodendron* spp., and *Dicranopteris linearis* and containing one or more of the following native species: *Bidens* spp., *Boehmeria grandis*, *Coprosma* spp., *Cyanea* spp., *Cyrtandra kauaiensis*, *Cyrtandra limahuliensis*, *Cyrtandra longifolia*, *Diplazium sandwichianum*, *Freycinetia arborea*, *Gunnera kauaiensis*, *Hedyotis terminalis*, *Hedyotis tryblium*, *Machaerina* spp., *Melicope clusiifolia*, *Melicope puberula*, *Perrottetia sandwicensis*, *Pipturus* spp., *Psychotria* spp., *Pritchardia* spp., or *Stenogyne purpurea;* and

(ii) Elevations between 157 and 1,407 m (514 and 4,614 ft).

FAMILY GESNERIACEAE: ***Cyrtandra limahuliensis*** (HAIWALE)

Kauai 4—*Cyrtandra limahuliensis*—a, Kauai 4—*Cyrtandra limahuliensis*—b, Kauai 10—*Cyrtandra limahuliensis*—c, Kauai 11—*Cyrtandra limahuliensis*—d, and Kauai 11—*Cyrtandra limahuliensis*—e, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Cyrtandra limahuliensis* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Stream banks in lowland wet forests containing one or more of the following native plant species: *Antidesma platyphyllum*, *Bidens* spp., *Boehmeria grandis*, *Charpentiera* spp., *Cibotium glaucum*, *Cyanea* spp., *Cyrtandra kealiae*, *Dicranopteris linearis*, *Diplazium sandwichianum*, *Dubautia* spp., *Eugenia reinwardtiana*, *Gunnera kauaiensis*, *Hedyotis terminalis*, *Hibiscus waimeae*, *Metrosideros polymorpha*, *Perrottetia sandwicensis*, *Pisonia* spp., *Pipturus* spp., *Pritchardia* spp., *Psychotria* spp., or *Touchardia latifolia;* and

(ii) Elevations between 208 and 1,591 m (681 and 5,217 ft).

FAMILY GESNERIACEAE: ***Cyrtandra oenobarba*** (HAIWALE)

Kauai 4–*Cyrtandra oenobarba*–a, Kauai 10–*Cyrtandra oenobarba*–b, Kauai 10–*Cyrtandra oenobarba*–c, Kauai 11–*Cyrtandra oenobarba*–d, Kauai 11–*Cyrtandra oenobarba*–e, Kauai 18–*Cyrtandra oenobarba*–f, Kauai 19–*Cyrtandra oenobarba*–g, and Kauai 20–

Cyrtandra oenobarba–h, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Cyrtandra oenobarba* on Kauai.

(i) In units Kauai 10–*Cyrtandra oenobarba*–b, Kauai 11–*Cyrtandra oenobarba*–d, and Kauai 20–*Cyrtandra oenobarba*–h, the primary constituent elements of critical habitat are:

(A) Elevation: Less than 3,000 ft (914 m).

(B) Annual precipitation: Greater than 75 inches (190 centimeters).

(C) Substrate: Clays, ashbeds, deep well-drained soils, lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In units Kauai 4–*Cyrtandra oenobarba*–a, Kauai 10–*Cyrtandra oenobarba*–c, Kauai 11–*Cyrtandra oenobarba*–e, Kauai 18–*Cyrtandra oenobarba*–f, and Kauai 19–*Cyrtandra oenobarba*–g, the primary constituent elements of critical habitat are:

(A) Annual precipitation: Greater than 75 inches (190 centimeters).

(B) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(C) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(D) Understory: Ferns, Bryophytes, *Coprosoma*, *Dubautia*, *Kadua*, *Peperomia*.

FAMILY GESNERIACEAE: ***Cyrtandra paliku*** (HAIWALE)

Kauai 4–*Cyrtandra paliku*–a, Kauai 10–*Cyrtandra paliku*–b, Kauai 11–*Cyrtandra paliku*–c, Kauai 18–*Cyrtandra paliku*–d, and Kauai 19–*Cyrtandra paliku*–e, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Cyrtandra paliku* on Kauai. Within these units, the primary constituent elements of critical habitat are:

(i) Annual precipitation: Greater than 75 inches (190 centimeters).

(ii) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(iii) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(iv) Understory: Ferns, Bryophytes, *Coprosoma*, *Dubautia*, *Kadua*, *Peperomia*.

FAMILY LAMIACEAE: ***Phyllostegia knudsenii*** (NCN)

Kauai 11—*Phyllostegia knudsenii*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Phyllostegia knudsenii* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) *Metrosideros polymorpha* lowland mesic or wet forest containing one or more of the following associated native plant species: *Bobea timonioides*, *Claoxylon sandwicense*, *Cryptocarya mannii*, *Cyrtandra kauaiensis*, *Cyrtandra paludosa*, *Diospyros sandwicensis*, *Elaeocarpus bifidus*, *Ilex anomala*, *Myrsine linearifolia*, *Perrottetia sandwicensis*, *Pittosporum kauaiense*, *Pouteria sandwicensis*, *Pritchardia minor*, *Selaginella arbuscula*, *Tetraplasandra oahuensis*, or *Zanthoxylum dipetalum;* and

(ii) Elevations between 401 and 1,059 m (1,315 and 3,475 ft).

FAMILY LAMIACEAE: ***Phyllostegia renovans*** (NCN)

Kauai 10–*Phyllostegia renovans*–a, Kauai 10–*Phyllostegia renovans*–b, Kauai 11–*Phyllostegia renovans*–c, Kauai 11–*Phyllostegia renovans*–d, Kauai 20–*Phyllostegia renovans*–e, Kauai 23–*Phyllostegia renovans*–f, Kauai 24–*Phyllostegia renovans*–g, and Kauai 25–*Phyllostegia renovans*–h, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Phyllostegia renovans* on Kauai.

(i) In units Kauai 10–*Phyllostegia renovans*–b, Kauai 11–*Phyllostegia renovans*–d, and Kauai 20–*Phyllostegia renovans*–e, the primary constituent elements of critical habitat are:

(A) Elevation: Less than 3,000 ft (914 m).

(B) Annual precipitation: Greater than 75 inches (190 centimeters).

(C) Substrate: Clays, ashbeds, deep well-drained soils, lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In units Kauai 10–*Phyllostegia renovans*–a, Kauai 11–*Phyllostegia renovans*–c, Kauai 23–*Phyllostegia renovans*–f, Kauai 24–*Phyllostegia renovans*–g, and Kauai 25–*Phyllostegia renovans*–h, the primary constituent elements of critical habitat are:

(A) Elevation: 3,000 to 5,243 ft (914 to 1,598 m).

(B) Annual precipitation: Greater than 75 inches (190 centimeters).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

FAMILY LAMIACEAE: ***Phyllostegia waimeae*** (NO COMMON NAME)

Kauai 11—*Phyllostegia waimeae*—a, and Kauai 11—*Phyllostegia waimeae*—b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Phyllostegia waimeae* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) *Acacia koa-Metrosideros polymorpha* dominated wet or mixed mesic forest with *Cheirodendron* spp. or *Dicranopteris linearis* as co-dominants and containing one or more of the following associated native plant species: *Broussaisia arguta*, *Claoxylon sandwicense*, *Diplazium sandwichianum*, *Dubautia knudsenii*, *Elaphoglossum* spp., *Gunnera kauaiensis*, *Hedyotis* spp., *Myrsine lanaiensis*, *Pleomele aurea*, *Psychotria* spp., *Sadleria* spp., *Scaevola procera*, *Syzygium sandwicensis*, or *Vaccinium* spp.; and

(ii) Elevations between 655 and 1,224 m (2,149 and 4,016 ft).

FAMILY LAMIACEAE: ***Phyllostegia wawrana*** (NO COMMON NAME)

Kauai 4—*Phyllostegia wawrana*—a, Kauai 11—*Phyllostegia wawrana*—b, Kauai 11—*Phyllostegia wawrana*—c, and Kauai 11—*Phyllostegia wawrana*—d, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Phyllostegia wawrana* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) *Acacia koa-Metrosideros polymorpha-Cheirodendron* mixed mesic forest containing one or more of the following associated native plant species: *Alectryon macrococcus*, *Asplenium polyodon*, *Athyrium microphyllum*, *Carex* spp., *Claoxylon sandwicense*, *Cyanea fissa*, *Delissea rivularis*, *Dianella sandwicensis*, *Diplazium sandwichianum*, *Dodonaea viscosa*, *Doodia kunthiana*, *Dryopteris wallichiana*, *Dubautia knudsenii*, *Dubautia laevigata*, *Hedyotis tryblium*, *Machaerina angustifolia*, *Panicum nephelophilum*, *Peperomia* spp., *Perrottetia sandwicensis*, *Poa sandvicensis*, *Pleomele aurea*, *Pteridium aquilinum* var. *decompositum*, *Sadleria pallida*, *Scaevola procera*, *Schiedea stellarioides*, *Syzygium sandwicensis*, *Touchardia latifolia*, or *Vaccinium dentatum;* and

(ii) Elevations between 400 and 1,284 m (1,311 and 4,212 ft).

FAMILY LAMIACEAE: ***Stenogyne campanulata*** (NCN)

Kauai 11—*Stenogyne campanulata*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Stenogyne campanulata* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Rock faces of nearly vertical, north-facing cliffs in diverse lowland or montane mesic forest and containing one or more of the following associated native plant species: *Lepidium serra*, *Lobelia niihauensis*, *Lysimachia* spp., *Melicope pallida*, *Metrosideros polymorpha*, *Neraudia kauaiensis*, *Nototrichium divaricatum*, *Poa mannii*, *Remya montgomeryi*, or *Wilkesia gymnoxiphium;* and

(ii) Elevations between 335 and 1,290 (1,100 and 4,232 ft).

FAMILY LAMIACEAE: ***Stenogyne kealiae*** (NCN)

Kauai 10–*Stenogyne kealiae*–a, Kauai 11–*Stenogyne kealiae*–b, Kauai 11–*Stenogyne kealiae*–c, Kauai 11–*Stenogyne kealiae*–d, Kauai 20–*Stenogyne kealiae*–e, Kauai 21–*Stenogyne kealiae*–f, and Kauai 22–*Stenogyne kealiae*–g, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Stenogyne kealiae* on Kauai.

(i) In units Kauai 10–*Stenogyne kealiae*–a, Kauai 11–*Stenogyne kealiae*–c, and Kauai 20–*Stenogyne kealiae*–e, the primary constituent elements of critical habitat are:

(A) Elevation: Less than 3,000 ft (914 m).

(B) Annual precipitation: Greater than 75 inches (190 centimeters).

(C) Substrate: Clays, ashbeds, deep well-drained soils, lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In units Kauai 11–*Stenogyne kealiae*–d, Kauai 21–*Stenogyne kealiae*–f, and Kauai 22–*Stenogyne kealiae*–g, the primary constituent elements of critical habitat are:

(A) Elevation: 3,000 to 5,243 ft (914 to 1,598 m).

(B) Annual precipitation: 50 to 75 inches (127 to 190 centimeters).

(C) Substrate: Weathered aa lava flows, rocky mucks, thin silty loams, deep volcanic ash soils.

(D) Canopy: *Acacia*, *Metrosideros*, *Psychotria*, *Tetraplasandra*, *Zanthoxylum*.

(E) Subcanopy: *Cheirodendron*, *Coprosma*, *Kadua*, *Ilex*, *Myoporum*, *Myrsine*.

(F) Understory: *Bidens*, *Dryopteris*, *Leptecophylla*, *Poa*, *Scaevola*, *Sophora*.

(iii) In unit Kauai 11–*Stenogyne kealiae*–b, the primary constituent elements of critical habitat are:

(A) Annual precipitation: Less than 75 inches (190 centimeters).

(B) Substrate: Greater than 65 degree slope, rocky talus.

(C) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(D) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

FAMILY LOGANIACEAE: ***Labordia helleri*** (KAMAKAHALA)

Kauai 7–*Labordia helleri*–a, Kauai 10–*Labordia helleri*–b, Kauai 10–*Labordia helleri*–c, Kauai 11–*Labordia helleri*–d, Kauai 11–*Labordia helleri*–e, Kauai 11–*Labordia helleri*–f, Kauai 11–*Labordia helleri*–g, Kauai 20–*Labordia helleri*–h, Kauai 21–*Labordia helleri*–i, Kauai 22–*Labordia helleri*–j, Kauai 23–*Labordia helleri*–k, Kauai 24–*Labordia helleri*–l, and Kauai 25–*Labordia helleri*–m, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Labordia helleri* on Kauai.

(i) In units Kauai 7–*Labordia helleri*–a and Kauai 11–*Labordia helleri*–e, the primary constituent elements of critical habitat are:

(A) Elevation: Less than 3,000 ft (914 m).

(B) Annual precipitation: 50 to 75 inches (127 to 190 centimeters).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Kauai 10–*Labordia helleri*–c, Kauai 11–*Labordia helleri*–f, and Kauai 20–*Labordia helleri*–h, the primary constituent elements of critical habitat are:

(A) Elevation: Less than 3,000 ft (914 m).

(B) Annual precipitation: Greater than 75 inches (190 centimeters).

(C) Substrate: Clays, ashbeds, deep well-drained soils, lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(iii) In units Kauai 11–*Labordia helleri*–g, Kauai 21–*Labordia helleri*–i,

and Kauai 22–*Labordia helleri*–j, the primary constituent elements of critical habitat are:

(A) Elevation: 3,000 to 5,243 ft (914 to 1,598 m).

(B) Annual precipitation: 50 to 75 inches (127 to 190 centimeters).

(C) Substrate: Weathered aa lava flows, rocky mucks, thin silty loams, deep volcanic ash soils.

(D) Canopy: *Acacia*, *Metrosideros*, *Psychotria*, *Tetraplasandra*, *Zanthoxylum*.

(E) Subcanopy: *Cheirodendron*, *Coprosma*, *Kadua*, *Ilex*, *Myoporum*, *Myrsine*.

(F) Understory: *Bidens*, *Dryopteris*, *Leptecophylla*, *Poa*, *Scaevola*, *Sophora*.

(iv) In units Kauai 10–*Labordia helleri*–b, Kauai 11–*Labordia helleri*–d, Kauai 23–*Labordia helleri*–k, Kauai 24–*Labordia helleri*–l, and Kauai 25–*Labordia helleri*–m, the primary constituent elements of critical habitat are:

(A) Elevation: 3,000 to 5,243 ft (914 to 1,598 m).

(B) Annual precipitation: Greater than 75 inches (190 centimeters).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

FAMILY LOGANIACEAE: ***Labordia lydgatei*** (KAMAKAHALA)

Kauai 4—*Labordia lydgatei*—a, Kauai 10—*Labordia lydgatei*—b, Kauai 11—*Labordia lydgatei*—c, Kauai 11—*Labordia lydgatei*—d, and Kauai 11—*Labordia lydgatei*—e, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Labordia lydgatei* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Streambanks in *Metrosideros polymorpha-Dicranopteris linearis* lowland wet forest containing one or more of the following associated native plant species: *Antidesma platyphyllum* var. *hillebrandii*, *Cyanea* spp., *Cyrtandra* spp., *Dubautia knudsenii*, *Hedyotis terminalis*, *Ilex anomala*, *Labordia hirtella*, *Psychotria* spp., or *Syzygium sandwicensis;* and

(ii) Elevations between 182 and 1,148 m (597 and 3,737 ft).

FAMILY LOGANIACEAE: ***Labordia pumila*** (KAMAHALA)

Kauai 10–*Labordia pumila*–a, Kauai 11–*Labordia pumila*–b, Kauai 23–*Labordia pumila*–c, Kauai 24–*Labordia pumila*–d, and Kauai 25–*Labordia pumila*–e, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Labordia pumila* on Kauai. Within these units, the primary constituent elements of critical habitat are:

(i) Elevation: 3,000 to 5,243 ft (914 to 1,598 m).

(ii) Annual precipitation: Greater than 75 inches (190 centimeters).

(iii) Substrate: Well-developed soils, montane bogs.

(iv) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(v) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(vi) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(vii) Bogs.

FAMILY LOGANIACEAE: ***Labordia tinifolia*** VAR. ***wahiawaensis*** (KAMAKAHALA)

Kauai 10—*Labordia tinifolia* var. *wahiawaensis*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Labordia tinifolia* var. *wahiawaensis* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Streambanks in lowland wet forests dominated by *Metrosideros polymorpha* and containing one or more of the following associated species: *Antidesma platyphyllum*, *Athyrium microphyllum*, *Cheirodendron* spp., *Cyrtandra* spp., *Dicranopteris linearis*, *Hedyotis terminalis*, or *Psychotria* spp.; and

(ii) Elevations between 458 and 1,006 m (1,502 and 3,301 ft).

FAMILY MALVACEAE: ***Hibiscadelphus woodii*** (HAU KUAHIWI)

Kauai 11—*Hibiscadelphus woodii*—a, and Kauai 11—*Hibiscadelphus woodii*—b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Hibiscadelphus woodii* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Basalt talus or cliff walls in *Metrosideros polymorpha* montane mesic forest and containing one or more of the following associated native plant species: *Artemisia australis, Bidens sandvicensis, Carex meyenii, Chamaesyce celastroides* var. *hanapepensis, Dubautia* spp., *Hedyotis* spp., *Lepidium serra, Lipochaeta* spp., *Lobelia niihauensis, Lysimachia glutinosa, Melicope pallida, Myrsine* spp., *Nototrichium* spp., *Panicum lineale, Poa mannii,* or *Stenogyne campanulata;* and

(ii) Elevations between 219 and 1,197 m (717 and 3,926 ft).

FAMILY MALVACEAE: ***Hibiscus clayi*** (CLAY'S HIBISCUS)

Kauai 4—*Hibiscus clayi*—a, Kauai 4—*Hibiscus clayi*—b, Kauai 4—*Hibiscus clayi*—c, Kauai 4—*Hibiscus clayi*—d, Kauai 4—*Hibiscus clayi*—e, and Kauai 5—*Hibiscus clayi*—f, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Hibiscus clayi* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Slopes in *Acacia koa* or *Diospyros* spp.-*Pisonia* spp.-*Metrosideros polymorpha* lowland dry or mesic forest and containing one or more of the following associated native plant species: *Artemisia australis, Bidens* spp., *Cyanea hardyi, Gahnia* spp., *Hedyotis acuminata, Munroidendron racemosum, Pandanus tectorius, Panicum tenuifolium, Pleomele aurea, Pipturus* spp., *Psychotria* spp., or *Psydrax odorata;* and

(ii) Elevations between 121 and 765 m (396 and 2,509 ft).

FAMILY MALVACEAE: ***Hibiscus waimeae*** SSP. ***hannerae*** (KOKIO KEOKEO)

Kauai 11—*Hibiscus waimeae* ssp. *hannerae*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Hibiscus waimeae* ssp. *hannerae* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) *Metrosideros polymorpha-Dicranopteris linearis* or *Pisonia* spp.-*Charpentiera elliptica* lowland wet or mesic forest and containing one or more of the following associated native plant species: *Antidesma* spp., *Bidens* spp., *Bobea* spp., *Cibotium* spp., *Cyanea* spp., *Cyrtandra* spp., *Perrottetia sandwicensis, Pipturus* spp., *Psychotria* spp., *Sadleria* spp., or *Syzygium sandwicensis;* and

(ii) Elevations between 174 and 1,155 m (570 and 3,787 ft).

FAMILY MALVACEAE: ***Kokia kauaiensis*** (KOKIO)

Kauai 11—*Kokia kauaiensis*—a, Kauai 11—*Kokia kauaiensis*—b, Kauai 11—*Kokia kauaiensis*—c, and Kauai 11—*Kokia kauaiensis*—d, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Kokia kauaiensis* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Diverse mesic forest containing one or more of the following associated native plant species: *Acacia koa, Alyxia oliviformis, Antidesma* spp., *Bobea* spp., *Chamaesyce celastroides, Claoxylon sandwicense, Dicranopteris linearis, Diellia pallida, Diospyros hillebrandii, Diospyros sandwicensis, Dodonaea viscosa, Flueggea neowawraea, Hedyotis* spp., *Hibiscus* spp., *Isodendrion laurifolium, Lipochaeta fauriei, Melicope* spp., *Metrosideros polymorpha, Nestegis sandwicensis, Nototrichium* spp., *Pisonia* spp., *Pleomele aurea, Pouteria sandwicensis, Psydrax odorata, Pteralyxia kauaiensis, Rauvolfia sandwicensis, Santalum freycinetianum* var. *pyrularium, Streblus pendulinus,*

Syzygium sandwicensis, *Tetraplasandra* spp., or *Xylosma* spp.; and

(ii) Elevations between 300 and 1,049 m (984 and 3,441 ft).

FAMILY MYRSINACEAE: ***Lysimachia daphnoides*** (LEHUA MAKANOE)

Kauai 10–*Lysimachia daphnoides*–a, Kauai 11–*Lysimachia daphnoides*–b, Kauai 23–*Lysimachia daphnoides*–c, Kauai 24–*Lysimachia daphnoides*–d, and Kauai 25–*Lysimachia daphnoides*–e, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Lysimachia daphnoides* on Kauai. Within these units, the primary constituent elements of critical habitat are:

(i) Elevation: 3,000 to 5,243 ft (914 to 1,598 m).

(ii) Annual precipitation: Greater than 75 inches (190 centimeters).

(iii) Substrate: Well-developed soils, montane bogs.

(iv) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(v) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(vi) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(vii) Hummocks in bogs.

FAMILY MYRSINACEAE: ***Lysimachia iniki*** (NCN)

Kauai 4–*Lysimachia iniki*–a, Kauai 10–*Lysimachia iniki*–b, Kauai 11–*Lysimachia iniki*–c, Kauai 18–*Lysimachia iniki*–d, and Kauai 19–*Lysimachia iniki*–e, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Lysimachia iniki* on Kauai. Within these units, the primary constituent elements of critical habitat are:

(i) Annual precipitation: Greater than 75 inches (190 centimeters).

(ii) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(iii) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(iv) Understory: Ferns, Bryophytes, *Coprosoma*, *Dubautia*, *Kadua*, *Peperomia*.

FAMILY MYRSINACEAE: ***Lysimachia pendens*** (NCN)

Kauai 4–*Lysimachia pendens*–a, Kauai 10–*Lysimachia pendens*–b, Kauai 11–*Lysimachia pendens*–c, Kauai 18–*Lysimachia pendens*–d, and Kauai 19–*Lysimachia pendens*–e, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Lysimachia pendens* on Kauai. Within these units, the primary constituent elements of critical habitat are:

(i) Annual precipitation: Greater than 75 inches (190 centimeters).

(ii) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(iii) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(iv) Understory: Ferns, Bryophytes, *Coprosoma*, *Dubautia*, *Kadua*, *Peperomia*.

FAMILY MYRSINACEAE: ***Lysimachia scopulensis*** (NCN)

Kauai 11–*Lysimachia scopulensis*–a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Lysimachia scopulensis* on Kauai. Within this unit, the primary constituent elements of critical habitat are:

(i) Annual precipitation: Less than 75 inches (190 centimeters).

(ii) Substrate: Greater than 65 degree slope, rocky talus.

(iii) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(iv) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

FAMILY MYRSINACEAE: ***Lysimachia venosa*** (NCN)

Kauai 4–*Lysimachia venosa*–a, Kauai 10–*Lysimachia venosa*–b, Kauai 11–*Lysimachia venosa*–c, Kauai 18–*Lysimachia venosa*–d, and Kauai 19–*Lysimachia venosa*–e, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Lysimachia venosa* on Kauai. Within these units, the primary constituent elements of critical habitat are:

(i) Annual precipitation: Greater than 75 inches (190 centimeters).

(ii) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(iii) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(iv) Understory: Ferns, Bryophytes, *Coprosoma*, *Dubautia*, *Kadua*, *Peperomia*.

FAMILY MYRSINACEAE: ***Myrsine knudsenii*** (KOLEA)

Kauai 11–*Myrsine knudsenii*–a, Kauai 21–*Myrsine knudsenii*–b, and Kauai 22–*Myrsine knudsenii*–c, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Myrsine knudsenii* on Kauai. Within these units, the primary constituent elements of critical habitat are:

(i) Elevation: 3,000 to 5,243 ft (914 to 1,598 m).

(ii) Annual precipitation: 50 to 75 inches (127 to 190 centimeters).

(iii) Substrate: Weathered aa lava flows, rocky mucks, thin silty loams, deep volcanic ash soils.

(iv) Canopy: *Acacia*, *Metrosideros*, *Psychotria*, *Tetraplasandra*, *Zanthoxylum*.

(v) Subcanopy: *Cheirodendron*, *Coprosma*, *Kadua*, *Ilex*, *Myoporum*, *Myrsine*.

(vi) Understory: *Bidens*, *Dryopteris*, *Leptecophylla*, *Poa*, *Scaevola*, *Sophora*.

FAMILY MYRSINACEAE: ***Myrsine linearifolia*** (KOLEA)

Kauai 7—*Myrsine linearifolia*—a, Kauai 10—*Myrsine linearifolia*—b, Kauai 11—*Myrsine linearifolia*—c, Kauai 11—*Myrsine linearifolia*—d, Kauai 11—*Myrsine linearifolia*—e, and Kauai 11—*Myrsine linearifolia*—f, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Myrsine linearifolia* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Diverse mesic or wet lowland or montane *Metrosideros polymorpha* forest with *Cheirodendron* spp. or *Dicranopteris linearis* as co-dominant species, and containing one or more of the following associated native plant species: *Bobea brevipes*, *Cryptocarya mannii*, *Dubautia* spp., *Eurya sandwicensis*, *Freycinetia arborea*, *Hedyotis terminalis*, Lysimachia glutinosa, *Machaerina angustifolia*, *Melicope* spp., *Myrsine* spp., *Nothocestrum* spp., *Psychotria* spp., *Sadleria pallida*, or *Syzygium sandwicensis*; and

(ii) Elevations between 129 and 1,345 m (424 and 4,411 ft).

FAMILY MYRSINACEAE: ***Myrsine mezii*** (KOLEA)

Kauai 10–*Myrsine mezii*–a, Kauai 11–*Myrsine mezii*–b, Kauai 11–*Myrsine mezii*–c, Kauai 21–*Myrsine mezii*–d, Kauai 22–*Myrsine mezii*–e, Kauai 23–*Myrsine mezii*–f, Kauai 24–*Myrsine mezii*–g, and Kauai 25–*Myrsine mezii*–h, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Myrsine mezii* on Kauai.

(i) In units Kauai 11–*Myrsine mezii*–c, Kauai 21–*Myrsine mezii*–d, and Kauai 22–*Myrsine mezii*–e, the primary constituent elements of critical habitat are:

(A) Elevation: 3,000 to 5,243 ft (914 to 1,598 m).

(B) Annual precipitation: 50 to 75 inches (127 to 190 centimeters).

(C) Substrate: Weathered aa lava flows, rocky mucks, thin silty loams, deep volcanic ash soils.

(D) Canopy: *Acacia*, *Metrosideros*, *Psychotria*, *Tetraplasandra*, *Zanthoxylum*.

(E) Subcanopy: *Cheirodendron*, *Coprosma*, *Kadua*, *Ilex*, *Myoporum*, *Myrsine*.

(F) Understory: *Bidens*, *Dryopteris*, *Leptecophylla*, *Poa*, *Scaevola*, *Sophora*.

(ii) In units Kauai 10–*Myrsine mezii*–a, Kauai 11–*Myrsine mezii*–b, Kauai 23–*Myrsine mezii*–f, Kauai 24–*Myrsine mezii*–g, and Kauai 25–*Myrsine mezii*–h, the primary constituent elements of critical habitat are:

(A) Elevation: 3,000 to 5,243 ft (914 to 1,598 m).

(B) Annual precipitation: Greater than 75 inches (190 centimeters).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

FAMILY ORCHIDACEAE: ***Platanthera holochila*** (NCN)

Kauai 11—*Platanthera holochila*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Platanthera holochila* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Montane *Metrosideros polymorpha—Dicranopteris linearis* wet forest or *M. polymorpha* mixed bog and containing one or more of the following associated native plant species: *Carex montis-eeka*, *Cibotium* spp., *Clermontia fauriei*, *Coprosma elliptica*, *Dichanthelium* spp., grammitid ferns (Grammitidaceae), *Leptecophylla tameiameiae*, *Lobelia kauaensis*, *Machaerina angustifolia*, *Myrsine denticulata*, *Oreobolus furcatus*, *Rhynchospora* spp., *Vaccinium* spp., or *Viola kauaensis*; and

(ii) Elevations between 861 and 1,453 m (2,825 and 4,766 ft).

FAMILY PITTOSPORACEAE: ***Pittosporum napaliense*** (HOAWA)

Kauai 7–*Pittosporum napaliense*–a and Kauai 11–*Pittosporum napaliense*–b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Pittosporum napaliense* on Kauai. Within these units, the primary constituent elements of critical habitat are:

(i) Elevation: Less than 3,000 ft (914 m).

(ii) Annual precipitation: 50 to 75 inches (127 to 190 centimeters).

(iii) Substrate: Shallow soils, little to no herbaceous layer.

(iv) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(v) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(vi) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

FAMILY PLANTAGINACEAE: ***Plantago princeps*** (LAUKAHI KUAHIWI)

Kauai 10—*Plantago princeps*—a, Kauai 11—*Plantago princeps*—b, Kauai 11—*Plantago princeps*—c, and Kauai 11—*Plantago princeps*—d, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Plantago princeps* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Windswept areas near waterfalls in *Metrosideros polymorpha-Cheirodendron* montane wet forest with riparian vegetation or *Metrosideros polymorpha* lowland to montane transitional wet forest on cliffs and ridges, growing on basalt rocky outcrops, and containing one or more of the following associated native plant species: *Antidesma platyphyllum* var. *hillebrandii*, *Bidens forbesii*, *Bidens sandvicensis*, *Bobea elatior*, *Boehmeria grandis*, *Carex meyenii*, *Carex wahuensis*, *Charpentiera elliptica*, *Cyrtandra* spp., *Diplazium sandwichianum*, *Freycinetia arborea*, *Gunnera kauaiensis*, *Hedyotis* spp., *Huperzia* spp. *Isachne pallens*, *Lipochaeta connata*, *Lysimachia glutinosa*, *Lysimachia kalalauensis*, *Machaerina angustifolia*, *Melicope* spp., *Myrsine linearifolia*, *Perrottetia sandwicensis*, *Pilea peploides*, *Pipturus* spp., *Poa mannii*, *Sadleria cyatheoides*, *Tetraplasandra* spp., or *Wilkesia gymnoxiphium*; and

(ii) Elevations between 434 and 1,563 m (1,424 and 5,128 ft).

FAMILY POACEAE: ***Ischaemum byrone*** (HILO ISCHAEMUM)

Kauai 1—*Ischaemum byrone*—a, Kauai 2—*Ischaemum byrone*—b, Kauai 3—*Ischaemum byrone*—c, and Kauai 11—*Ischaemum byrone*—d, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Ischaemum byrone* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Coastal shrubland near the ocean among rocks and seepy cliffs and containing one or more of the following associated native plant species: *Bidens* spp., *Chamaesyce celastroides*, *Fimbristylis cymosa*, *Lipochaeta succulenta*, *Lysimachia mauritiana*, or *Scaevola sericea*; and

(ii) Elevations between 0 and 159 m (0 and 523 ft).

FAMILY POACEAE: ***Panicum niihauense*** (LAU EHU)

Kauai 14—*Panicum niihauense*—a, Kauai 15—*Panicum niihauense*—b, Kauai 16—*Panicum niihauense*—c, and Kauai 17—*Panicum niihauense*—d, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Panicum niihauense* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Sand dunes in coastal shrubland and containing one or more of the following associated native plant species: *Cassytha filiformis*, *Chamaesyce celastroides*, *Dodonaea viscosa*, *Nama sandwicensis*, *Ophioglossum pendulum* ssp. *falcatum*, *Scaevola sericea*, *Sida fallax*, *Sporobolus virginicus*, or *Vitex rotundifolia*; and

(ii) Elevations between 0 and 29 m (0 and 95 ft).

FAMILY POACEAE: ***Poa mannii*** (MANN'S BLUEGRASS)

Kauai 11—*Poa mannii*—a, Kauai 11—*Poa mannii*—b, Kauai 11—*Poa mannii*—c, and Kauai 11—*Poa mannii*—d, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Poa mannii* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Cliffs or rock faces in lowland or montane mesic *Metrosideros polymorpha* or *Acacia koa-Metrosideros polymorpha* forest and containing one or more of the following associated native plant species: *Antidesma platyphyllum*, *Artemisia australis*, *Bidens cosmoides*, *Bidens sandvicensis*, *Carex meyenii*, *Carex wahuensis*, *Chamaesyce celastroides* var. *hanapepensis*, *Cyperus phleoides*, *Diospyros sandwicensis*, *Dodonaea viscosa*, *Eragrostis variabilis*, *Hedyotis terminalis*, *Lobelia niihauensis*, *Lobelia yuccoides*, *Luzula hawaiiensis*, *Melicope anisata*, *Melicope barbigera*, *Melicope pallida*, *Nototrichium* spp., *Panicum lineale*, *Pleomele aurea*, *Pouteria sandwicensis*, *Psychotria greenwelliae*, *Psychotria mariniana*, *Schiedea* spp., or *Wilkesia gymnoxiphium*; and

(ii) Elevations between 327 and 1,222 m (1,072 and 4,009 ft).

FAMILY POACEAE: ***Poa sandvicensis*** (HAWAIIAN BLUEGRASS)

Kauai 11—*Poa sandvicensis*—a, and Kauai 11—*Poa sandvicensis*—b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Poa sandvicensis* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Wet, shaded, gentle to steep slopes, ridges, and rock ledges of stream banks in semi-open to closed, wet, diverse *Acacia koa-Metrosideros polymorpha* montane forest and containing one or more of the following associated native species: *Alyxia oliviformis*, *Bidens sandvicensis*, *Cheirodendron* spp., *Claoxylon sandwicense*, *Coprosma* spp., *Dianella sandwicensis*, *Dicranopteris linearis*, *Dodonaea viscosa*, *Dubautia* spp., *Hedyotis* spp., *Melicope* spp., *Peperomia* spp., *Psychotria* spp., *Scaevola procera*, *Schiedea stellarioides*, or *Syzygium sandwicensis*; and

(ii) Elevations between 473 and 1,270 m (1,553 and 4,165 ft).

FAMILY POACEAE: ***Poa siphonoglossa*** (NCN)

Kauai 11—*Poa siphonoglossa*—a, and Kauai 11—*Poa siphonoglossa*—b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Poa siphonoglossa* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Shady banks on steep slopes in mesic *Metrosideros polymorpha-Acacia koa* forests and containing one or more of the following associated native plant species: *Alphitonia ponderosa*, *Alyxia oliviformis*, *Bobea brevipes*, *Carex meyenii*, *Carex wahuensis*, *Coprosma waimeae*, *Dianella sandwicensis*, *Dodonaea viscosa*, *Dubautia* spp., *Hedyotis* spp., *Leptecophylla tameiameiae*, *Lobelia yuccoides*, *Melicope*

spp., *Microlepia strigosa*, *Myrsine* spp., *Panicum nephelophilum*, *Poa sandvicensis*, *Psychotria* spp., *Scaevola procera*, *Tetraplasandra kavaiensis*, *Vaccinium* spp., *Wilkesia gymnoxiphium*, *Xylosma* spp., or *Zanthoxylum dipetalum*; and

(ii) Elevations between 480 and 1,296 m (1,573 and 4,251 ft).

FAMILY PRIMULACEAE: ***Lysimachia filifolia*** (NO COMMON NAME)

Kauai 10—*Lysimachia filifolia*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Lysimachia filifolia* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Mossy banks at the base of cliff faces within the spray zone of waterfalls or along streams in lowland wet forests and containing one or more of the following associated native plant species: *Antidesma platyphyllum*, *Bidens valida*, *Bobea elatior*, *Chamaesyce remyi* var *kauaiensis*, *Cyanea asarifolia*, *Dubautia plantaginea* ssp. *magnifolia*, *Eragrostis variabilis*, *Machaerina angustifolia*, *Melicope* spp., *Metrosideros polymorpha*, or *Panicum lineale*; and

(ii) Elevations between 454 and 1,308 m (1,490 and 4,290 ft).

FAMILY RHAMNACEAE: ***Gouania meyenii*** (NCN)

Kauai 11—*Gouania meyenii*—a, Kauai 11—*Gouania meyenii*—b, and Kauai 11—*Gouania meyenii*—c, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Gouania meyenii* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Rocky ledges, cliff faces, and ridge tops in dry shrubland or *Metrosideros polymorpha* lowland diverse mesic forest and containing one or more of the following native plant species: *Bidens* spp., *Carex meyenii*, *Chamaesyce* spp., *Dodonaea viscosa*, *Diospyros* spp., *Eragrostis variabilis*, *Euphorbia haeleeleana*, *Hedyotis* spp., *Hibiscadelphus* spp., *Lysimachia* spp., *Melicope pallida*, *Neraudia kauaiensis*, *Nestegis sandwicensis*, *Nototrichium divaricatum*, *Panicum lineale*, *Poa mannii*, *Psychotria* spp., *Senna gaudichaudii*, or *Wilkesia gymnoxiphium*; and

(ii) Elevations between 375 and 1,179 m (1,231 and 3,867 ft).

FAMILY RUBIACEAE: ***Hedyotis cookiana*** (AWIWI)

Kauai 11—*Hedyotis cookiana*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Hedyotis cookiana* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Streambeds or steep cliffs close to water sources in relict *Metrosideros polymorpha* lowland mesic and lowland wet forest communities containing one or more of the following associated native plant species: *Boehmeria grandis*, *Chamaesyce celastroides* var. *hanapepensis*, *Hibiscus kokio* ssp. *saintjohnianus*, *Machaerina angustifolia*, *Nototrichium sandwicense*, *Pipturus kauaiensis*, *Pleomele aurea*, *Pouteria sandwicensis*, *Psydrax odorata*, or *Rauvolfia sandwicensis;* and

(ii) Elevations between 120 and 553 m (392 and 1,814 ft).

FAMILY RUBIACEAE: ***Hedyotis st.-johnii*** (NA PALI BEACH HEDYOTIS)

Kauai 11—*Hedyotis st.-johnii*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Hedyotis st.-johnii* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Crevices of north-facing, near-vertical coastal cliff faces within the spray zone in sparse dry coastal shrubland and containing one or more of the following native plant species: *Artemisia australis*, *Bidens* spp., *Capparis sandwichiana*, *Chamaesyce celastroides*, *Eragrostis variabilis*, *Heteropogon contortus*, *Lipochaeta connata*, *Lycium sandwicense*, *Myoporum sandwicense*, *Nototrichium sandwicense*, or *Schiedea apokremnos;* and

(ii) Elevations between 0 and 187 m (0 and 613 ft).

FAMILY RUBIACEAE: ***Psychotria grandiflora*** (KOPIKO)

Kauai 10–*Psychotria grandiflora*–a, Kauai 11–*Psychotria grandiflora*–b, Kauai 11–*Psychotria grandiflora*–c, Kauai 21–*Psychotria grandiflora*–d, Kauai 22–*Psychotria grandiflora*–e, Kauai 23–*Psychotria grandiflora*–f, Kauai 24–*Psychotria grandiflora*–g, and Kauai 25–*Psychotria grandiflora*–h, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Psychotria grandiflora* on Kauai.

(i) In units Kauai 11–*Psychotria grandiflora*–c, Kauai 21–*Psychotria grandiflora*–d, and Kauai 22–*Psychotria grandiflora*–e, the primary constituent elements of critical habitat are:

(A) Elevation: 3,000 to 5,243 ft (914 to 1,598 m).

(B) Annual precipitation: 50 to 75 inches (127 to 190 centimeters).

(C) Substrate: Weathered aa lava flows, rocky mucks, thin silty loams, deep volcanic ash soils.

(D) Canopy: *Acacia*, *Metrosideros*, *Psychotria*, *Tetraplasandra*, *Zanthoxylum*.

(E) Subcanopy: *Cheirodendron*, *Coprosma*, *Kadua*, *Ilex*, *Myoporum*, *Myrsine*.

(F) Understory: *Bidens*, *Dryopteris*, *Leptecophylla*, *Poa*, *Scaevola*, *Sophora*.

(ii) In units Kauai 10–*Psychotria grandiflora*–a, Kauai 11–*Psychotria grandiflora*–b, Kauai 23–*Psychotria grandiflora*–f, Kauai 24–*Psychotria grandiflora*–g, and Kauai 25–*Psychotria grandiflora*–h, the primary constituent elements of critical habitat are:

(A) Elevation: 3,000 to 5,243 ft (914 to 1,598 m).

(B) Annual precipitation: Greater than 75 inches (190 centimeters).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

FAMILY RUBIACEAE: ***Psychotria hobdyi*** (KOPIKO)

Kauai 7–*Psychotria hobdyi*–a and Kauai 11–*Psychotria hobdyi*–b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Psychotria hobdyi* on Kauai. Within these units, the primary constituent elements of critical habitat are:

(i) Elevation: Less than 3,000 ft (914 m).

(ii) Annual precipitation: 50 to 75 inches (127 to 190 centimeters).

(iii) Substrate: Shallow soils, little to no herbaceous layer.

(iv) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(v) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(vi) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

FAMILY RUTACEAE: ***Melicope degeneri*** (ALANI)

Kauai 10–*Melicope degeneri*–a, Kauai 11–*Melicope degeneri*–b, Kauai 23–*Melicope degeneri*–c, Kauai 24–*Melicope degeneri*–d, and Kauai 25–*Melicope degeneri*–e, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Melicope degeneri* on Kauai. Within these units, the primary constituent elements of critical habitat are:

(i) Elevation: 3,000 to 5,243 ft (914 to 1,598 m).

(ii) Annual precipitation: Greater than 75 inches (190 centimeters).

(iii) Substrate: Well-developed soils, montane bogs.

(iv) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(v) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(vi) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

FAMILY RUTACEAE: ***Melicope haupuensis*** (ALANI)

Kauai 7—*Melicope haupuensis*—a, Kauai 11—*Melicope haupuensis*—b, and Kauai 11—*Melicope haupuensis*—c, identified in the legal descriptions in paragraph (a)(1) of this section, constitute

critical habitat for *Melicope haupuensis* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Moist talus slopes in *Metrosideros polymorpha*-dominated lowland mesic forests or *Metrosideros polymorpha-Acacia koa* montane mesic forest and containing one or more of the following associated native plant species: *Antidesma platyphyllum* var. *hillebrandii*, *Bobea brevipes*, *Cheirodendron trigynum*, *Claoxylon sandwicense*, *Cryptocarya mannii*, *Dianella sandwicensis*, *Diospyros hillebrandii*, *Diospyros sandwicensis*, *Dodonaea viscosa*, *Elaeocarpus bifidus*, *Hedyotis terminalis*, *Melicope anisata*, *Melicope barbigera*, *Melicope ovata*, *Pleomele aurea*, *Pouteria sandwicensis*, *Pritchardia minor*, *Psychotria greenwelliae*, *Psychotria mariniana*, *Tetraplasandra waimeae*, or *Zanthoxylum dipetalum;* and

(ii) Elevations between 125 and 1,249 m (410 and 4,097 ft).

FAMILY RUTACEAE: ***Melicope knudsenii*** (ALANI)

Kauai 11—*Melicope knudsenii*—a, and Kauai 11—*Melicope knudsenii*—b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Melicope knudsenii* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Forested flats with brown granular soil in lowland dry to montane mesic forests and containing one or more of the following associated native plant species: *Alectryon macrococcus*, *Antidesma platyphylla*, *Bobea brevipes*, *Carex meyenii*, *Cryptocarya mannii*, *Diospyros sandwicensis*, *Diplazium sandwichianum*, *Dodonaea viscosa*, *Euphorbia haeleeleana*, *Gahnia beecheyi*, *Hedyotis spp.*, *Hibiscus waimeae*, *Isodendrion laurifolium*, *Leptecophylla tameiameiae*, *Melicope spp.*, *Metrosideros polymorpha*, *Myrsine lanaiensis*, *Nestegis sandwicensis*, *Panicum nephelophilum*, *Peucedanum sandwicense*, *Pisonia sandwicensis*, *Pittosporum kauaiensis*, *Pleomele aurea*, *Pouteria sandwicensis*, *Pritchardia minor*, *Psychotria hobdyi*, *Psydrax odorata*, *Rauvolfia sandwicensis*, *Remya kauaiensis*, *Scaevola procera*, or *Xylosma hawaiiense;* and

(ii) Elevations between 346 and 1,065 m (1,135 and 3,492 ft).

FAMILY RUTACEAE: ***Melicope pallida*** (ALANI)

Kauai 11—*Melicope pallida*—a, and Kauai 11—*Melicope pallida*—b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Melicope pallida* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep rock faces in lowland to montane mesic to wet forests or shrubland and containing one or more of the following associated native plant species: *Alyxia oliviformis*, *Artemisia australis*, *Boehmeria grandis*, *Carex meyenii*, *Chamaesyce celastroides* var. *hanapepensis*, *Coprosma kauensis*, *Coprosma waimeae*, *Dodonaea viscosa*, *Dryopteris* spp., *Hedyotis terminalis*, *Lepidium serra*, *Melicope* spp., *Metrosideros polymorpha*, *Nototrichium* spp., *Pipturus albidus*, *Pleomele aurea*, *Poa mannii*, *Psychotria mariniana*, *Pritchardia minor*, *Sapindus oahuensis*, *Schiedea membranacea*, *Tetraplasandra waialealae*, or *Xylosma hawaiiense;* and

(ii) Elevations between 418 and 1,081 m (1,371 and 3,546 ft).

FAMILY RUTACEAE: ***Melicope paniculata*** (ALANI)

Kauai 10–*Melicope paniculata*–a, Kauai 11–*Melicope paniculata*–b, and Kauai 20–*Melicope paniculata*–c, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Melicope paniculata* on Kauai. Within these units, the primary constituent elements of critical habitat are:

(i) Elevation: Less than 3,000 ft (914 m).

(ii) Annual precipitation: Greater than 75 inches (190 centimeters).

(iii) Substrate: Clays, ashbeds, deep well-drained soils, lowland bogs.

(iv) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(v) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(vi) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

FAMILY RUTACEAE: ***Melicope puberula*** (ALANI)

Kauai 10–*Melicope puberula*–a, Kauai 10–*Melicope puberula*–b, Kauai 11–*Melicope puberula*–c, Kauai 11–*Melicope puberula*–d, Kauai 20–*Melicope puberula*–e, Kauai 23–*Melicope puberula*–f, Kauai 24–*Melicope puberula*–g, and Kauai 25–*Melicope puberula*–h, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Melicope puberula* on Kauai.

(i) In units Kauai 10–*Melicope puberula*–b, Kauai 11–*Melicope puberula*–d, and Kauai 20–*Melicope puberula*–e, the primary constituent elements of critical habitat are:

(A) Elevation: Less than 3,000 ft (914 m).

(B) Annual precipitation: Greater than 75 inches (190 centimeters).

(C) Substrate: Clays, ashbeds, deep well-drained soils, lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In units Kauai 10–*Melicope puberula*–a, Kauai 11–*Melicope puberula*–c, Kauai 23–*Melicope puberula*–f, Kauai 24–*Melicope puberula*–g, and Kauai 25–*Melicope puberula*–h, the primary constituent elements of critical habitat are:

(A) Elevation: 3,000 to 5,243 ft (914 to 1,598 m).

(B) Annual precipitation: Greater than 75 inches (190 centimeters).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

FAMILY RUTACEAE: ***Platydesma rostrata*** (PILO KEA LAU LII)

Kauai 4–*Platydesma rostrata*–a, Kauai 7–*Platydesma rostrata*–b, Kauai 10–*Platydesma rostrata*–c, Kauai 10–*Platydesma rostrata*–d, Kauai 10–*Platydesma rostrata*–e, Kauai 11–*Platydesma rostrata*–f, Kauai 11–*Platydesma rostrata*–g, Kauai 11–*Platydesma rostrata*–h, Kauai 11–*Platydesma rostrata*–i, Kauai 11–*Platydesma rostrata*–j, Kauai 18–*Platydesma rostrata*–k, Kauai 19–*Platydesma rostrata*–l, Kauai 20–*Platydesma rostrata*–m, Kauai 21–*Platydesma rostrata*–n, Kauai 22–*Platydesma rostrata*–o, Kauai 23–*Platydesma rostrata*–p, Kauai 24–*Platydesma rostrata*–q, and Kauai 25–*Platydesma rostrata*–r, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Platydesma rostrata* on Kauai.

(i) In units Kauai 7–*Platydesma rostrata*–b and Kauai 11–*Platydesma rostrata*–g, the primary constituent elements of critical habitat are:

(A) Elevation: Less than 3,000 ft (914 m).

(B) Annual precipitation: 50 to 75 inches (127 to 190 centimeters).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Kauai 10–*Platydesma rostrata*–d, Kauai 11–*Platydesma rostrata*–h, and Kauai 20–*Platydesma rostrata*–m, the primary constituent elements of critical habitat are:

(A) Elevation: Less than 3,000 ft (914 m).

(B) Annual precipitation: Greater than 75 inches (190 centimeters).

(C) Substrate: Clays, ashbeds, deep well-drained soils, lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(iii) In units Kauai 11–*Platydesma rostrata*–j, Kauai 21–*Platydesma rostrata*–n, and Kauai 22–*Platydesma rostrata*–o,

the primary constituent elements of critical habitat are:

(A) Elevation: 3,000 to 5,243 ft (914 to 1,598 m).

(B) Annual precipitation: 50 to 75 inches (127 to 190 centimeters).

(C) Substrate: Weathered aa lava flows, rocky mucks, thin silty loams, deep volcanic ash soils.

(D) Canopy: *Acacia*, *Metrosideros*, *Psychotria*, *Tetraplasandra*, *Zanthoxylum*.

(E) Subcanopy: *Cheirodendron*, *Coprosma*, *Kadua*, *Ilex*, *Myoporum*, *Myrsine*.

(F) Understory: *Bidens*, *Dryopteris*, *Leptecophylla*, *Poa*, *Scaevola*, *Sophora*.

(iv) In units Kauai 10–*Platydesma rostrata*–c, Kauai 11–*Platydesma rostrata*–f, Kauai 23–*Platydesma rostrata*–p, Kauai 24–*Platydesma rostrata*–q, and Kauai 25–*Platydesma rostrata*–r, the primary constituent elements of critical habitat are:

(A) Elevation: 3,000 to 5,243 ft (914 to 1,598 m).

(B) Annual precipitation: Greater than 75 inches (190 centimeters).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(v) In units Kauai 4–*Platydesma rostrata*–a, Kauai 10–*Platydesma rostrata*–e, Kauai 11–*Platydesma rostrata*–i, Kauai 18–*Platydesma rostrata*–k, and Kauai 19–*Platydesma rostrata*–l, the primary constituent elements of critical habitat are:

(A) Annual precipitation: Greater than 75 inches (190 centimeters).

(B) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(C) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(D) Understory: Ferns, Bryophytes, *Coprosoma*, *Dubautia*, *Kadua*, *Peperomia*.

FAMILY RUTACEAE: ***Zanthoxylum hawaiiense*** (AE)

Kauai 11—*Zanthoxylum hawaiiense*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Zanthoxylum hawaiiense* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Lowland dry or mesic forests dominated by *Metrosideros polymorpha* or *Diospyros sandwicensis*, and containing one or more of the following associated plant species: *Alectryon macrococcus*, *Antidesma platyphyllum*, *Charpentiera elliptica*, *Dodonaea viscosa*, *Melicope* spp., *Myrsine lanaiensis*, *Pisonia* spp., *Pleomele aurea*, *Streblus pendulinus*, or *Zanthoxylum dipetalum;* and

(ii) Elevations between 332 and 1,151 m (1,089 and 3,774 ft).

FAMILY SANTALACEAE: ***Exocarpos luteolus*** (HEAU)

Kauai 10—*Exocarpos luteolus*—a, Kauai 11—*Exocarpos luteolus*—b, Kauai 11—*Exocarpos luteolus*—c, Kauai 11—*Exocarpos luteolus*—d, and Kauai 11—*Exocarpos luteolus*—e, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Exocarpos luteolus* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Wet places bordering swamps or open bogs or on open or dry ridges in lowland or montane mesic *Acacia koa-Metrosideros polymorpha*-dominated forest communities with *Dicranopteris linearis* and containing one or more of the following native plant species: *Bobea brevipes*, *Cheirodendron trigynum*, *Claoxylon sandwicense*, *Dianella sandwicensis*, *Dodonaea viscosa*, *Dubautia laevigata*, *Elaeocarpus bifidus*, *Hedyotis terminalis*, *Leptecophylla tameiameiae*, *Melicope haupuensis*, *Peperomia* spp., *Pleomele aurea*, *Poa sandvicensis*, *Pouteria sandwicensis*, *Psychotria greenwelliae*, *Psychotria mariniana*, *Santalum freycinetianum*, or *Schiedea stellarioides;* and

(ii) Elevations between 416 and 1,453 m (1,364 and 4,766 ft).

FAMILY SAPINDACEAE: ***Alectryon macrococcus*** (MAHOE)

Kauai 11—*Alectryon macrococcus*—a, and Kauai 11—*Alectryon macrococcus*—b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Alectryon macrococcus* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Dry slopes or gulches in *Diospyros* spp.-*Metrosideros polymorpha* lowland mesic forest, *Metrosideros polymorpha* mixed mesic forest, or *Diospyros* spp. mixed mesic forest, and containing one or more of the following native plant species: *Acacia koa*, *Alyxia oliviformis*, *Antidesma* spp., *Bobea timonioides*, *Caesalpinia kavaiense*, *Canavalia* spp., *Carex meyenii*, *Carex wahuensis*, *Doodia kunthiana*, *Hibiscus waimeae*, *Kokia kauaiensis*, *Melicope knudsenii*, *Microlepia strigosa*, *Munroidendron racemosum*, *Myrsine lanaiensis*, *Nesoluma polynesicum*, *Nestegis sandwicensis*, *Pisonia* spp., *Pleomele aurea*, *Pouteria sandwicensis*, *Psychotria* spp., *Psydrax odorata*, *Pteralyxia kauaiensis*, *Rauvolfia sandwicensis*, *Streblus pendulinus*, *Tetraplasandra* spp., *Xylosma* spp., or *Zanthoxylum spp.;* and

(ii) Elevations between 343 and 954 m (1,126 and 3,129 ft).

FAMILY SOLANACEAE: ***Nothocestrum peltatum*** (AIEA)

Kauai 11—*Nothocestrum peltatum*—a, Kauai 11—*Nothocestrum peltatum*—b, Kauai 11—*Nothocestrum peltatum*—c, and *Kauai 12—Nothocestrum peltatum*—d, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Nothocestrum peltatum* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Rich soil on steep slopes in mesic or wet forest dominated by *Acacia koa* or a mixture of *Acacia koa* and *Metrosideros polymorpha* and containing one or more of the following associated native plant species: *Alphitonia ponderosa*, *Antidesma* spp., *Bobea brevipes*, *Broussaisia arguta*, *Cheirodendron trigynum*, *Claoxylon sandwicense*, *Coprosma* spp., *Cryptocarya mannii*, *Dianella sandwicensis*, *Dicranopteris linearis*, *Diplazium sandwichianum*, *Dodonaea viscosa*, *Elaeocarpus bifidus*, *Hedyotis terminalis*, *Ilex anomala*, *Melicope anisata*, *Melicope barbigera*, *Melicope haupuensis*, *Perrottetia sandwicensis*, *Pleomele aurea*, *Pouteria sandwicensis*, *Psychotria mariniana*, *Psychotria greenwelliae*, *Tetraplasandra kavaiensis*, or *Xylosma* spp.; and

(ii) Elevations between 581 and 1,290 m (1,906 and 4,232 ft).

FAMILY SOLANACEAE: ***Solanum sandwicense*** (AIAKEAKUA, POPOLO)

Kauai 11—*Solanum sandwicense*—a, and Kauai 11—*Solanum sandwicense*—b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Solanum sandwicense* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Under forest canopies in diverse lowland or montane *Acacia koa* or *Acacia koa-Metrosideros polymorpha* mesic or wet forests and containing one or more of the following associated plant species: *Alphitonia ponderosa*, *Athyrium sandwicensis*, *Bidens* spp., *Carex meyenii*, *Coprosma* spp., *Cryptocarya mannii*, *Dianella sandwicensis*, *Dicranopteris linearis*, *Dubautia* spp., *Hedyotis* spp., *Ilex anomala*, *Melicope* spp., *Poa* spp., *Pouteria sandwicensis*, *Psychotria* spp., *Syzygium sandwicensis*, or *Xylosma hawaiiense;* and

(ii) Elevations between 540 and 1,290 m (1,770 and 4,232 ft).

FAMILY VIOLACEAE: ***Isodendrion laurifolium*** (AUPAKA)

Kauai 11—*Isodendrion laurifolium*—a, and Kauai 11—*Isodendrion laurifolium*—b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Isodendrion laurifolium* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Diverse mesic forest dominated by *Metrosideros polymorpha*, *Acacia koa* or *Diospyros* spp. and containing one or

more of the following associated native plant species: *Alphitonia ponderosa*, *Antidesma* spp., *Claoxylon sandwicense*, *Dodonaea viscosa*, *Dubautia* spp., *Elaeocarpus bifidus*, *Euphorbia haeleeleana*, *Hedyotis terminalis*, *Kokia kauaiensis*, *Melicope anisata*, *Melicope barbigera*, *Melicope ovata*, *Melicope peduncularis*, *Myrsine lanaiensis*, *Nestegis sandwicensis*, *Pisonia* spp., *Pittosporum glabrum*, *Pleomele aurea*, *Pouteria sandwicensis*, *Psydrax odorata*, *Streblus pendulinus*, or *Xylosma hawaiiense;* and

(ii) Elevations between 397 and 1,164 m (1,303 and 3,817 ft).

FAMILY VIOLACEAE: ***Isodendrion longifolium*** (AUPAKA)

Kauai 7—*Isodendrion longifolium*—a, Kauai 10—*Isodendrion longifolium*—b, Kauai 11—*Isodendrion longifolium*—c, Kauai 11—*Isodendrion longifolium*—d, and Kauai 11—*Isodendrion longifolium*—e, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Isodendrion longifolium* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep slopes, gulches, or streambanks and flats in undisturbed areas, in mesic or wet *Metrosideros polymorpha-Acacia koa* forests and containing one or more of the following native species: *Antidesma* spp., *Bidens* spp., *Bobea brevipes*, *Cheirodendron* spp., *Cibotium* spp., *Cyanea hardyi*, *Cyrtandra* spp., *Dicranopteris linearis*, *Diospyros* spp., *Eugenia reinwardtiana*, *Hedyotis* spp., *Ilex anomala*, *Melicope* spp., *Nestegis sandwicensis*, *Peperomia* spp., *Perrottetia sandwicensis*, *Pipturus* spp., *Pittosporum* spp., *Pritchardia* spp., *Psychotria* spp., *Psydrax odorata*, or *Syzygium sandwicensis;* and

(ii) Elevations between 127 and 1,295 m (418 and 4,246 ft).

FAMILY VIOLACEAE: ***Viola helenae*** (NCN)

Kauai 10—*Viola helenae*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Viola helenae* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Stream drainage banks or adjacent valley bottoms in light to moderate shade in *Metrosideros polymorpha-Dicranopteris linearis* lowland wet forest or *Metrosideros polymorpha-Cheirodendron* wet forest and containing one or more of the following native plant species: *Antidesma platyphyllum* var. *hillebrandii*, *Broussaisia arguta*, *Dicranopteris linearis*, *Diplazium sandwichianum*, *Dubautia* spp., *Freycinetia arborea*, *Hesperomannia lydgatei*, *Melicope* spp., or *Pritchardia* spp.; and

(ii) Elevations between 522 and 1,006 m (1,712 and 3,301 ft).

FAMILY VIOLACEAE: ***Viola kauaiensis*** VAR. ***wahiawaensis*** (NANI WAIALEALE)

Kauai 10—*Viola kauaiensis* var. *wahiawaensis*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Viola kauaiensis* var. *wahiawaensis* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) *Machaerina angustifolia-Rhynchospora rugosa* lowland bog or mixed wet shrubland and adjacent *Metrosideros polymorpha* wet forest and containing one or more of the following native plant species: *Antidesma platyphyllum* var. *hillebrandii*, *Bidens forbesii*, *Chamaesyce remyi*, *Chamaesyce sparsiflora*, *Coprosma* spp., *Cyanea fissa*, *Dicranopteris linearis*, *Diplopterygium pinnatum*, *Dubautia imbricata*, *Dubautia raillardioides*, *Gahnia vitiensis*, *Leptechophylla tameiameiae*, *Lobelia kauaensis*, *Machaerina angustifolia*, *Machaerina mariscoides*, *Melicope* spp., *Psychotria wawrae*, *Sadleria pallida*, *Scaevola gaudichaudii*, *Sphenomeris chinensis*, *Syzygium sandwicensis*, *Tetraplasandra oahuensis*, or *Vaccinium dentatum;* and

(ii) Elevations between 394 and 1,006 (1,291 and 3,301 ft).

(2) *Ferns and allies.*

FAMILY ASPLENIACEAE: *Asplenium dielerectum* (ASPLENIUM-LEAVED DIELLIA

Kauai 11—*Asplenium dielerectum*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Asplenium dielerectum*—on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Brown granular soil with leaf litter and occasional terrestrial moss on north-facing slopes in deep shade on steep slopes or gulch bottoms in *Metrosideros polymorpha-Dicranopteris linearis* wet forest or *Metrosideros polymorpha* mixed mesic forest with *Acacia koa* and *Acacia koaia* as codominants and containing one or more of the following native plant species: *Asplenium aethiopicum*, *Asplenium contiguum*, *Asplenium macraei*, *Coprosma* spp., *Dodonaea viscosa*, *Dryopteris fuscoatra*, *Dryopteris unidentata*, *Hedyotis terminalis*, *Leptecophylla tameiameiae*, *Melicope* spp., *Microlepia strigosa*, *Myrsine* spp., *Nestegis sandwicensis*, *Psychotria* spp., *Syzygium sandwicensis*, or *Wikstroemia* spp.; and

(ii) Elevations between 655 and 1,224 m (2,149 and 4,016 ft).

FAMILY ASPLENIACEAE: ***Diellia mannii*** (NCN)

Kauai 11–*Diellia mannii*–a, Kauai 21–*Diellia mannii*–b, and Kauai 22–*Diellia mannii*–c, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Diellia mannii* on Kauai. Within these units, the primary constituent elements of critical habitat are:

(i) Elevation: 3,000 to 5,243 ft (914 to 1,598 m).

(ii) Annual precipitation: 50 to 75 inches (127 to 190 centimeters).

(iii) Substrate: Weathered aa lava flows, rocky mucks, thin silty loams, deep volcanic ash soils.

(iv) Canopy: *Acacia*, *Metrosideros*, *Psychotria*, *Tetraplasandra*, *Zanthoxylum*.

(v) Subcanopy: *Cheirodendron*, *Coprosma*, *Kadua*, *Ilex*, *Myoporum*, *Myrsine*.

(vi) Understory: *Bidens*, *Dryopteris*, *Leptecophylla*, *Poa*, *Scaevola*, *Sophora*.

FAMILY ASPLENIACEAE: ***Diellia pallida*** (NO COMMON NAME)

Kauai 11—*Diellia pallida*—a, and Kauai 11—*Diellia pallida*—b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Diellia pallida* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Bare granular soil with dry to mesophytic leaf litter with a pH of 6.9 to 7.9 on steep talus slopes in lowland mesic forests and containing one or more of the following native plant species: *Acacia koa*, *Alectryon macrococcus*, *Alphitonia ponderosa*, *Alyxia oliviformis*, *Antidesma platyphyllum*, *Asplenium* spp., *Carex meyenii*, *Diospyros hillebrandii*, *Diospyros sandwicensis*, *Doodia kunthiana*, *Hedyotis knudsenii*, *Leptecophylla tameiameiae*, *Metrosideros polymorpha*, *Microlepia strigosa*, *Myrsine lanaiensis*, *Nestegis sandwicensis*, *Psychotria mariniana*, *Psydrax odorata*, *Pteralyxia kauaiensis*, *Rauvolfia sandwicensis*, *Tetraplasandra kavaiensis*, *Wilkesia gymnoxiphium*, or *Zanthoxylum dipetalum;* and

(ii) Elevations between 445 and 1,028 m (1,461 and 3,371 ft).

FAMILY ASPLENIACEAE: ***Diplazium molokaiense*** (NCN)

Kauai 11—*Diplazium molokaiense*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Diplazium molokaiense* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Brown soil with basalt outcrops near waterfalls in lowland or montane mesic *Metrosideros polymorpha-Acacia koa* forest; and

(ii) Elevations between 624 and 1,234 m (2,048 and 4,048 ft).

FAMILY ASPLENIACEAE: ***Ctenitis squamigera*** (PAUOA)

Kauai 11—*Ctenitis squamigera*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Ctenitis*

squamigera on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Rock faces in gulches in the understory of *Metrosideros polymorpha-Diospyros* spp. mesic forest and diverse mesic forest and containing one or more of the following native plant species: *Myrsine* spp., *Psychotria* spp., or *Xylosma* spp.; and

(ii) Elevations between 538 and 1,069 m (1,765 and 3,507 ft).

FAMILY DRYOPTERIDACEAE: ***Dryopteris crinalis*** VAR. *podosorus* (PALAPALAI AUMAKUA)

Kauai 10–*Dryopteris crinalis* var. *podosorus*–a, Kauai 11–*Dryopteris crinalis* var. *podosorus*–b, Kauai 23–*Dryopteris crinalis* var. *podosorus*–c, Kauai 24–*Dryopteris crinalis* var. *podosorus*–d, and Kauai 25–*Dryopteris crinalis* var. *podosorus*–e, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Dryopteris crinalis* var. *podosorus* on Kauai. Within these units, the primary constituent elements of critical habitat are:

(i) Elevation: 3,000 to 5,243 ft (914 to 1,598 m).

(ii) Annual precipitation: Greater than 75 inches (190 centimeters).

(iii) Substrate: Well-developed soils, montane bogs.

(iv) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(v) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(vi) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

FAMILY GRAMMITIDACEAE: ***Adenophorus periens*** (PENDENT KIHI FERN)

Kauai 4—*Adenophorus periens*—a, Kauai 10—*Adenophorus periens*—b, Kauai 11—*Adenophorus periens*—c, and Kauai 11—*Adenophorus periens*—d, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Adenophorus periens* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) On *Metrosideros polymorpha* trunks, in riparian banks of stream systems in well-developed, closed canopy that provides deep shade or high humidity in *Metrosideros polymorpha-Cibotium glaucum* lowland wet forests, open *Metrosideros polymorpha* montane wet forest, or *Metrosideros polymorpha-Dicranopteris linearis* lowland wet forest and containing one or more of the following native plant species: *Antidesma platyphyllum*, *Athyrium sandwichianum*, *Broussaisia arguta*, *Cheirodendron trigynum*, *Cyanea* spp., *Cyrtandra* spp., *Dicranopteris linearis*, *Freycinetia arborea*, *Hedyotis terminalis*, *Labordia hirtella*, *Machaerina angustifolia*, *Psychotria* spp., *Syzygium sandwicensis*, or *Tetraplasandra oahuensis;* and

(ii) Elevations between 169 and 1,345 m (553 and 4,411 ft).

FAMILY LYCOPODIACEAE: ***Huperzia nutans*** (WAWAEIOLE)

Kauai 10—*Huperzia nutans*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Huperzia nutans* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Tree trunks, usually on open ridges and slopes in *Metrosideros polymorpha-Dicranopteris linearis* wet or mesic forests and containing one or more of the following associated native plant species: *Antidesma platyphyllum*, *Broussaisia arguta*, *Cheirodendron fauriei*, *Cibotium* spp., *Diplopterygium pinnatum*, *Hedyotis terminalis*, *Hibiscus kokio ssp. kokio*, *Melicope waialealae*, *Perrottetia sandwicensis*, *Psychotria hexandra*, *Psychotria mariniana*, *Psychotria wawrae*, *Scaevola gaudichaudii*, or *Syzygium sandwicensis;* and

(ii) Elevations between 615 and 1,591 m (2,016 and 5,217 ft).

FAMILY PTERIDACEAE: ***Doryopteris angelica*** (NCN)

Kauai 7–*Doryopteris angelica*–a and Kauai 11–*Doryopteris angelica*–b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Doryopteris angelica*

on Kauai. Within these units, the primary constituent elements of critical habitat are:

(i) Elevation: Less than 3,000 ft (914 m).

(ii) Annual precipitation: 50 to 75 inches (127 to 190 centimeters).

(iii) Substrate: Shallow soils, little to no herbaceous layer.

(iv) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(v) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

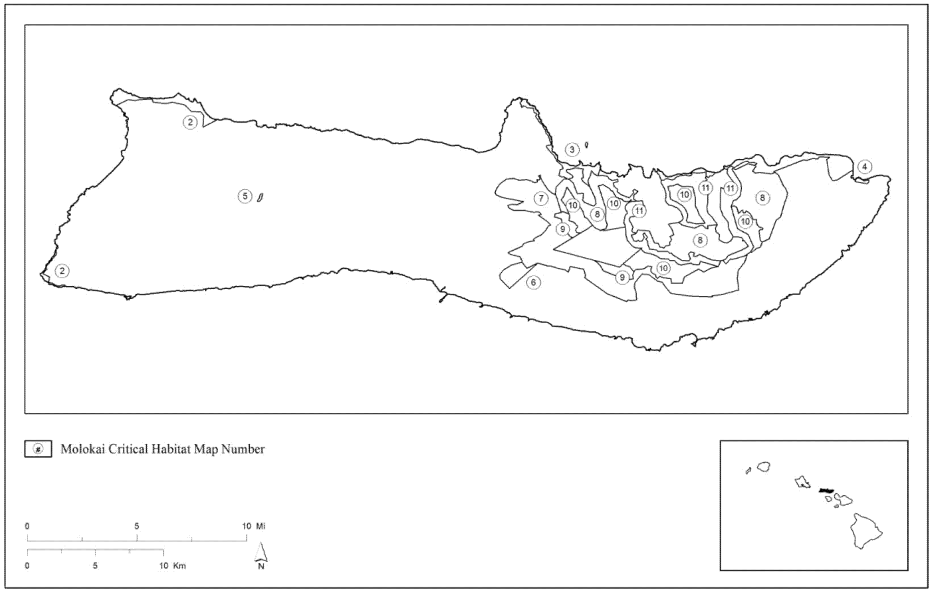
(vi) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(c) *Maps and critical habitat unit descriptions for the island of Molokai, HI.* Critical habitat units are described below. Coordinates are in UTM Zone 4 with units in meters using North American Datum of 1983 (NAD83). The following map shows the locations of the critical habitat units designated on the island of Molokai. Existing man-made features and structures, such as buildings, roads, railroads, airports, runways, other paved areas, lawns, and other urban landscaped areas, do not contain one or more of the physical and biological features. Federal actions limited to those areas, therefore, would not trigger a consultation under section 7 of the Act unless they may affect the species or physical or biological features in adjacent critical habitat.

(1) NOTE: Map 1—Index map follows:

Map 1

Molokai Critical Habitat—Island Index Map



(2) Molokai—Coastal—Unit 1 (125 ac, 50 ha) and Molokai—Coastal—Unit 2 (977 ac, 396 ha).

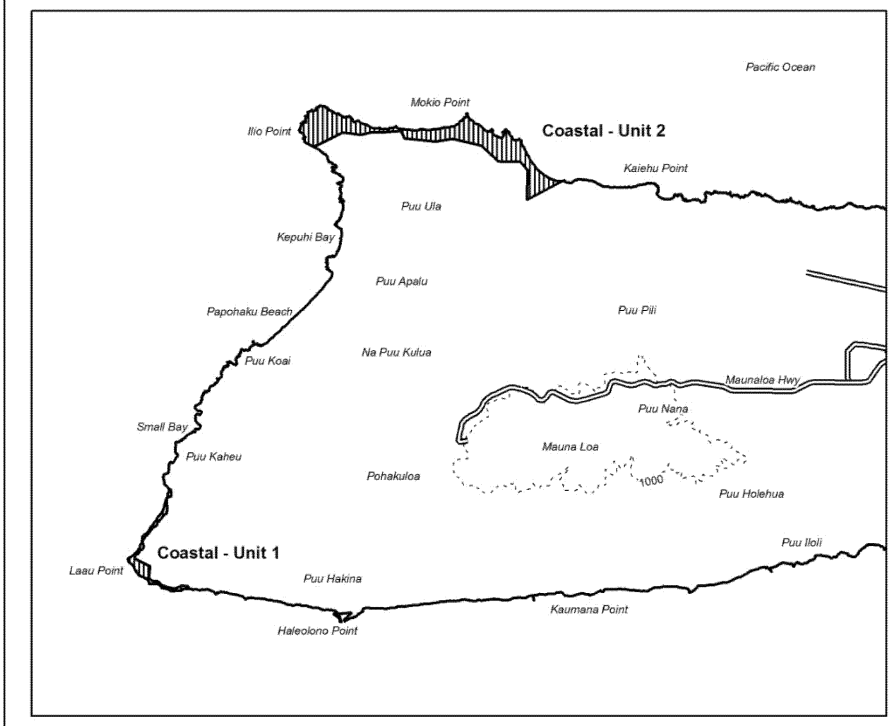
(i) These units are critical habitat for *Bidens wiebkei*, *Brighamia rockii*, *Canavalia molokaiensis*, *Hibiscus arnottianus* ssp. *immaculatus*, *Hibiscus brackenridgei*, *Ischaemum byrone*, *Marsilea villosa*, *Peucedanum sandwicense*, *Pittosporum halophilum*, *Schenkia sebaeoides*, *Sesbania tomentosa*, and *Tetramolopium rockii*.

(ii) Map of Molokai—Coastal—Unit 1 and Molokai—Coastal—Unit 2 (Map 2) follows:

Map 2

Molokai—Coastal

Unit 1 and Unit 2



Critical Habitat
Coastline
Major roads
Elevation (1,000-foot contours)

0 1 2 Mi
0 1 2 Km
N

(3) Molokai—Coastal—Unit 3 (805 ac, 325 ha), Molokai—Coastal—Unit 4 (10 ac, 4 ha), and Molokai—Coastal—Unit 5 (1 ac, 0.5 ha).

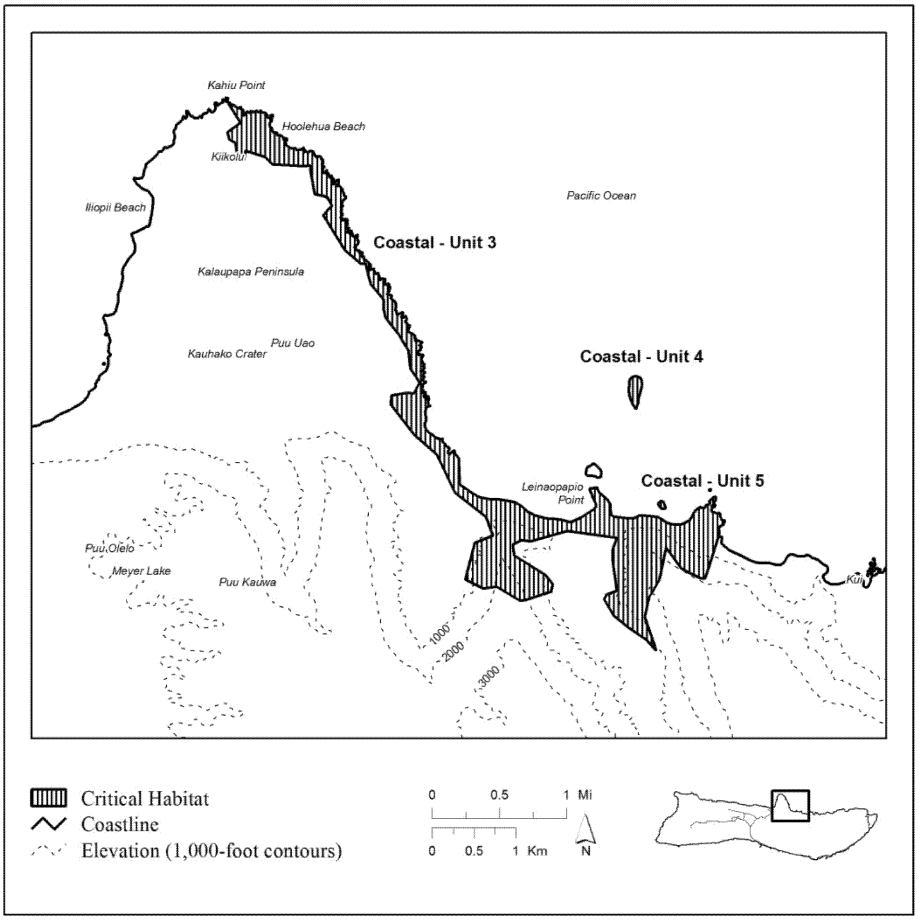
(i) These units are critical habitat for *Bidens wiebkei*, *Brighamia rockii*, *Canavalia molokaiensis*, *Hibiscus arnottianus* ssp. *immaculatus*, *Hibiscus brackenridgei*, *Ischaemum byrone*, *Marsilea villosa*, *Peucedanum sandwicense*, *Pittosporum halophilum*, *Schenkia sebaeoides*, *Sesbania tomentosa*, and *Tetramolopium rockii*.

(ii) Map of Molokai—Coastal—Unit 3, Molokai—Coastal—Unit 4, and Molokai—Coastal—Unit 5 (Map 3) follows:

Map 3

Molokai—Coastal

Unit 3, Unit 4, and Unit 5



(4) Molokai—Coastal—Unit 6 (1,884 ac, 762 ha) and Molokai—Coastal—Unit 7 (49 ac, 24 ha).

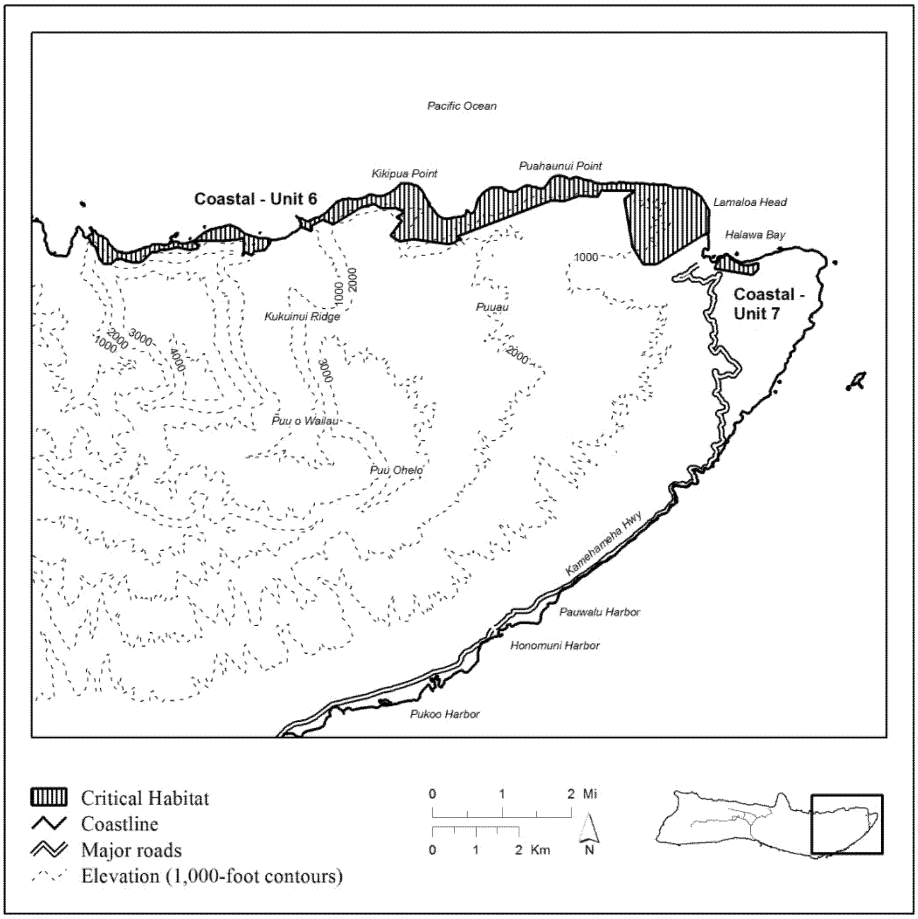
(i) These units are critical habitat for *Bidens wiebkei*, *Brighamia rockii*, *Canavalia molokaiensis*, *Hibiscus arnottianus* ssp. *immaculatus*, *Hibiscus brackenridgei*, *Ischaemum byrone*, *Marsilea villosa*, *Peucedanum sandwicense*, *Pittosporum halophilum*, *Schenkia sebaeoides*, *Sesbania tomentosa*, and *Tetramolopium rockii*.

(ii) Map of Molokai—Coastal—Unit 6 and Molokai—Coastal—Unit 7 (Map 4) follows:

Map 4

Molokai—Coastal

Unit 6 and Unit 7



(5) Molokai—Lowland Dry—Unit 1 (24 ac, 10 ha).

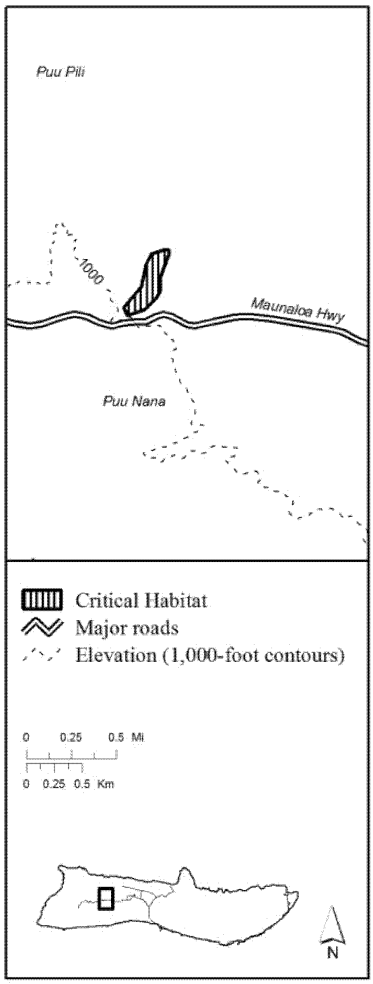
(i) This unit is critical habitat for *Bonamia menziesii*, *Cyperus trachysanthos*, *Eugenia koolauensis*, *Hibiscus brackenridgei*, *Kokia cookei*, and *Sesbania tomentosa*.

(ii) Map of Molokai—Lowland Dry—Unit 1 (Map 5) follows:

Map 5

Molokai—Lowland Dry

Unit 1



(6) Molokai—Lowland Dry—Unit 2 (589 ac, 238 ha)

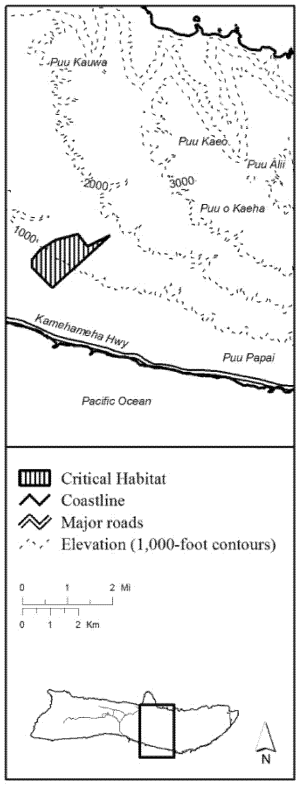
(i) This unit is critical habitat for *Bonamia menziesii*, *Cyperus trachysanthos*, *Eugenia koolauensis*, *Hibiscus brackenridgei*, *Kokia cookei*, and *Sesbania tomentosa*.

(ii) Map of Molokai—Lowland Dry—Unit 2 (Map 6) follows:

Map 6

Molokai—Lowland Dry

Unit 2



(7) Molokai—Lowland Mesic—Unit 1 (8,770 ac, 3,549 ha).

(i) This unit is critical habitat for *Alectryon macrococcus*, *Asplenium dielerectum*, *Bonamia menziesii*, *Canavalia molokaiensis*, *Clermontia oblongifolia* ssp. *brevipes*, *Ctenitis squamigera*, *Cyanea dunbariae*, *Cyanea mannii*, *Cyanea procera*, *Cyanea profuga*, *Cyanea solanacea*, *Cyperus fauriei*, *Cyrtandra filipes*, *Diplazium molokaiense*, *Festuca molokaiensis*, *Flueggea neowawraea*, *Gouania hillebrandii*, *Isodendrion pyrifolium*, *Kadua laxiflora*, *Labordia triflora*, *Melicope mucronulata*, *Melicope munroi*, *Melicope reflexa*, *Neraudia sericea*, *Phyllostegia haliakalae*, *Phyllostegia mannii*, *Phyllostegia pilosa*, *Santalum haleakalae* var. *lanaiense*, *Schiedea lydgatei*, *Schiedea sarmentosa*,

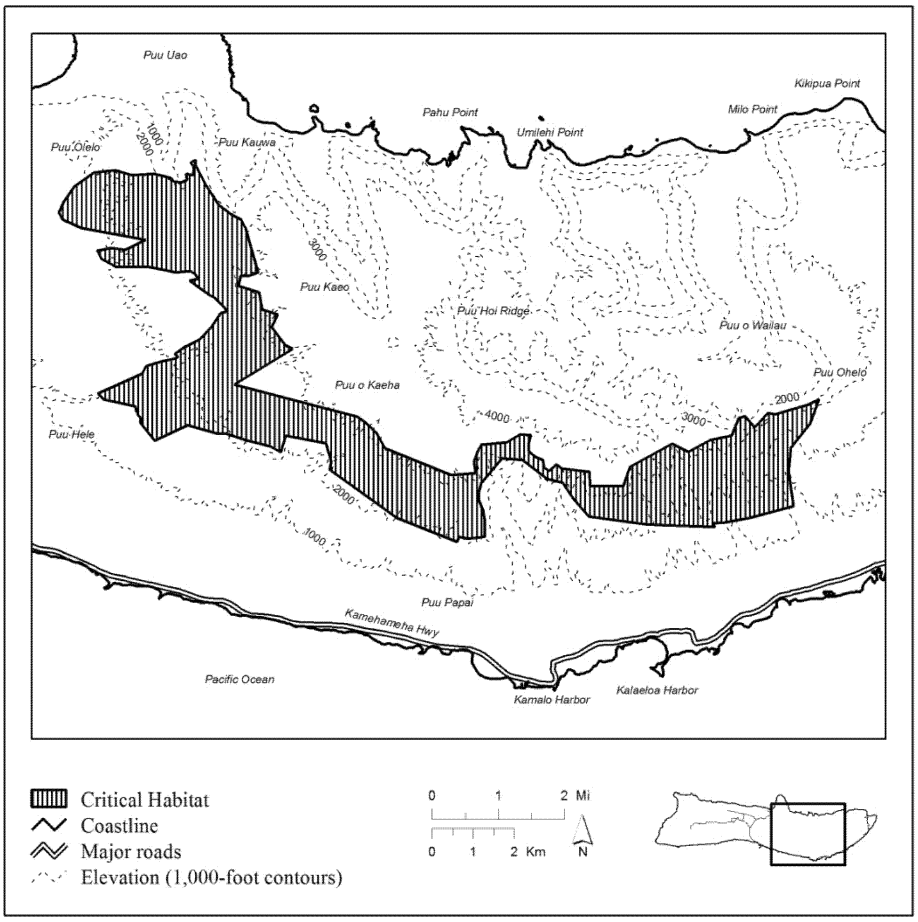
Sesbania tomentosa, *Silene alexandri*, *Silene lanceolata*, *Spermolepis hawaiiensis*, *Stenogyne bifida*, *Vigna o-wahuensis*, and *Zanthoxylum hawaiiense*.

(ii) Map of Molokai—Lowland Mesic—Unit 1 (Map 7) follows:

Map 7

Molokai—Lowland Mesic

Unit 1



(8) Molokai—Lowland Wet—Unit 1 (2,949 ac, 1,193 ha), Molokai—Lowland Wet—Unit 2 (1,950 ac, 789 ha), and Molokai—Lowland Wet—Unit 3 (3,219 ac, 1,303 ha).

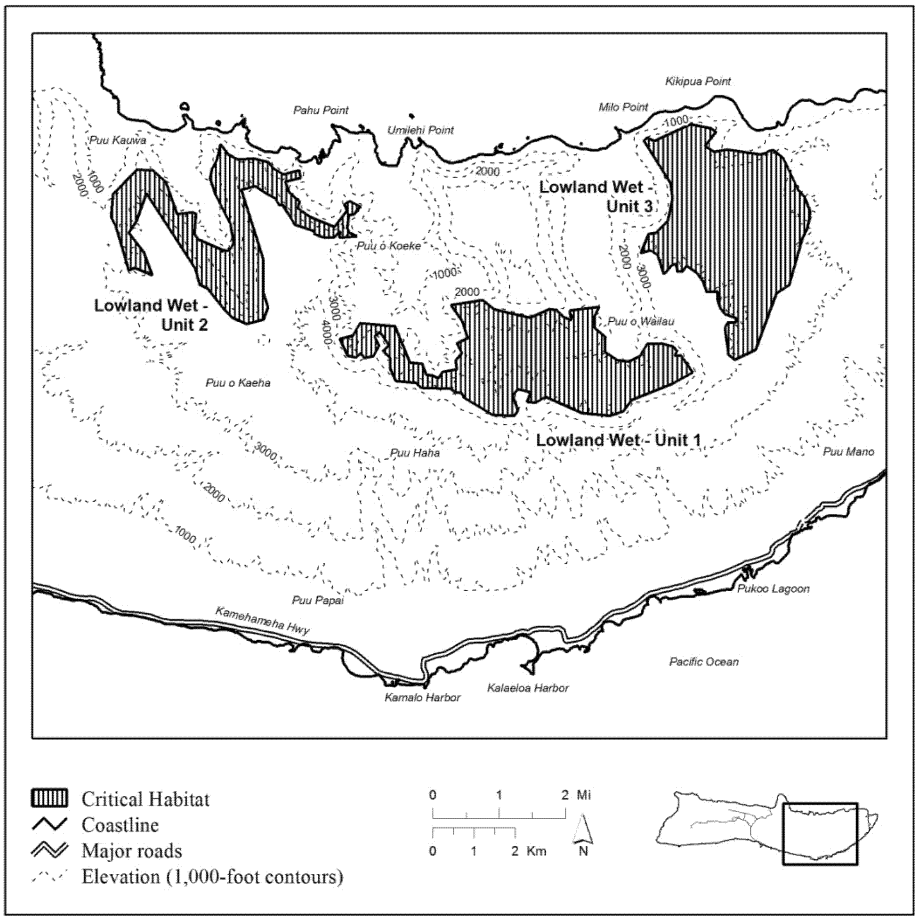
(i) These units are critical habitat for *Asplenium dielerectum*, *Bidens wiebkei*, *Canavalia molokaiensis*, *Clermontia oblongifolia* ssp. *brevipes*, *Cyanea dunbariae*, *Cyanea grimesiana* ssp. *grimesiana*, *Cyanea solanacea*, *Cyrtandra filipes*, *Lysimachia maxima*, *Melicope reflexa*, *Peucedanum sandwicense*, *Phyllostegia hispida*, *Phyllostegia mannii*, *Plantago princeps*, *Stenogyne bifida*, and *Zanthoxylum hawaiiense*.

(ii) Map of Molokai—Lowland Wet—Unit 1, Molokai—Lowland Wet—Unit 2, and Molokai—Lowland Wet—Unit 3 (Map 8) follows

Map 8

Molokai—Lowland Wet

Unit 1, Unit 2, and Unit 3



(9) Molokai—Montane Wet—Unit 1 (3,397 ac, 1,375 ha), Molokai—Montane Wet—Unit 2 (910 ac, 368 ha), and Molokai—Montane Wet—Unit 3 (803 ac, 325 ha).

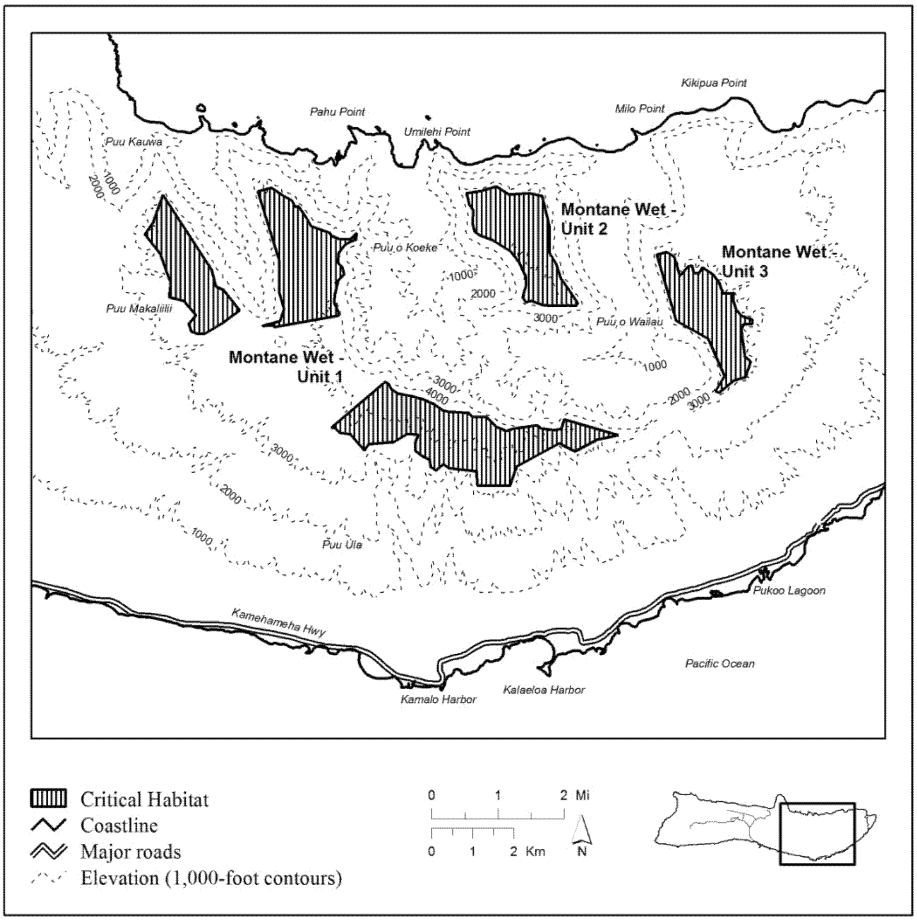
(i) These units are critical habitat for *Adenophorus periens*, *Bidens wiebkei*, *Clermontia oblongifolia* ssp. *brevipes*, *Cyanea mannii*, *Cyanea procera*, *Cyanea profuga*, *Cyanea solanacea*, *Hesperomannia arborescens*, *Lysimachia maxima*, *Melicope reflexa*, *Phyllostegia hispida*, *Phyllostegia mannii*, *Phyllostegia pilosa*, *Platanthera holochila*, *Pteris lidgatei*, *Schiedea laui*, *Stenogyne bifida*, and *Zanthoxylum hawaiiense*.

(ii) Map of Molokai—Montane Wet—Unit 1, Molokai—Montane Wet—Unit 2, and Molokai—Montane Wet—Unit 3 (Map 9) follows:

Map 9

Molokai—Montane Wet

Unit 1, Unit 2, and Unit 3



(10) Molokai—Montane Mesic—Unit 1 (816 ac, 330 ha).

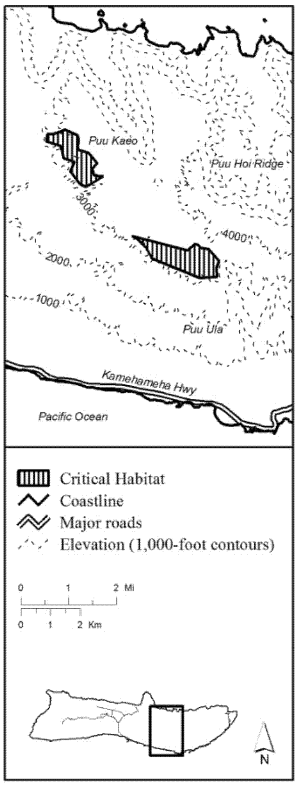
(i) This unit is critical habitat for *Alectryon macrococcus*, *Asplenium dielerectum*, *Bidens wiebkei*, *Cyanea dunbariae*, *Cyanea mannii*, *Cyanea procera*, *Cyanea solanacea*, *Cyperus fauriei*, *Kadua laxiflora*, *Melicope mucronulata*, *Neraudia sericea*, *Plantago princeps*, *Santalum haleakalae* var. *lanaiense*, *Spermolepis hawaiiensis*, and *Stenogyne bifida*.

(ii) Map of Molokai–Montane Mesic—Unit 1 (Map 10) follows:

Map 10

Molokai—Montane Mesic

Unit 1



(11) Molokai—Wet Cliff—Unit 1 (1,607 ac, 651 ha), Molokai—Wet Cliff—Unit 2 (1,268 ac, 513 ha), and Molokai—Wet Cliff—Unit 3 (1,362 ac, 551 ha).

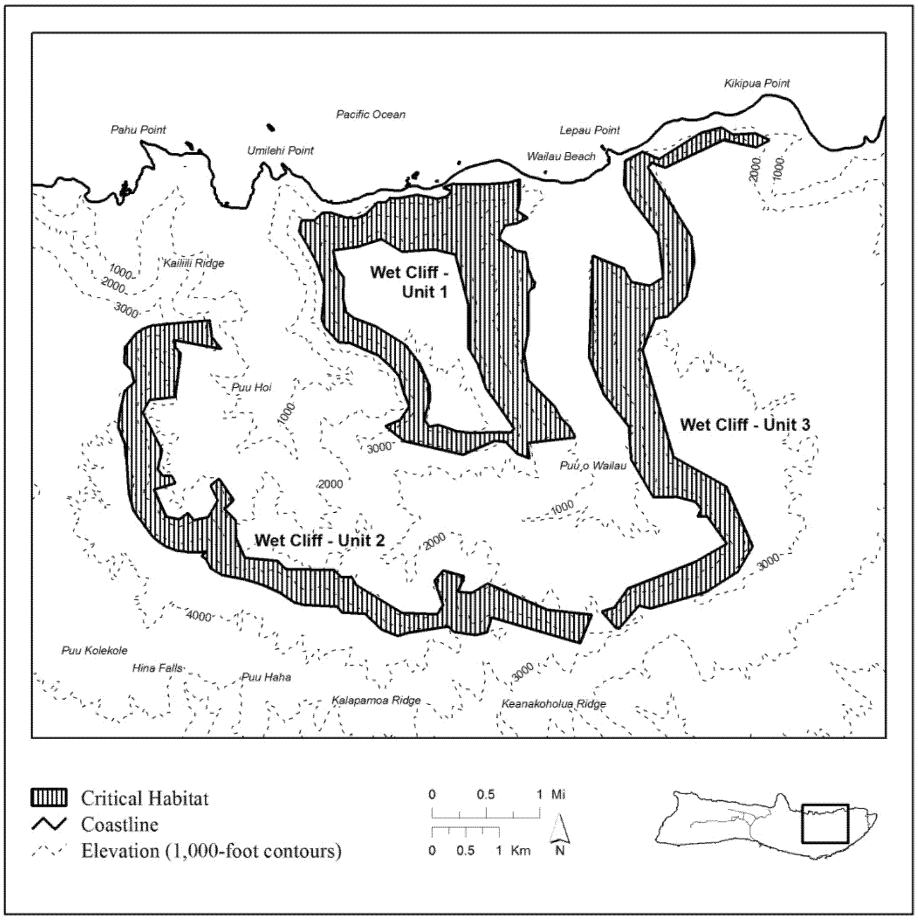
(i) This unit is critical habitat for *Brighamia rockii*, *Canavalia molokaiensis*, *Clermontia oblongifolia* ssp. *brevipes*, *Cyanea grimesiana* ssp. *grimesiana*, *Cyanea munroi*, *Hesperomannia arborescens*, *Hibiscus arnottianus* ssp. *immaculatus*, *Phyllostegia hispida*, *Pteris lidgatei*, and *Stenogyne bifida*.

(ii) Map of Molokai—Wet Cliff—Unit 1, Molokai—Wet Cliff—Unit 2, and Molokai—Wet Cliff—Unit 3 (Map 11) follows:

Map 11

Molokai—Wet Cliff

Unit 1, Unit 2, and Unit 3



(12) OCCUPANCY OF SPECIES BY DESIGNATED CRITICAL HABITAT UNITS FOR MOLOKAI

Unit	Species occupied	Species unoccupied
Molokai—Coastal—Unit 1		*Bidens wiebkei.*
		Brighamia rockii.
		Canavalia molokaiensis.
		Hibiscus arnottianus ssp. *immaculatus.*
		Hibiscus brackenridgei.
		Ischaemum byrone.
	Marsilea villosa.	
		Peucedanum sandwicense.
		Pittosporum halophilum.

(12) OCCUPANCY OF SPECIES BY DESIGNATED CRITICAL HABITAT UNITS FOR MOLOKAI—Continued

Unit	Species occupied	Species unoccupied
Molokai–Coastal—Unit 2	.....	*Schenkia sebaeoides.* *Sesbania tomentosa.* *Tetramolopium rockii.* *Bidens wiebkei.* *Brighamia rockii.* *Canavalia molokaiensis.* *Hibiscus arnottianus* ssp. *immaculatus.* *Hibiscus brackenridgei.* *Ischaemum byrone.*
	Marsilea villosa.	
Molokai—Coastal—Unit 3	.....	*Peucedanum sandwicense.* *Pittosporum halophilum.* *Schenkia sebaeoides.* *Sesbania tomentosa.* *Tetramolopium rockii.* *Bidens wiebkei.* *Brighamia rockii.* *Canavalia molokaiensis.* *Hibiscus arnottianus* ssp. *immaculatus.* *Hibiscus brackenridgei.* *Ischaemum byrone.* *Marsilea villosa.* *Peucedanum sandwicense.*
	Pittosporum halophilum. *Schenkia sebaeoides.*	
		Sesbania tomentosa.
	Tetramolopium rockii.	
Molokai—Coastal—Unit 4	.....	*Bidens wiebkei.* *Brighamia rockii.* *Canavalia molokaiensis.* *Hibiscus arnottianus* ssp. *immaculatus.* *Hibiscus brackenridgei.* *Ischaemum byrone.* *Marsilea villosa.*
	Peucedanum sandwicense. *Pittosporum halophilum.*	
		Schenkia sebaeoides. *Sesbania tomentosa.* *Tetramolopium rockii.*
Molokai—Coastal—Unit 5	.....	*Bidens wiebkei.*
	Brighamia rockii.	
		Canavalia molokaiensis. *Hibiscus arnottianus* ssp. *immaculatus.* *Hibiscus brackenridgei.* *Ischaemum byrone.* *Marsilea villosa.*
	Peucedanum sandwicense. *Pittosporum halophilum.*	
		Schenkia sebaeoides. *Sesbania tomentosa.* *Tetramolopium rockii.*
Molokai—Coastal—Unit 6	*Bidens wiebkei.*	
		Brighamia rockii.
	Canavalia molokaiensis. *Hibiscus arnottianus* ssp. *immaculatus.*	
		Hibiscus brackenridgei.
	Ischaemum byrone.	
		Marsilea villosa. *Peucedanum sandwicense.* *Pittosporum halophilum.* *Schenkia sebaeoides.* *Sesbania tomentosa.* *Tetramolopium rockii.*
Molokai—Coastal—Unit 7	.....	*Bidens wiebkei.* *Brighamia rockii.* *Canavalia molokaiensis.* *Hibiscus arnottianus* ssp. *immaculatus.* *Hibiscus brackenridgei.* *Ischaemum byrone.* *Marsilea villosa.* *Peucedanum sandwicense.* *Pittosporum halophilum.*

(12) OCCUPANCY OF SPECIES BY DESIGNATED CRITICAL HABITAT UNITS FOR MOLOKAI—Continued

Unit	Species occupied	Species unoccupied
		Schenkia sebaeoides.
		Sesbania tomentosa.
		Tetramolopium rockii.
Molokai—Lowland Dry—Unit 1	.....	*Bonamia menziesii.*
		Cyperus trachysanthos.
		Eugenia koolauensis.
		Hibiscus brackenridgei.
		Kokia cookei.
		Sesbania tomentosa.
Molokai—Lowland Dry—Unit 2	.....	*Bonamia menziesii.*
		Cyperus trachysanthos.
		Eugenia koolauensis.
		Hibiscus brackenridgei.
		Kokia cookei.
		Sesbania tomentosa.
Molokai—Lowland Mesic—Unit 1	*Alectryon macrococcus.*	
		Asplenium dielerectum.
		Bonamia menziesii.
		Canavalia molokaiensis.
		Clermontia oblongifolia ssp. *brevipes.*
	Ctenitis squamigera.	
	Cyanea dunbariae.	
	Cyanea mannii.	
		Cyanea procera.
	Cyanea profuga.	
		Cyanea solanacea.
	Cyperus fauriei.	
	Cyrtandra filipes.	
		Diplazium molokaiense.
		Festuca molokaiensis.
		Flueggea neowawraea.
	Gouania hillebrandii.	
		Isodendrion pyrifolium.
		Kadua laxiflora.
	Labordia triflora.	
		Melicope mucronulata.
		Melicope munroi.
		Melicope reflexa.
	Neraudia sericea.	
		Phyllostegia haliakalae.
		Phyllostegia mannii.
		Phyllostegia pilosa.
	Santalum haleakalae var. *lanaiense.*	
	Schiedea lydgatei.	
	Schiedea sarmentosa.	
		Sesbania tomentosa.
	Silene alexandri.	
	Silene lanceolata.	
	Spermolepis hawaiiensis.	
		Stenogyne bifida.
		Vigna o-wahuensis.
	Zanthoxylum hawaiiense.	
Molokai—Lowland Wet—Unit 1		*Asplenium dielerectum.*
		Bidens wiebkei.
		Canavalia molokaiensis.
		Clermontia oblongifolia ssp. *brevipes.*
		Cyanea dunbariae.
		Cyanea grimesiana ssp. *grimesiana.*
		Cyanea solanacea.
	Cyrtandra filipes.	
		Lysimachia maxima.
		Melicope reflexa.
		Peucedanum sandwicense.
		Phyllostegia hispida.
		Phyllostegia mannii.
		Plantago princeps.
		Stenogyne bifida.
		Zanthoxylum hawaiiense.
Molokai—Lowland Wet—Unit 2	.....	*Asplenium dielerectum.*
		Bidens wiebkei.
		Canavalia molokaiensis.
		Clermontia oblongifolia ssp. *brevipes.*

(12) OCCUPANCY OF SPECIES BY DESIGNATED CRITICAL HABITAT UNITS FOR MOLOKAI—Continued

Unit	Species occupied	Species unoccupied
		Cyanea dunbariae.
		Cyanea grimesiana ssp. *grimesiana.*
		Cyanea solanacea.
		Cyrtandra filipes.
	Lysimachia maxima.	
		Melicope reflexa.
		Peucedanum sandwicense.
		Phyllostegia hispida.
		Phyllostegia mannii.
		Plantago princeps.
		Stenogyne bifida.
		Zanthoxylum hawaiiense.
Molokai—Lowland Wet—Unit 3	.....	*Asplenium dielerectum.*
		Bidens wiebkei.
		Canavalia molokaiensis.
		Clermontia oblongifolia ssp. *brevipes.*
		Cyanea dunbariae.
		Cyanea grimesiana ssp. *grimesiana.*
		Cyanea solanacea.
		Cyrtandra filipes.
		Lysimachia maxima.
		Melicope reflexa.
		Peucedanum sandwicense.
		Phyllostegia hispida.
		Phyllostegia mannii.
		Plantago princeps.
		Stenogyne bifida.
		Zanthoxylum hawaiiense.
Molokai—Montane Wet—Unit 1	.....	*Adenophorus periens*
	Bidens wiebkei.	
	Clermontia oblongifolia ssp. *brevipes.*	
	Cyanea mannii.	
		Cyanea procera.
	Cyanea profuga.	
		Cyanea solanacea.
		Hesperomannia arborescens.
		Lysimachia maxima.
		Melicope reflexa.
	Phyllostegia hispida.	
		Phyllostegia mannii.
		Phyllostegia pilosa.
		Platanthera holochila.
	Pteris lidgatei.	
		Schiedea laui.
		Stenogyne bifida.
		Zanthoxylum hawaiiense.
Molokai—Montane Wet—Unit 2	.....	*Adenophorus periens.*
		Bidens wiebkei.
		Clermontia oblongifolia ssp. *brevipes.*
		Cyanea mannii.
		Cyanea procera.
		Cyanea profuga.
		Cyanea solanacea.
		Hesperomannia arborescens.
		Lysimachia maxima.
		Melicope reflexa.
		Phyllostegia hispida.
		Phyllostegia mannii.
		Phyllostegia pilosa.
		Platanthera holochila.
		Pteris lidgatei.
		Schiedea laui.
		Stenogyne bifida.
		Zanthoxylum hawaiiense.
Molokai—Montane Wet—Unit 3	.....	*Adenophorus periens.*
		Bidens wiebkei.
		Clermontia oblongifolia ssp. *brevipes.*
		Cyanea mannii.
		Cyanea procera.
		Cyanea profuga.
		Cyanea solanacea.
		Hesperomannia arborescens.

(12) OCCUPANCY OF SPECIES BY DESIGNATED CRITICAL HABITAT UNITS FOR MOLOKAI—Continued

Unit	Species occupied	Species unoccupied
		Lysimachia maxima.
	Melicope reflexa.	
		Phyllostegia hispida.
		Phyllostegia mannii.
		Phyllostegia pilosa.
		Platanthera holochila.
		Pteris lidgatei.
		Schiedea laui.
		Stenogyne bifida.
		Zanthoxylum hawaiiense.
Molokai—Montane Mesic—Unit 1	*Alectryon macrococcus.*	
		Asplenium dielerectum.
	Bidens wiebkei.	
		Cyanea dunbariae.
		Cyanea mannii.
		Cyanea procera.
		Cyanea solanacea.
		Cyperus fauriei.
		Kadua laxiflora.
		Melicope mucronulata.
		Neraudia sericea.
		Plantago princeps.
	Santalum haleakalae var. *lanaiense.*	
	Spermolepis hawaiiensis.	
		Stenogyne bifida.
Molokai—Wet Cliff—Unit 1	*Brighamia rockii.*	
	Canavalia molokaiensis.	
	Clermontia oblongifolia ssp. *brevipes.*	
		Cyanea grimesiana ssp. *grimesiana.*
	Cyanea munroi.	
		Hesperomannia arborescens.
	Hibiscus arnottianus ssp. *immaculatus.*	
		Phyllostegia hispida.
		Pteris lidgatei.
		Stenogyne bifida.
Molokai—Wet Cliff—Unit 2	.....	*Brighamia rockii.*
		Canavalia molokaiensis.
	Clermontia oblongifolia ssp. *brevipes.*	
		Cyanea grimesiana ssp. *grimesiana.*
		Cyanea munroi.
		Hesperomannia arborescens.
		Hibiscus arnottianus ssp. *immaculatus.*
	Phyllostegia hispida.	
		Pteris lidgatei.
		Stenogyne bifida.
Molokai—Wet Cliff—Unit 3	.....	*Brighamia rockii.*
		Canavalia molokaiensis.
		Clermontia oblongifolia ssp. *brevipes.*
		Cyanea grimesiana ssp. *grimesiana.*
		Cyanea munroi.
		Hesperomannia arborescens.
		Hibiscus arnottianus ssp. *immaculatus.*
		Phyllostegia hispida.
		Pteris lidgatei.
		Stenogyne bifida.

(d) *Plants on Molokai; Constituent elements.*

(1) *Flowering plants.*

FAMILY APIACEAE

Peucedanum sandwicense (MAKOU)

Molokai—Coastal—Unit 1, Molokai—Coastal—Unit 2, Molokai—Coastal—Unit 3, Molokai—Coastal—Unit 4, Molokai—Coastal—Unit 5, Molokai—Coastal—Unit 6, Molokai—Coastal—Unit 7, Molokai—Lowland Wet—Unit 1, Molokai—Lowland Wet—Unit 2, and Molokai—Lowland Wet—Unit 3, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Peucedanum sandwicense* on Molokai.

(i) In units Molokai—Coastal—Unit 1, Molokai—Coastal—Unit 2, Molokai—Coastal—Unit 3, Molokai—Coastal—Unit 4, Molokai—Coastal—Unit 5, Molokai—Coastal—Unit 6, and Molokai—Coastal—Unit 7, the physical and biological features of critical habitat are:

(A) Elevation: Less than 980 ft (300 m).

(B) Annual precipitation: Less than 20 in (50 cm).

(C) Substrate: Well-drained, calcareous, talus slopes; dunes; weathered clay soils; ephemeral pools; mudflats.

(D) Canopy: *Hibiscus*, *Myoporum*, *Santalum*, *Scaevola*.

(E) Subcanopy: *Gossypium*, *Sida*, *Vitex*.

(F) Understory: *Eragrostis*, *Jacquemontia*, *Lyceum*, *Nama*, *Sesuvium*, *Sporobolus*, *Vigna*.

(ii) In units Molokai—Lowland Wet—Unit 1, Molokai—Lowland Wet—Unit 2, and Molokai—Lowland Wet—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

Spermolepis hawaiiensis (NCN)

Molokai—Lowland Mesic—Unit 1 and Molokai—Montane Mesic—Unit 1, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Spermolepis hawaiiensis* on Molokai.

(i) In unit Molokai—Lowland Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In unit Molokai—Montane Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Deep ash deposits, thin silty loams.

(D) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(E) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

(F) Understory: Ferns, *Carex*, *Peperomia*.

FAMILY ASTERACEAE

Bidens wiebkei (KOOKOOLAU)

Molokai—Coastal—Unit 1, Molokai—Coastal—Unit 2, Molokai—Coastal—Unit 3, Molokai—Coastal—Unit 4, Molokai—Coastal—Unit 5, Molokai—Coastal—Unit 6, Molokai—Coastal—Unit 7, Molokai—Lowland Wet—Unit 1, Molokai—Lowland Wet—Unit 2, Molokai—Lowland Wet—Unit 3, Molokai—Montane Wet—Unit 1, Molokai—Montane Wet—Unit 2, Molokai—Montane Wet—Unit 3, and Molokai—Montane Mesic—Unit 1, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Bidens wiebkei* on Molokai.

(i) In units Molokai—Coastal—Unit 1, Molokai—Coastal—Unit 2, Molokai—Coastal—Unit 3, Molokai—Coastal—Unit 4, Molokai—Coastal—Unit 5, Molokai—Coastal—Unit 6, and Molokai—Coastal—Unit 7, the physical and biological features of critical habitat are:

(A) Elevation: Less than 980 ft (300 m).

(B) Annual precipitation: Less than 20 in (50 cm).

(C) Substrate: Well-drained, calcareous, talus slopes; dunes; weathered clay soils; ephemeral pools; mudflats.

(D) Canopy: *Hibiscus*, *Myoporum*, *Santalum*, *Scaevola*.

(E) Subcanopy: *Gossypium*, *Sida*, *Vitex*.

(F) Understory: *Eragrostis*, *Jacquemontia*, *Lyceum*, *Nama*, *Sesuvium*, *Sporobolus*, *Vigna*.

(ii) In units Molokai—Lowland Wet—Unit 1, Molokai—Lowland Wet—Unit 2, and Molokai—Lowland Wet—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(iii) In units Molokai—Montane Wet—Unit 1, Molokai—Montane Wet—Unit 2, and Molokai—Montane Wet—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(iv) In unit Molokai—Montane Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Deep ash deposits, thin silty loams.

(D) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(E) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

(F) Understory: Ferns, *Carex*, *Peperomia*.

Hesperomannia arborescens (NCN)

Molokai—Montane Wet—Unit 1, Molokai—Montane Wet—Unit 2, Molokai—Montane Wet—Unit 3, Molokai—Wet Cliff—Unit 1, Molokai—Wet Cliff—Unit 2, and Molokai—Wet Cliff—Unit 3, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Hesperomannia arborescens* on Molokai.

(i) In units Molokai—Montane Wet—Unit 1, Molokai—Montane Wet—Unit 2, and Molokai—Montane Wet—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(ii) In units Molokai—Wet Cliff—Unit 1, Molokai—Wet Cliff—Unit 2, and Molokai—Wet Cliff—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

Tetramolopium rockii (NCN)

Molokai—Coastal—Unit 1, Molokai—Coastal—Unit 2, Molokai—Coastal—Unit 3, Molokai—Coastal—Unit 4, Molokai—Coastal—Unit 5, Molokai—

Coastal—Unit 6, and Molokai—Coastal—Unit 7, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Tetramolopium rockii* on Molokai. In units Molokai—Coastal—Unit 1, Molokai—Coastal—Unit 2, Molokai—Coastal—Unit 3, Molokai—Coastal—Unit 4, Molokai—Coastal—Unit 5, Molokai—Coastal—Unit 6, and Molokai—Coastal—Unit 7, the physical and biological features of critical habitat are:

(i) Elevation: Less than 980 ft (300 m).

(ii) Annual precipitation: Less than 20 in (50 cm).

(iii) Substrate: Well-drained, calcareous, talus slopes; dunes; weathered clay soils; ephemeral pools; mudflats.

(iv) Canopy: *Hibiscus*, *Myoporum*, *Santalum*, *Scaevola*.

(v) Subcanopy: *Gossypium*, *Sida*, *Vitex*.

(vi) Understory: *Eragrostis*, *Jacquemontia*, *Lyceum*, *Nama*, *Sesuvium*, *Sporobolus*, *Vigna*.

FAMILY CAMPANULACEAE

Brighamia rockii (PUA ALA)

Molokai—Coastal—Unit 1, Molokai—Coastal—Unit 2, Molokai—Coastal—Unit 3, Molokai—Coastal—Unit 4, Molokai—Coastal—Unit 5, Molokai—Coastal—Unit 6, Molokai—Coastal—Unit 7, Molokai—Wet Cliff—Unit 1, Molokai—Wet Cliff—Unit 2, and Molokai—Wet Cliff—Unit 3, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Brighamia rockii* on Molokai.

(i) In units Molokai—Coastal—Unit 1, Molokai—Coastal—Unit 2, Molokai—Coastal—Unit 3, Molokai—Coastal—Unit 4, Molokai—Coastal—Unit 5, Molokai—Coastal—Unit 6, and Molokai—Coastal—Unit 7, the physical and biological features of critical habitat are:

(A) Elevation: Less than 980 ft (300 m).

(B) Annual precipitation: Less than 20 in (50 cm).

(C) Substrate: Well-drained, calcareous, talus slopes; dunes; weathered clay soils; ephemeral pools; mudflats.

(D) Canopy: *Hibiscus*, *Myoporum*, *Santalum*, *Scaevola*.

(E) Subcanopy: *Gossypium*, *Sida*, *Vitex*.

(F) Understory: *Eragrostis*, *Jacquemontia*, *Lyceum*, *Nama*, *Sesuvium*, *Sporobolus*, *Vigna*.

(ii) In units Molokai—Wet Cliff—Unit 1, Molokai—Wet Cliff—Unit 2, and Molokai—Wet Cliff—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

Clermontia oblongifolia ssp. brevipes (OHA WAI)

Molokai—Lowland Mesic—Unit 1, Molokai—Lowland Wet—Unit 1, Molokai—Lowland Wet—Unit 2, Molokai—Lowland Wet—Unit 3, Molokai—Montane Wet—Unit 1, Molokai—Montane Wet—Unit 2, Molokai—Montane Wet—Unit 3, Molokai—Wet Cliff—Unit 1, Molokai—Wet Cliff—Unit 2, and Molokai—Wet Cliff—Unit 3, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Clermontia oblongifolia* ssp. *brevipes* on Molokai.

(i) In unit Molokai—Lowland Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Molokai—Lowland Wet—Unit 1, Molokai—Lowland Wet—Unit 2, and Molokai—Lowland Wet—Unit 3,

the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(iii) In units Molokai—Montane Wet—Unit 1, Molokai—Montane Wet—Unit 2, and Molokai—Montane Wet—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(iv) In units Molokai—Wet Cliff—Unit 1, Molokai—Wet Cliff—Unit 2, and Molokai—Wet Cliff—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

Cyanea dunbariae (HAHA)

Molokai—Lowland Mesic—Unit 1, Molokai—Lowland Wet—Unit 1, Molokai—Lowland Wet—Unit 2, Molokai—Lowland Wet—Unit 3, and Molokai—Montane Mesic—Unit 1, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Cyanea dunbariae* on Molokai.

(i) In unit Molokai—Lowland Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Molokai—Lowland Wet—Unit 1, Molokai—Lowland Wet—Unit 2, and Molokai—Lowland Wet—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(iii) In unit Molokai—Montane Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Deep ash deposits, thin silty loams.

(D) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(E) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

(F) Understory: Ferns, *Carex*, *Peperomia*.

Cyanea grimesiana ssp. grimesiana (HAHA)

Molokai—Lowland Wet—Unit 1, Molokai—Lowland Wet—Unit 2, Molokai—Lowland Wet—Unit 3, Molokai—Wet Cliff—Unit 1, Molokai—Wet Cliff—Unit 2, and Molokai—Wet Cliff—Unit 3, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Cyanea grimesiana* ssp. *grimesiana* on Molokai.

(i) In units Molokai—Lowland Wet—Unit 1, Molokai—Lowland Wet—Unit 2, and Molokai—Lowland Wet—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In units Molokai—Wet Cliff—Unit 1, Molokai—Wet Cliff—Unit 2, and Molokai—Wet Cliff—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

Cyanea mannii (HAHA)

Molokai—Lowland Mesic—Unit 1, Molokai—Montane Wet—Unit 1, Molokai—Montane Wet—Unit 2, Molokai—Montane Wet—Unit 3, and Molokai—Montane Mesic—Unit 1, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Cyanea mannii* on Molokai.

(i) In unit Molokai—Lowland Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Molokai—Montane Wet—Unit 1, Molokai—Montane Wet—Unit 2, and Molokai—Montane Wet—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(iii) In unit Molokai—Montane Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Deep ash deposits, thin silty loams.

(D) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(E) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

(F) Understory: Ferns, *Carex*, *Peperomia*.

Cyanea munroi (HAHA)

Molokai—Wet Cliff—Unit 1, Molokai—Wet Cliff—Unit 2, and Molokai—Wet Cliff—Unit 3, identified in the legal descriptions in paragraph

(c) of this section, constitute critical habitat for *Cyanea munroi* on Molokai. In units Molokai—Wet Cliff—Unit 1, Molokai—Wet Cliff—Unit 2, and Molokai—Wet Cliff—Unit 3, the physical and biological features of critical habitat are:

(i) Elevation: Unrestricted.

(ii) Annual precipitation: Greater than 75 in (190 cm).

(iii) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(iv) Canopy: None.

(v) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(vi) Understory: Bryophytes, ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

Cyanea procera (HAHA)

Molokai—Lowland Mesic—Unit 1, Molokai—Montane Wet—Unit 1, Molokai—Montane Wet—Unit 2, Molokai—Montane Wet—Unit 3, and Molokai—Montane Mesic—Unit 1, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Cyanea procera* on Molokai.

(i) In unit Molokai—Lowland Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Molokai—Montane Wet—Unit 1, Molokai—Montane Wet—Unit 2, and Molokai—Montane Wet—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(iii) In unit Molokai—Montane Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Deep ash deposits, thin silty loams.

(D) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(E) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

(F) Understory: Fern, *Carex*, *Peperomia*.

Cyanea profuga (HAHA)

Molokai—Lowland Mesic—Unit 1, Molokai—Montane Wet—Unit 1, Molokai—Montane Wet—Unit 2, and Molokai—Montane Wet—Unit 3, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Cyanea profuga* on Molokai.

(i) In unit Molokai—Lowland Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Molokai—Montane Wet—Unit 1, Molokai—Montane Wet—Unit 2, and Molokai—Montane Wet—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

Cyanea solanacea (POPOLO, HAHA NUI)

Molokai—Lowland Mesic—Unit 1, Molokai—Lowland Wet—Unit 1, Molokai—Lowland Wet—Unit 2, Molokai—Lowland Wet—Unit 3, Molokai—Montane Wet—Unit 1, Molokai—Montane Wet—Unit 2, Molokai—Montane Wet—Unit 3, and Molokai—Montane Mesic—Unit 1, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Cyanea solanacea* on Molokai.

(i) In unit Molokai—Lowland Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Molokai—Lowland Wet—Unit 1, Molokai—Lowland Wet—Unit 2, and Molokai—Lowland Wet—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(iii) In units Molokai—Montane Wet—Unit 1, Molokai—Montane Wet—Unit 2, and Molokai—Montane Wet—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(iv) In unit Molokai—Montane Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Deep ash deposits, thin silty loams.

(D) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(E) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

(F) Understory: Ferns, *Carex*, *Peperomia*.

FAMILY CARYOPHYLLACEAE

Schiedea laui (NCN)

Molokai—Montane Wet—Unit 1, Molokai—Montane Wet—Unit 2, and Molokai—Montane Wet—Unit 3, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Schiedea laui* on Molokai. In units Molokai—Montane Wet—Unit 1, Molokai—Montane Wet—Unit 2, and Molokai—Montane Wet—Unit 3, the physical and biological features of critical habitat are:

(i) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(ii) Annual precipitation: Greater than 75 in (190 cm).

(iii) Substrate: Well-developed soils, montane bogs.

(iv) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(v) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(vi) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

Schiedea lydgatei (NCN)

Molokai—Lowland Mesic—Unit 1, identified in the legal descriptions in paragraph (c) of this section, constitutes critical habitat for *Schiedea lydgatei* on Molokai. In unit Molokai—Lowland Mesic—Unit 1, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: 50 to 75 in (130 to 190 cm).

(iii) Substrate: Shallow soils, little to no herbaceous layer.

(iv) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(v) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(vi) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

Schiedea sarmentosa (NCN)

Molokai—Lowland Mesic—Unit 1, identified in the legal descriptions in paragraph (c) of this section, constitutes critical habitat for *Schiedea sarmentosa* on Molokai. In unit Molokai—Lowland Mesic—Unit 1, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: 50 to 75 in (130 to 190 cm).

(iii) Substrate: Shallow soils, little to no herbaceous layer.

(iv) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(v) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(vi) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

Silene alexandri (NCN)

Molokai—Lowland Mesic—Unit 1, identified in the legal descriptions in paragraph (c) of this section, constitutes critical habitat for *Silene alexandri* on Molokai. In unit Molokai—Lowland Mesic—Unit 1, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: 50 to 75 in (130 to 190 cm).

(iii) Substrate: Shallow soils, little to no herbaceous layer.

(iv) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(v) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(vi) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

Silene lanceolata (NCN)

Molokai—Lowland Mesic—Unit 1, identified in the legal descriptions in paragraph (c) of this section, constitutes critical habitat for *Silene lanceolata* on Molokai. In unit Molokai—Lowland Mesic—Unit 1, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: 50 to 75 in (130 to 190 cm).

(iii) Substrate: Shallow soils, little to no herbaceous layer.

(iv) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(v) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(vi) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

FAMILY CONVOLVULACEAE

Bonamia menziesii (NCN)

Molokai—Lowland Dry—Unit 1, Molokai—Lowland Dry—Unit 2, and Molokai—Lowland Mesic—Unit 1, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Bonamia menziesii* on Molokai.

(i) In units Molokai—Lowland Dry—Unit 1 and Molokai—Lowland Dry—Unit 2, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Less than 50 in (130 cm).

(C) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(D) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

(ii) In unit Molokai—Lowland Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

FAMILY CYPERACEAE

Cyperus fauriei (NCN)

Molokai—Lowland Mesic—Unit 1 and Molokai—Montane Mesic—Unit 1, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Cyperus fauriei* on Molokai.

(i) In unit Molokai—Lowland Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In unit Molokai—Montane Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Deep ash deposits, thin silty loams.

(D) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(E) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

(F) Understory: Ferns, *Carex*, *Peperomia*.

Cyperus trachysanthos (PUUKAA)

Molokai—Lowland Dry—Unit 1 and Molokai—Lowland Dry—Unit 2, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Cyperus trachysanthos* on Molokai. In units Molokai—Lowland Dry—Unit 1 and Molokai—Lowland Dry—Unit 2, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: Less than 50 in (130 cm).

(iii) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(iv) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*.

(v) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(vi) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

FAMILY EUPHORBIACEAE

Flueggea neowawraea (MEHAMEHAME)

Molokai—Lowland Mesic—Unit 1, identified in the legal descriptions in paragraph (c) of this section, constitutes critical habitat for *Flueggea neowawraea* on Molokai. In unit

Molokai—Lowland Mesic—Unit 1, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: 50 to 75 in (130 to 190 cm).

(iii) Substrate: Shallow soils, little to no herbaceous layer.

(iv) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(v) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(vi) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

FAMILY FABACEAE

Canavalia molokaiensis (AWIKIWIKI)

Molokai—Coastal—Unit 1, Molokai—Coastal—Unit 2, Molokai—Coastal—Unit 3, Molokai—Coastal—Unit 4, Molokai—Coastal—Unit 5, Molokai—Coastal—Unit 6, Molokai—Coastal—Unit 7, Molokai—Lowland Mesic—Unit 1, Molokai—Lowland Wet—Unit 1, Molokai—Lowland Wet—Unit 2, Molokai—Lowland Wet—Unit 3, Molokai—Wet Cliff—Unit 1, Molokai—Wet Cliff—Unit 2, and Molokai—Wet Cliff—Unit 3, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Canavalia molokaiensis* on Molokai.

(i) In units Molokai—Coastal—Unit 1, Molokai—Coastal—Unit 2, Molokai—Coastal—Unit 3, Molokai—Coastal—Unit 4, Molokai—Coastal—Unit 5, Molokai—Coastal—Unit 6, and Molokai—Coastal—Unit 7, the physical and biological features of critical habitat are:

(A) Elevation: Less than 980 ft (300 m).

(B) Annual precipitation: Less than 20 in (50 cm).

(C) Substrate: Well-drained, calcareous, talus slopes; dunes; weathered clay soils; ephemeral pools; mudflats.

(D) Canopy: *Hibiscus*, *Myoporum*, *Santalum*, *Scaevola*.

(E) Subcanopy: *Gossypium*, *Sida*, *Vitex*.

(F) Understory: *Eragrostis*, *Jacquemontia*, *Lyceum*, *Nama*, *Sesuvium*, *Sporobolus*, *Vigna*.

(ii) In unit Molokai—Lowland Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(iii) In units Molokai—Lowland Wet—Unit 1, Molokai—Lowland Wet—Unit 2, and Molokai—Lowland Wet—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(iv) In units Molokai—Wet Cliff—Unit 1, Molokai—Wet Cliff—Unit 2, and Molokai—Wet Cliff—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

Sesbania tomentosa (OHAI)

Molokai—Coastal—Unit 1, Molokai—Coastal—Unit 2, Molokai—Coastal—Unit 3, Molokai—Coastal—Unit 4, Molokai—Coastal—Unit 5, Molokai—Coastal—Unit 6, Molokai—Coastal—Unit 7, Molokai—Lowland Dry—Unit 1,

Molokai—Lowland Dry—Unit 2, and Molokai—Lowland Mesic—Unit 1, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Sesbania tomentosa* on Molokai.

(i) In units Molokai—Coastal—Unit 1, Molokai—Coastal—Unit 2, Molokai—Coastal—Unit 3, Molokai—Coastal—Unit 4, Molokai—Coastal—Unit 5, Molokai—Coastal—Unit 6, and Molokai—Coastal—Unit 7, the physical and biological features of critical habitat are:

(A) Elevation: Less than 980 ft (300 m).

(B) Annual precipitation: Less than 20 in (50 cm).

(C) Substrate: Well-drained, calcareous, talus slopes; dunes; weathered clay soils; ephemeral pools; mudflats.

(D) Canopy: *Hibiscus*, *Myoporum*, *Santalum*, *Scaevola*.

(E) Subcanopy: *Gossypium*, *Sida*, *Vitex*.

(F) Understory: *Eragrostis*, *Jacquemontia*, *Lyceum*, *Nama*, *Sesuvium*, *Sporobolus*, *Vigna*.

(ii) In units Molokai—Lowland Dry—Unit 1 and Molokai—Lowland Dry—Unit 2, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Less than 50 in (130 cm).

(C) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(D) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

(iii) In unit Molokai—Lowland Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

Vigna o-wahuensis (NCN)

Molokai—Lowland Mesic—Unit 1, identified in the legal descriptions in paragraph (c) of this section, constitutes critical habitat for *Vigna o-wahuensis* on Molokai. In unit Molokai—Lowland Mesic—Unit 1, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: 50 to 75 in (130 to 190 cm).

(iii) Substrate: Shallow soils, little to no herbaceous layer.

(iv) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(v) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(vi) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

FAMILY GENTIANACEAE

Schenkia sebaeoides (AWIWI)

Molokai—Coastal—Unit 1, Molokai—Coastal—Unit 2, Molokai—Coastal—Unit 3, Molokai—Coastal—Unit 4, Molokai—Coastal—Unit 5, Molokai—Coastal—Unit 6, and Molokai—Coastal—Unit 7, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Schenkia sebaeoides* on Molokai. In units Molokai—Coastal—Unit 1, Molokai—Coastal—Unit 2, Molokai—Coastal—Unit 3, Molokai—Coastal—Unit 4, Molokai—Coastal—Unit 5, Molokai—Coastal—Unit 6, and Molokai—Coastal—Unit 7, the physical and biological features of critical habitat are:

(i) Elevation: Less than 980 ft (300 m).

(ii) Annual precipitation: Less than 20 in (50 cm).

(iii) Substrate: Well-drained, calcareous, talus slopes; dunes; weathered clay soils; ephemeral pools; mudflats.

(iv) Canopy: *Hibiscus*, *Myoporum*, *Santalum*, *Scaevola*.

(v) Subcanopy: *Gossypium*, *Sida*, *Vitex*.

(vi) Understory: *Eragrostis*, *Jacquemontia*, *Lyceum*, *Nama*, *Sesuvium*, *Sporobolus*, *Vigna*.

FAMILY GESNERIACEAE

Cyrtandra filipes (HAIWALE)

Molokai—Lowland Mesic—Unit 1, Molokai—Lowland Wet—Unit 1, Molokai—Lowland Wet—Unit 2, and Molokai—Lowland Wet—Unit 3, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Cyrtandra filipes* on Molokai.

(i) In unit Molokai—Lowland Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Molokai—Lowland Wet—Unit 1, Molokai—Lowland Wet—Unit 2, and Molokai—Lowland Wet—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

FAMILY LAMIACEAE

Phyllostegia haliakalae (NCN)

Molokai—Lowland Mesic—Unit 1, identified in the legal descriptions in paragraph (c) of this section, constitutes critical habitat for *Phyllostegia haliakalae* on Molokai. In unit Molokai—Lowland Mesic—Unit 1, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: 50 to 75 in (130 to 190 cm).

(iii) Substrate: Shallow soils, little to no herbaceous layer.

(iv) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(v) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(vi) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

Phyllostegia hispida (NCN)

Molokai—Lowland Wet—Unit 1, Molokai—Lowland Wet—Unit 2, Molokai—Lowland Wet—Unit 3, Molokai—Montane Wet—Unit 1, Molokai—Montane Wet—Unit 2, Molokai—Montane Wet—Unit 3, Molokai—Wet Cliff—Unit 1, Molokai—Wet Cliff—Unit 2, and Molokai—Wet Cliff—Unit 3, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Phyllostegia hispida* on Molokai.

(i) In units Molokai—Lowland Wet—Unit 1, Molokai—Lowland Wet—Unit 2, and Molokai—Lowland Wet—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In units Molokai—Montane Wet—Unit 1, Molokai—Montane Wet—Unit 2, and Molokai—Montane Wet—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(iii) In units Molokai—Wet Cliff—Unit 1, Molokai—Wet Cliff—Unit 2, and Molokai—Wet Cliff—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

Phyllostegia mannii (NCN)

Molokai—Lowland Mesic—Unit 1, Molokai—Lowland Wet—Unit 1, Molokai—Lowland Wet—Unit 2, Molokai—Lowland Wet—Unit 3, Molokai—Montane Wet—Unit 1, Molokai—Montane Wet—Unit 2, and Molokai—Montane Wet—Unit 3, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Phyllostegia mannii* on Molokai.

(i) In unit Molokai—Lowland Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Molokai—Lowland Wet—Unit 1, Molokai—Lowland Wet—Unit 2, and Molokai—Lowland Wet—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(iii) In units Molokai—Montane Wet—Unit 1, Molokai—Montane Wet—Unit 2, Molokai—Montane Wet—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

Phyllostegia pilosa (NCN)

Molokai—Lowland Mesic—Unit 1, Molokai—Montane Wet—Unit 1, Molokai—Montane Wet—Unit 2, and Molokai—Montane Wet—Unit 3, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Phyllostegia pilosa* on Molokai.

(i) In unit Molokai—Lowland Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Molokai—Montane Wet—Unit 1, Molokai—Montane Wet—Unit 2, and Molokai—Montane Wet—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*,*Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

Stenogyne bifida (NCN)

Molokai—Lowland Mesic—Unit 1, Molokai—Lowland Wet—Unit 1, Molokai—Lowland Wet—Unit 2, Molokai—Lowland Wet—Unit 3, Molokai—Montane Wet—Unit 1, Molokai—Montane Wet—Unit 2, Molokai—Montane Wet—Unit 3, Molokai—Montane Mesic—Unit 1, Molokai—Wet Cliff—Unit 1, Molokai—Wet Cliff—Unit 2, and Molokai—Wet Cliff—Unit 3, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Stenogyne bifida* on Molokai.

(i) In unit Molokai—Lowland Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Molokai—Lowland Wet—Unit 1, Molokai—Lowland Wet—Unit 2, and Molokai—Lowland Wet—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(iii) In units Molokai—Montane Wet—Unit 1, Molokai—Montane Wet—Unit 2, and Molokai—Montane Wet—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(iv) In unit Molokai—Montane Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Deep ash deposits, thin silty loams.

(D) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(E) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

(F) Understory: Ferns, *Carex*, *Peperomia*.

(v) In units Molokai—Wet Cliff—Unit 1, Molokai—Wet Cliff—Unit 2, and Molokai—Wet Cliff—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

FAMILY LOGANIACEAE

Labordia triflora (KAMAKAHALA)

Molokai—Lowland Mesic—Unit 1, identified in the legal descriptions in paragraph (c) of this section, constitutes critical habitat for *Labordia triflora* on Molokai. In unit Molokai—Lowland Mesic—Unit 1, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: 50 to 75 in (130 to 190 cm).

(iii) Substrate: Shallow soils, little to no herbaceous layer.

(iv) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(v) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(vi) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

FAMILY MALVACEAE

Hibiscus arnottianus ssp. immaculatus (KOKIO KEOKEO)

Molokai—Coastal—Unit 1, Molokai—Coastal—Unit 2, Molokai—Coastal—Unit 3, Molokai—Coastal—Unit 4, Molokai—Coastal—Unit 5, Molokai—Coastal—Unit 6, Molokai—Coastal—Unit 7, Molokai—Wet Cliff—Unit 1, Molokai—Wet Cliff—Unit 2, and Molokai—Wet Cliff—Unit 3, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Hibiscus arnottianus* ssp. *immaculatus* on Molokai.

(i) In units Molokai—Coastal—Unit 1, Molokai—Coastal—Unit 2, Molokai—Coastal—Unit 3, Molokai—Coastal—Unit 4, Molokai—Coastal—Unit 5, Molokai—Coastal—Unit 6, and Molokai—Coastal—Unit 7, the physical and biological features of critical habitat are:

(A) Elevation: Less than 980 ft (300 m).

(B) Annual precipitation: Less than 20 in (50 cm).

(C) Substrate: Well-drained, calcareous, talus slopes; dunes; weathered clay soils; ephemeral pools; mudflats.

(D) Canopy: *Hibiscus*, *Myoporum*, *Santalum*, *Scaevola*.

(E) Subcanopy: *Gossypium*, *Sida*, *Vitex*.

(F) Understory: *Eragrostis*, *Jacquemontia*, *Lyceum*, *Nama*, *Sesuvium*, *Sporobolus*, *Vigna*.

(ii) In units Molokai—Wet Cliff—Unit 1, Molokai—Wet Cliff—Unit 2, and Molokai—Wet Cliff—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

Hibiscus brackenridgei (MAO HAU HELE)

Molokai—Coastal—Unit 1, Molokai—Coastal—Unit 2, Molokai—Coastal—Unit 3, Molokai—Coastal—Unit 4, Molokai—Coastal—Unit 5, Molokai—Coastal—Unit 6, Molokai—Coastal—Unit 7, Molokai—Lowland Dry—Unit 1, and Molokai—Lowland Dry—Unit 2, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Hibiscus brackenridgei* on Molokai.

(i) In units Molokai—Coastal—Unit 1, Molokai—Coastal—Unit 2, Molokai—Coastal—Unit 3, Molokai—Coastal—Unit 4, Molokai—Coastal—Unit 5, Molokai—Coastal—Unit 6, and Molokai—Coastal—Unit 7, the physical and biological features of critical habitat are:

(A) Elevation: Less than 980 ft (300 m).

(B) Annual precipitation: Less than 20 in (50 cm).

(C) Substrate: Well-drained, calcareous, talus slopes; dunes; weathered clay soils; ephemeral pools; mudflats.

(D) Canopy: *Hibiscus*, *Myoporum*, *Santalum*, *Scaevola*.

(E) Subcanopy: *Gossypium*, *Sida*, *Vitex*.

(F) Understory: *Eragrostis*, *Jacquemontia*, *Lyceum*, *Nama*, *Sesuvium*, *Sporobolus*, *Vigna*.

(ii) In units Molokai—Lowland Dry—Unit 1 and Molokai—Lowland Dry—Unit 2, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Less than 50 in (130 cm).

(C) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(D) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

Kokia cookei (COOKE'S KOKIO)

Molokai—Lowland Dry—Unit 1 and Molokai—Lowland Dry—Unit 2, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Kokia cookei* on Molokai. In units Molokai—Lowland Dry—Unit 1 and Molokai—Lowland Dry—Unit 2, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: Less than 50 in (130 cm).

(iii) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(iv) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*.

(v) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(vi) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

FAMILY MYRTACEAE

Eugenia koolauensis (NIOI)

Molokai—Lowland Dry—Unit 1 and Molokai—Lowland Dry—Unit 2, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Eugenia koolauensis* on Molokai. In units Molokai—Lowland Dry—Unit 1 and Molokai—Lowland Dry—Unit 2, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: Less than 50 in (130 cm).

(iii) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(iv) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*.

(v) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(vi) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

FAMILY ORCHIDACEAE

Platanthera holochila (NCN)

Molokai—Montane Wet—Unit 1, Molokai—Montane Wet—Unit 2, and Molokai—Montane Wet—Unit 3, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Platanthera holochila* on Molokai. In units Molokai—Montane Wet—Unit 1, Molokai—Montane Wet—Unit 2, and Molokai—Montane Wet—Unit 3, the physical and biological features of critical habitat are:

(i) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(ii) Annual precipitation: Greater than 75 in (190 cm).

(iii) Substrate: Well-developed soils, montane bogs.

(iv) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(v) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(vi) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

FAMILY PITTOSPORACEAE

Pittosporum halophilum (HOAWA)

Molokai—Coastal—Unit 1, Molokai—Coastal—Unit 2, Molokai—Coastal—Unit 3, Molokai—Coastal—Unit 4, Molokai—Coastal—Unit 5, Molokai—

Coastal—Unit 6, and Molokai—Coastal—Unit 7, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Pittosporum halophilum* on Molokai. In units Molokai—Coastal—Unit 1, Molokai—Coastal—Unit 2, Molokai—Coastal—Unit 3, Molokai—Coastal—Unit 4, Molokai—Coastal—Unit 5, Molokai—Coastal—Unit 6, and Molokai—Coastal—Unit 7, the physical and biological features of critical habitat are:

(i) Elevation: Less than 980 ft (300 m).

(ii) Annual precipitation: Less than 20 in (50 cm).

(iii) Substrate: Well-drained, calcareous, talus slopes; dunes; weathered clay soils; ephemeral pools; mudflats.

(iv) Canopy: *Hibiscus*, *Myoporum*, *Santalum*, *Scaevola*.

(v) Subcanopy: *Gossypium*, *Sida*, *Vitex*.

(vi) Understory: *Eragrostis*, *Jacquemontia*, *Lyceum*, *Nama*, *Sesuvium*, *Sporobolus*, *Vigna*.

FAMILY PLANTAGINACEAE

Plantago princeps (LAUKAHI KUAHIWI)

Molokai—Lowland Wet—Unit 1, Molokai—Lowland Wet—Unit 2, Molokai—Lowland Wet—Unit 3, and Molokai—Montane Mesic—Unit 1, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Plantago princeps* on Molokai.

(i) In units Molokai—Lowland Wet—Unit 1, Molokai—Lowland Wet—Unit 2, and Molokai—Lowland Wet—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In unit Molokai—Montane Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Deep ash deposits, thin silty loams.

(D) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(E) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

(F) Understory: Ferns, *Carex*, *Peperomia*.

FAMILY POACEAE

Festuca molokaiensis (NCN)

Molokai—Lowland Mesic—Unit 1, identified in the legal descriptions in paragraph (c) of this section, constitutes critical habitat for *Festuca molokaiensis* on Molokai. In unit Molokai—Lowland Mesic—Unit 1, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: 50 to 75 in (130 to 190 cm).

(iii) Substrate: Shallow soils, little to no herbaceous layer.

(iv) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(v) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(vi) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

Ischaemum byrone (HILO ISCHAEMUM)

Molokai—Coastal—Unit 1, Molokai—Coastal—Unit 2, Molokai—Coastal—Unit 3, Molokai—Coastal—Unit 4, Molokai—Coastal—Unit 5, Molokai—Coastal—Unit 6, and Molokai—Coastal—Unit 7, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Ischaemum byrone* on Molokai. In units Molokai—Coastal—Unit 1, Molokai—Coastal—Unit 2, Molokai—Coastal—Unit 3, Molokai—Coastal—Unit 4, Molokai—Coastal—Unit 5, Molokai—Coastal—Unit 6, and Molokai—Coastal—Unit 7, the physical and biological features of critical habitat are:

(i) Elevation: Less than 980 ft (300 m).

(ii) Annual precipitation: Less than 20 in (50 cm).

(iii) Substrate: Well-drained, calcareous, talus slopes; dunes; weathered clay soils; ephemeral pools; mudflats.

(iv) Canopy: *Hibiscus*, *Myoporum*, *Santalum*, *Scaevola*.

(v) Subcanopy: *Gossypium*, *Sida*, *Vitex*.

(vi) Understory: *Eragrostis*, *Jacquemontia*, *Lyceum*, *Nama*, *Sesuvium*, *Sporobolus*, *Vigna*.

FAMILY PRIMULACEAE

Lysimachia maxima (NCN)

Molokai—Lowland Wet—Unit 1, Molokai—Lowland Wet—Unit 2, Molokai—Lowland Wet—Unit 3, Molokai—Montane Wet—Unit 1, Molokai—Montane Wet—Unit 2, and Molokai—Montane Wet—Unit 3, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Lysimachia maxima* on Molokai.

(i) In units Molokai—Lowland Wet—Unit 1, Molokai—Lowland Wet—Unit 2, and Molokai—Lowland Wet—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In units Molokai—Montane Wet—Unit 1, Molokai—Montane Wet—Unit 2, and Molokai—Montane Wet—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

FAMILY RHAMNACEAE

Gouania hillebrandii (NCN)

Molokai—Lowland Mesic—Unit 1, identified in the legal descriptions in paragraph (c) of this section, constitutes critical habitat for *Gouania hillebrandii* on Molokai. In unit Molokai—Lowland Mesic—Unit 1, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: 50 to 75 in (130 to 190 cm).

(iii) Substrate: Shallow soils, little to no herbaceous layer.

(iv) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(v) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(vi) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

FAMILY RUBIACEAE

Kadua laxiflora (PILO)

Molokai—Lowland Mesic—Unit 1 and Molokai—Montane Mesic—Unit 1, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Kadua laxiflora* on Molokai.

(i) In unit Molokai—Lowland Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In unit Molokai—Montane Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Deep ash deposits, thin silty loams.

(D) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(E) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

(F) Understory: Ferns, *Carex*, *Peperomia*.

FAMILY RUTACEAE

Melicope mucronulata (ALANI)

Molokai—Lowland Mesic—Unit 1 and Molokai—Montane Mesic—Unit 1, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Melicope mucronulata* on Molokai.

(i) In unit Molokai—Lowland Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In unit Molokai—Montane Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Deep ash deposits, thin silty loams.

(D) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(E) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

(F) Understory: Ferns, *Carex*, *Peperomia*.

Melicope munroi (ALANI)

Molokai—Lowland Mesic—Unit 1, identified in the legal descriptions in paragraph (c) of this section, constitutes critical habitat for *Melicope munroi* on Molokai. In unit Molokai—Lowland Mesic—Unit 1, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: 50 to 75 in (130 to 190 cm).

(iii) Substrate: Shallow soils, little to no herbaceous layer.

(iv) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(v) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(vi) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

Melicope reflexa (ALANI)

Molokai—Lowland Mesic—Unit 1, Molokai—Lowland Wet—Unit 1, Molokai—Lowland Wet—Unit 2, Molokai—Lowland Wet—Unit 3, Molokai—Montane Wet—Unit 1, Molokai—Montane Wet—Unit 2, and Molokai—Montane Wet—Unit 3, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Melicope reflexa* on Molokai.

(i) In unit Molokai—Lowland Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Molokai—Lowland Wet—Unit 1, Molokai—Lowland Wet—Unit 2, and Molokai—Lowland Wet—Unit 3,

the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(iii) In units Molokai—Montane Wet—Unit 1, Molokai—Montane Wet—Unit 2, and Molokai—Montane Wet—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

Zanthoxylum hawaiiense (AE)

Molokai—Lowland Mesic—Unit 1, Molokai—Lowland Wet—Unit 1, Molokai—Lowland Wet—Unit 2, Molokai—Lowland Wet—Unit 3, Molokai—Montane Wet—Unit 1, Molokai—Montane Wet—Unit 2, and Molokai—Montane Wet—Unit 3, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Zanthoxylum hawaiiense* on Molokai.

(i) In unit Molokai—Lowland Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Molokai—Lowland Wet—Unit 1, Molokai—Lowland Wet—Unit 2, and Molokai—Lowland Wet—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(iii) In units Molokai—Montane Wet—Unit 1, Molokai—Montane Wet—Unit 2, and Molokai—Montane Wet—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

FAMILY SANTALACEAE

Santalum haleakalae var. *lanaiense* (LANAI SANDALWOOD, ILIAHI)

Molokai—Lowland Mesic—Unit 1 and Molokai—Montane Mesic—Unit 1, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Santalum haleakalae* var. *lanaiense* on Molokai.

(i) In unit Molokai—Lowland Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In unit Molokai—Montane Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Deep ash deposits, thin silty loams.

(D) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(E) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

(F) Understory: Ferns, *Carex*, *Peperomia*.

FAMILY SAPINDACEAE

Alectryon macrococcus (MAHOE)

Molokai—Lowland Mesic—Unit 1 and Molokai—Montane Mesic—Unit 1, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Alectryon macrococcus* on Molokai.

(i) In unit Molokai—Lowland Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In unit Molokai—Montane Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Deep ash deposits, thin silty loams.

(D) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(E) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

(F) Understory: Ferns, *Carex*, *Peperomia*.

FAMILY URTICACEAE

Neraudia sericea (NCN)

Molokai—Lowland Mesic—Unit 1 and Molokai—Montane Mesic—Unit 1, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Neraudia sericea* on Molokai.

(i) In unit Molokai—Lowland Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In unit Molokai—Montane Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Deep ash deposits, thin silty loams.

(D) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(E) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

(F) Understory: Ferns, *Carex*, *Peperomia*.

FAMILY VIOLACEAE

Isodendrion pyrifolium (WAHINE NOHO KULA)

Molokai—Lowland Mesic—Unit 1, identified in the legal descriptions in paragraph (c) of this section, constitutes critical habitat for *Isodendrion pyrifolium* on Molokai. In unit Molokai—Lowland Mesic—Unit 1, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: 50 to 75 in (130 to 190 cm).

(iii) Substrate: Shallow soils, little to no herbaceous layer.

(iv) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(v) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(vi) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(2) *Ferns and fern allies*.

FAMILY ADIANTACEAE

Pteris lidgatei (NCN)

Molokai—Montane Wet—Unit 1, Molokai—Montane Wet—Unit 2, Molokai—Montane Wet—Unit 3, Molokai—Wet Cliff—Unit 1, Molokai—Wet Cliff—Unit 2, and Molokai—Wet Cliff—Unit 3, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Pteris lidgatei* on Molokai.

(i) In units Molokai—Montane Wet—Unit 1, Molokai—Montane Wet—Unit 2, and Molokai—Montane Wet—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(ii) In units Molokai—Wet Cliff—Unit 1, Molokai—Wet Cliff—Unit 2, and Molokai—Wet Cliff—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

FAMILY ASPLENIACEAE

Asplenium dielerectum (ASPLENIUM-LEAVED DIELLIA)

Molokai—Lowland Mesic—Unit 1, Molokai—Lowland Wet—Unit 1, Molokai—Lowland Wet—Unit 2, Molokai—Lowland Wet—Unit 3, and Molokai—Montane Mesic—Unit 1, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Asplenium dielerectum* on Molokai.

(i) In unit Molokai—Lowland Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Molokai—Lowland Wet—Unit 1, Molokai—Lowland Wet—Unit 2, and Molokai—Lowland Wet—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(iii) In unit Molokai—Montane Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Deep ash deposits, thin silty loams.

(D) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(E) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

(F) Understory: Ferns, *Carex*, *Peperomia*.

Ctenitis squamigera (PAUOA)

Molokai—Lowland Mesic—Unit 1, identified in the legal descriptions in paragraph (c) of this section, constitutes critical habitat for *Ctenitis squamigera* on Molokai. In unit Molokai—Lowland Mesic—Unit 1, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: 50 to 75 in (130 to 190 cm).

(iii) Substrate: Shallow soils, little to no herbaceous layer.

(iv) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(v) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(vi) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

Diplazium molokaiense (NCN)

Molokai—Lowland Mesic—Unit 1, identified in the legal descriptions in paragraph (c) of this section, constitutes critical habitat for *Diplazium molokaiense* on Molokai. In unit Molokai—Lowland Mesic—Unit 1, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: 50 to 75 in (130 to 190 cm).

(iii) Substrate: Shallow soils, little to no herbaceous layer.

(iv) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(v) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(vi) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

FAMILY GRAMMITIDACEAE

Adenophorus periens (PENDANT KIHI FERN)

Molokai—Montane Wet—Unit 1, Molokai—Montane Wet—Unit 2, and Molokai—Montane Wet—Unit 3, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Adenophorus periens* on Molokai. In units Molokai—Montane Wet—Unit 1, Molokai—Montane Wet—Unit 2, and Molokai—Montane Wet—Unit 3, the physical and biological features of critical habitat are:

(i) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(ii) Annual precipitation: Greater than 75 in (190 cm).

(iii) Substrate: Well-developed soils, montane bogs.

(iv) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(v) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(vi) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

FAMILY MARSILEACEAE

Marsilea villosa (IHI IHI)

Molokai—Coastal—Unit 1, Molokai—Coastal—Unit 2, Molokai—Coastal—Unit 3, Molokai—Coastal—Unit 4, Molokai—Coastal—Unit 5, Molokai—Coastal—Unit 6, and Molokai—Coastal—Unit 7, identified in the legal descriptions in paragraph (c) of this section, constitute critical habitat for *Marsilea villosa* on Molokai. In units

Molokai—Coastal—Unit 1, Molokai—Coastal—Unit 2, Molokai—Coastal—Unit 3, Molokai—Coastal—Unit 4, Molokai—Coastal—Unit 5, Molokai—Coastal—Unit 6, and Molokai—Coastal—Unit 7, the physical and biological features of critical habitat are:

(i) Elevation: Less than 980 ft (300 m).

(ii) Annual precipitation: Less than 20 in (50 cm).

(iii) Substrate: Well-drained, calcareous, talus slopes; dunes; weathered clay soils; ephemeral pools; mudflats.

(iv) Canopy: *Hibiscus*, *Myoporum*, *Santalum*, *Scaevola*.

(v) Subcanopy: *Gossypium*, *Sida*, *Vitex*.

(vi) Understory: *Eragrostis*, *Jacquemontia*, *Lyceum*, *Nama*, *Sesuvium*, *Sporobolus*, *Vigna*.

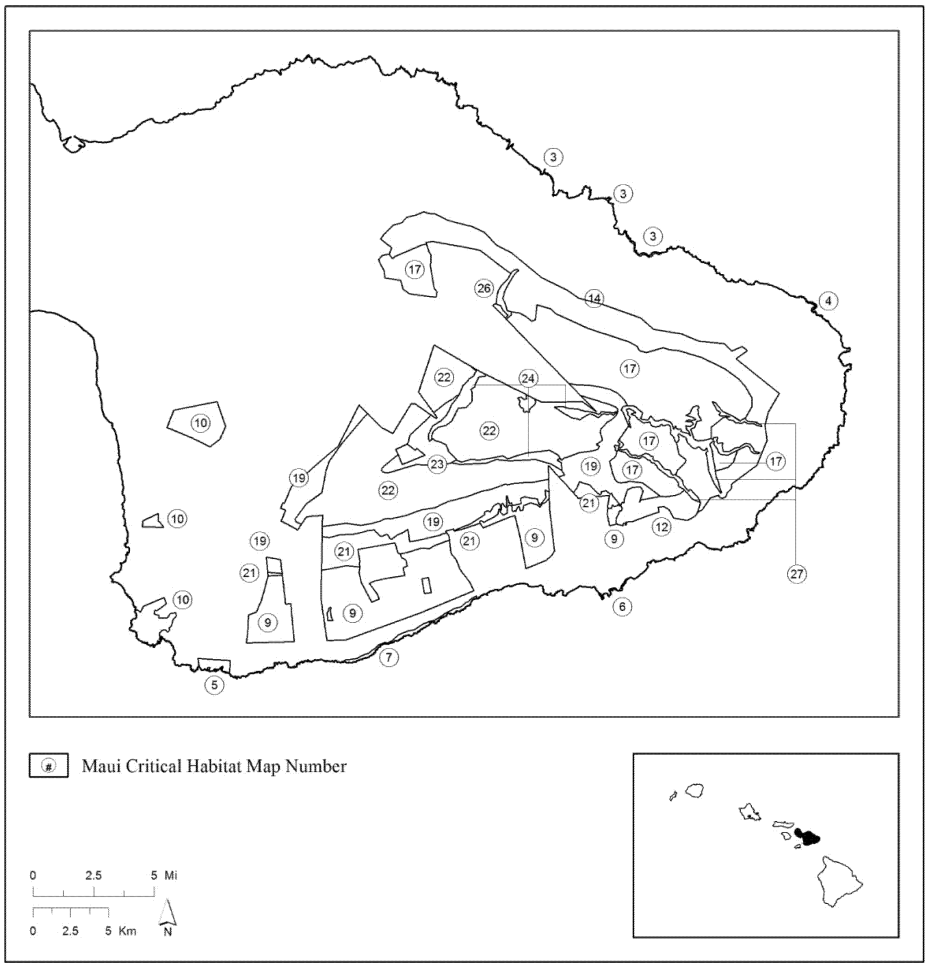
(e) *Maps and critical habitat unit descriptions for the islands of Maui and Kahoolawe, HI.*

(1) *Maui*. Critical habitat units are described below. Coordinates are in UTM Zone 4 with units in meters using North American Datum of 1983 (NAD83). The following maps show the locations of the critical habitat units designated on the island of Maui. Existing manmade features and structures, such as buildings, roads, railroads, airports, runways, other paved areas, lawns, and other urban landscaped areas, do not contain one or more of the physical and biological features. Federal actions limited to those areas, therefore, would not trigger a consultation under section 7 of the Act unless they may affect the species or physical or biological features in adjacent critical habitat.

(i) NOTE: Map 1—East Maui Index map follows:

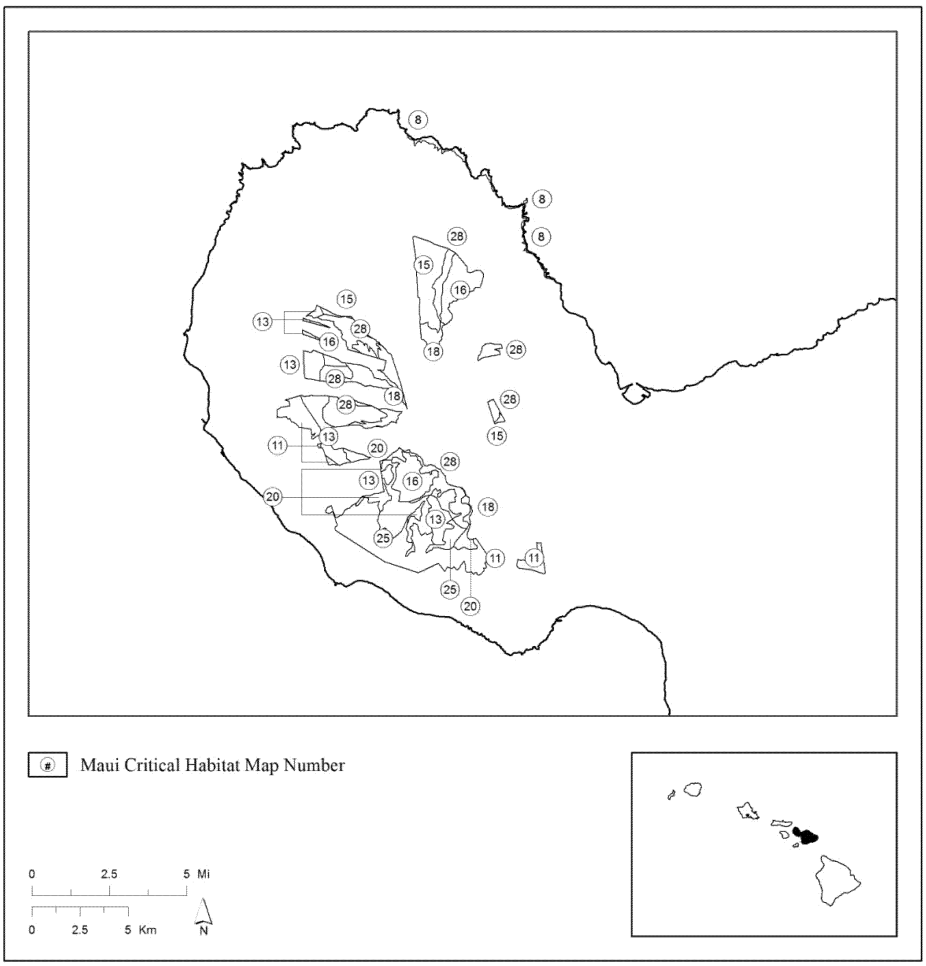
Map 1

Maui Critical Habitat—East Maui Index Map



Map 2

Maui Critical Habitat—West Maui Index Map



(ii) NOTE: Map 2—West Maui Index map follow:

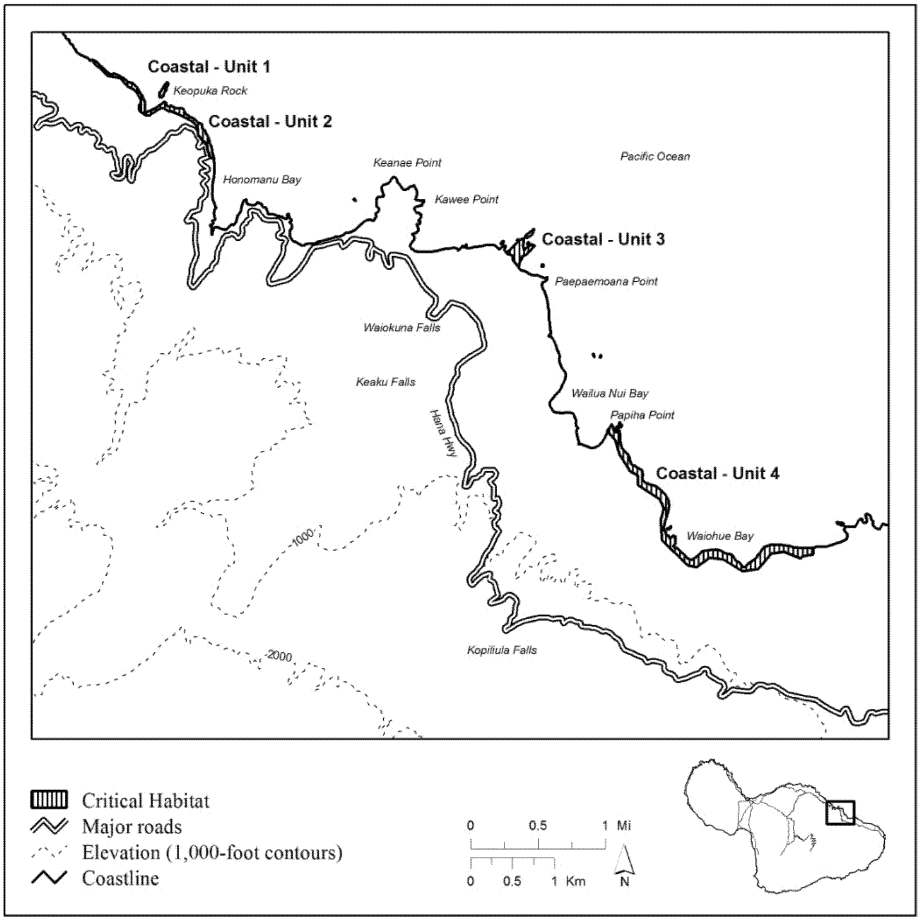
(iii) Maui—Coastal—Unit 1 (2 ac, 1 ha), Maui—Coastal—Unit 2 (25 ac, 10 ha), Maui—Coastal—Unit 3 (10 ac, 4 ha), and Maui—Coastal—Unit 4 (74 ac, 30 ha).

(A) These units are critical habitat for *Brighamia rockii*, *Cyperus pennatiformis*, *Ischaemum byrone*, *Peucedanum sandwicense*, and *Vigna o-wahuensis*.

(B) Map of Maui—Coastal—Unit 1, Maui—Coastal—Unit 2, Maui—Coastal—Unit 3, and Maui—Coastal—Unit 4 (Map 3) follows:

Map 3

Maui—Coastal Unit 1, Unit 2, Unit 3, and Unit 4



(iv) Maui—Coastal—Unit 5 (26 ac, 11 ha).

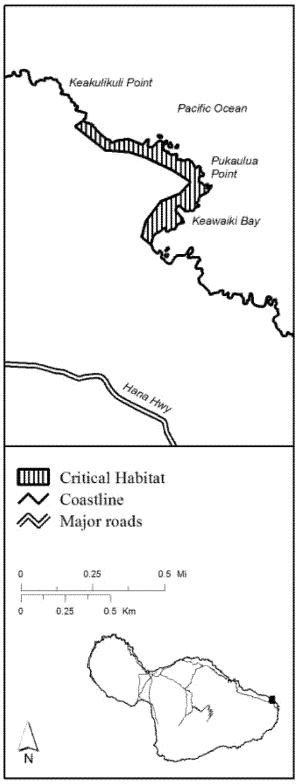
(A) This unit is critical habitat for *Brighamia rockii*, *Cyperus pennatiformis*, *Ischaemum byrone*, *Peucedanum sandwicense*, and *Vigna o-wahuensis*.

(B) Map of Maui—Coastal—Unit 5 (Map 4) follows:

Map 4

Maui—Coastal

Unit 5



(v) Maui—Coastal—Unit 6 (356 ac, 144 ha).

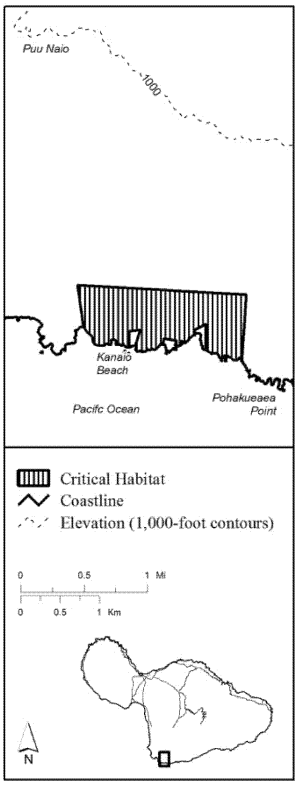
(A) This unit is critical habitat for *Brighamia rockii*, *Cyperus pennatiformis*, *Ischaemum byrone*, *Peucedanum sandwicense*, and *Vigna o-wahuensis*.

(B) Map of Maui—Coastal—Unit 6 (Map 5) follows:

Map 5

Maui—Coastal

Unit 6



(vi) Maui—Coastal—Unit 7 (46 ac, 19 ha).

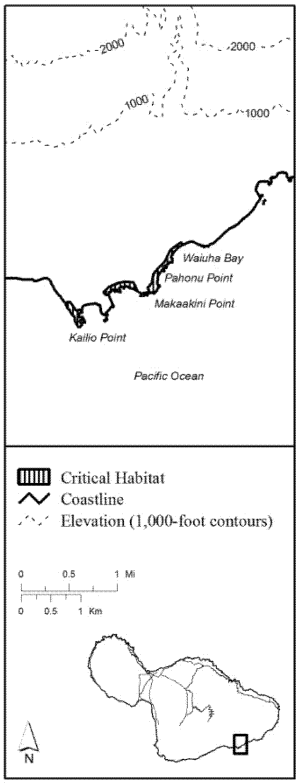
(A) This unit is critical habitat for *Brighamia rockii*, *Cyperus pennatiformis*, *Ischaemum byrone*, *Peucedanum sandwicense*, and *Vigna o-wahuensis*.

(B) Map of Maui—Coastal—Unit 7 (Map 6) follows:

Map 6

Maui—Coastal

Unit 7



(vii) Maui—Coastal—Unit 8 (493 ac, 200 ha).

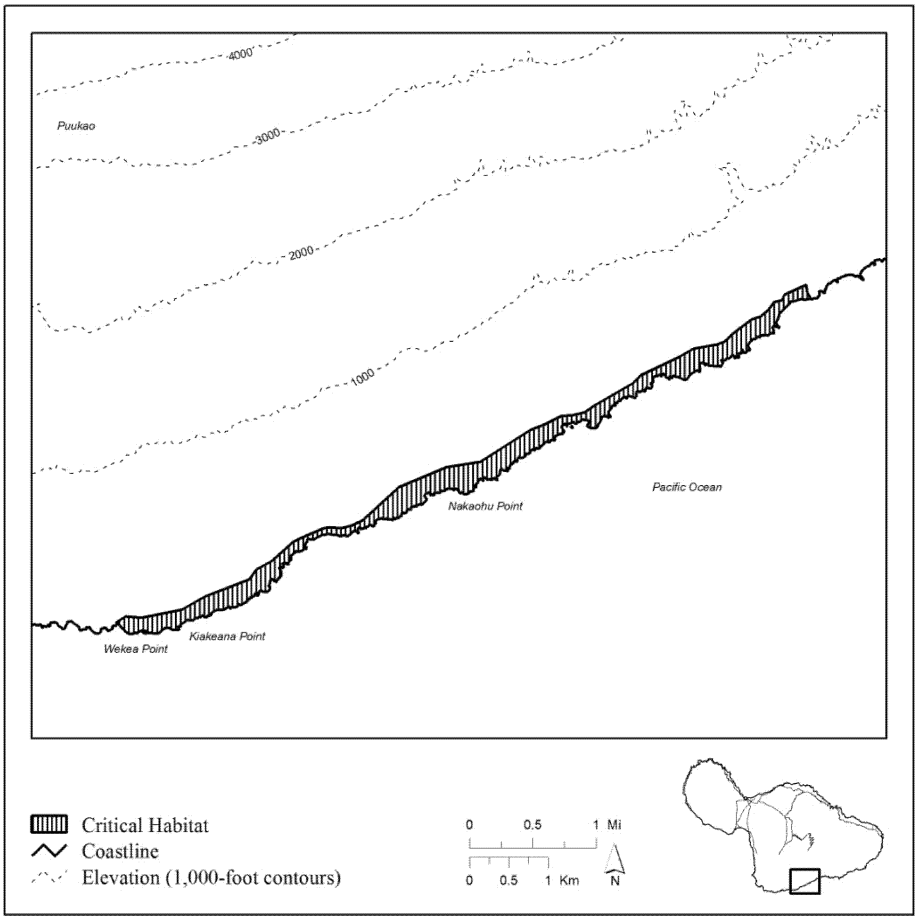
(A) This unit is critical habitat for *Brighamia rockii*, *Cyperus pennatiformis*, *Ischaemum byrone*, *Peucedanum sandwicense*, and *Vigna o-wahuensis*.

(B) Map of Maui—Coastal—Unit 8 (Map 7) follows:

Map 7

Maui—Coastal

Unit 8



(viii) Maui—Coastal—Unit 9 (170 ac, 69 ha), Maui—Coastal—Unit 10 (173 ac, 70 ha), and Maui—Coastal—Unit 11 (6 ac, 3 ha).

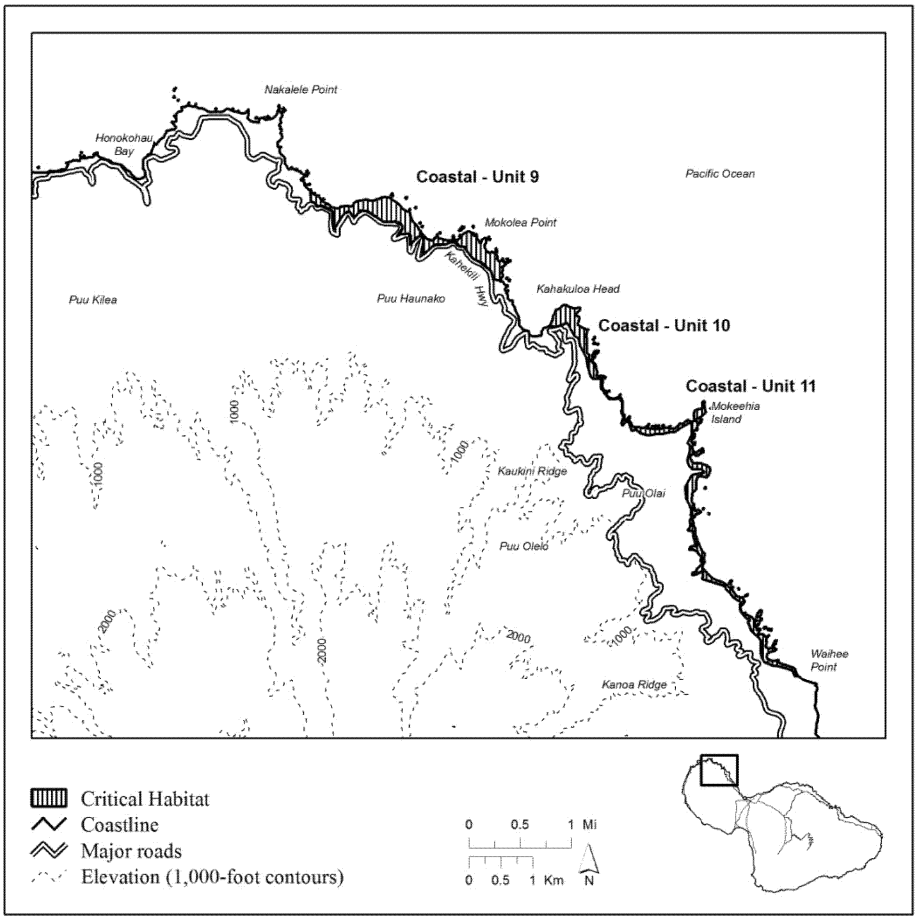
(A) These units are critical habitat for *Brighamia rockii*, *Schenkia sebaeoides*, and *Sesbania tomentosa*.

(B) Map of Maui—Coastal—Unit 9, Maui—Coastal—Unit 10, and Maui—Coastal—Unit 11 (Map 8) follows:

Map 8

Maui—Coastal

Unit 9, Unit 10, and Unit 11



(ix) Maui—Lowland Dry—Unit 1 (13,537 ac, 5,478 ha).

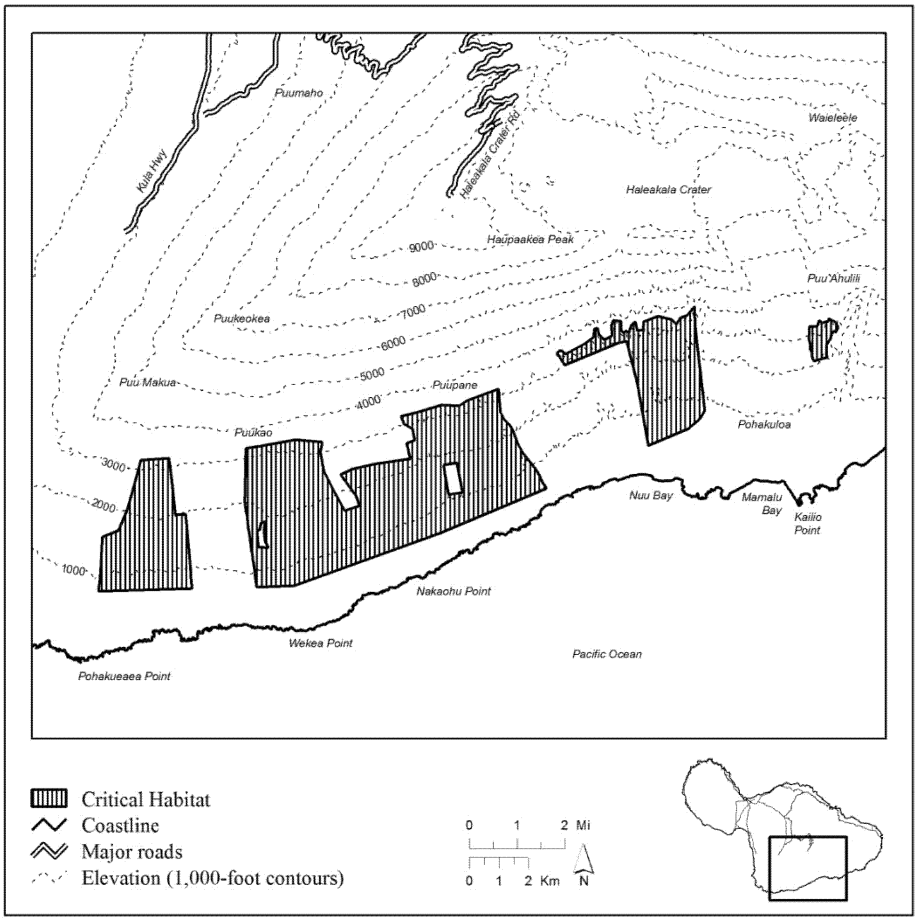
(A) This unit is critical habitat for *Alectryon macrococcus*, *Bidens micrantha* ssp. *kalealaha*, *Bonamia menziesii*, *Canavalia pubescens*, *Cenchrus agrimonioides*, *Colubrina oppositifolia*, *Ctenitis squamigera*, *Flueggea neowawraea*, *Hibiscus brackenridgei*, *Melanthera kamolensis*, *Melicope adscendens*, *Melicope mucronulata*, *Neraudia sericea*, *Nototrichium humile*, *Santalum haleakalae* var. *lanaiense*, *Sesbania tomentosa*, *Solanum incompletum*, *Spermolepis hawaiiensis*, and *Zanthoxylum hawaiiense*.

(B) Map of Maui—Lowland Dry—Unit 1 (Map 9) follows:

Map 9

Maui—Lowland Dry

Unit 1



(x) Maui—Lowland Dry—Unit 2 (1,851 ac, 749 ha), Maui—Lowland Dry—Unit 3 (188 ac, 76 ha), and Maui—Lowland Dry—Unit 4 (1,266 ac, 512 ha).

(A) Maui—Lowland Dry—Unit 2 is critical habitat for *Alectryon macrococcus*, *Bidens micrantha* ssp. *kalealaha*, *Bonamia menziesii*, *Canavalia pubescens*, *Cenchrus agrimonioides*, *Colubrina oppositifolia*, *Ctenitis squamigera*, *Flueggea neowawraea*, *Hibiscus brackenridgei*, *Melanthera kamolensis*, *Melicope mucronulata*, *Neraudia sericea*, *Nototrichium humile*, *Santalum haleakalae* var. *lanaiense*, *Sesbania tomentosa*, *Solanum incompletum*, *Spermolepis hawaiiensis*, and *Zanthoxylum hawaiiense*.

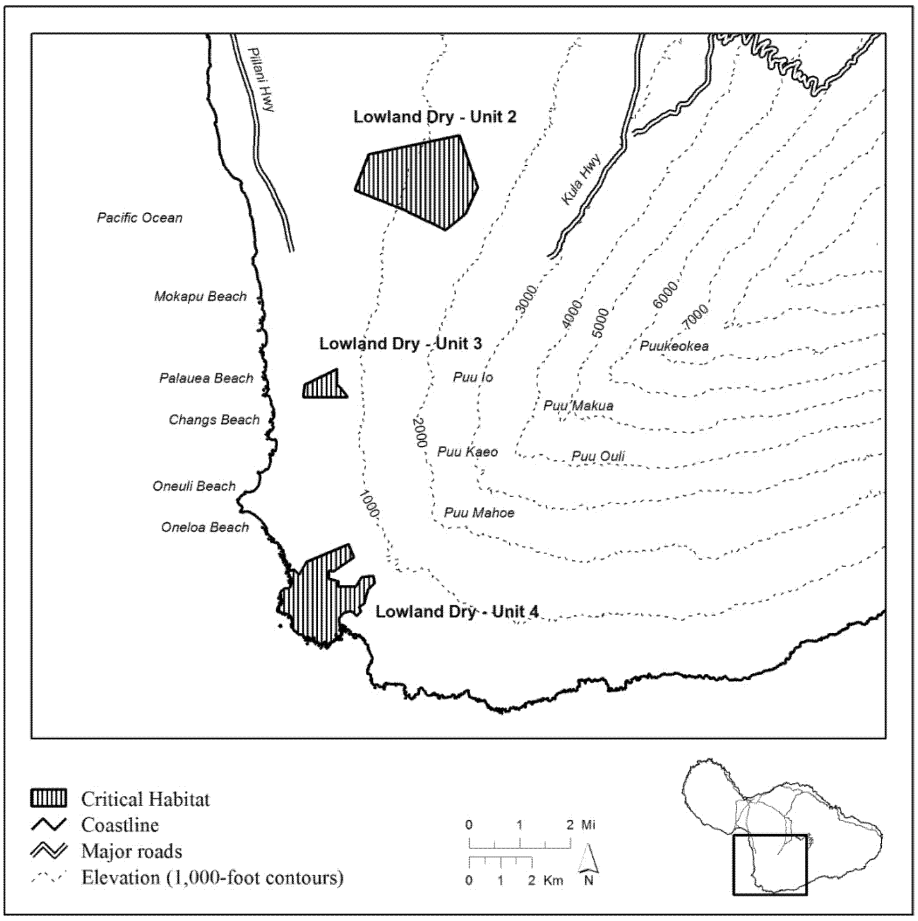
(B) Maui—Lowland Dry—Unit 3 and Maui—Lowland Dry—Unit 4 are critical habitat for *Bidens micrantha* ssp. *kalealaha*, *Bonamia menziesii*, *Canavalia pubescens*, *Cenchrus agrimonioides*, *Colubrina oppositifolia*, *Ctenitis squamigera*, *Flueggea neowawraea*, *Hibiscus brackenridgei*, *Melanthera kamolensis*, *Melicope mucronulata*, *Neraudia sericea*, *Nototrichium humile*, *Santalum haleakalae* var. *lanaiense*, *Sesbania tomentosa*, *Solanum incompletum*, *Spermolepis hawaiiensis*, and *Zanthoxylum hawaiiense*.

(C) Map of Maui—Lowland Dry—Unit 2, Maui—Lowland Dry—Unit 3, and Maui—Lowland Dry—Unit 4 (Map 10) follows:

Map 10

Maui—Lowland Dry

Unit 2, Unit 3, and Unit 4



(xi) Maui—Lowland Dry—Unit 5 (3,658 ac, 1,480 ha) and Maui—Lowland Dry—Unit 6 (240 ac, 97 ha).

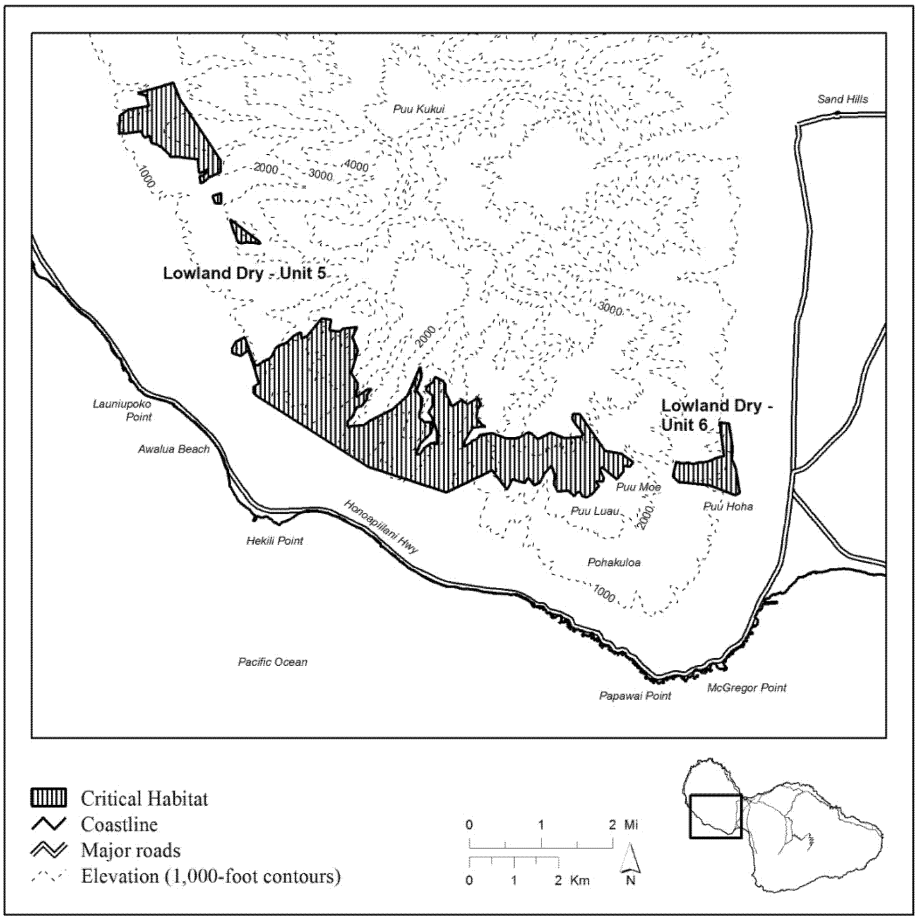
(A) These units are critical habitat for *Asplenium dielerectum*, *Bidens campylotheca* ssp. *pentamera*, *Cenchrus agrimonioides*, *Ctenitis squamigera*, *Cyanea obtusa*, *Gouania hillebrandii*, *Hesperomannia arbuscula*, *Hibiscus brackenridgei*, *Kadua coriacea*, *Lysimachia lydgatei*, *Neraudia sericea*, *Remya mauiensis*, *Santalum haleakalae* var. *lanaiense*, *Schiedea salicaria*, *Sesbania tomentosa*, *Spermolepis hawaiiensis*, *Tetramolopium capillare*, and *Tetramolopium remyi*.

(B) Map of Maui—Lowland Dry—Unit 5 and Maui—Lowland Dry—Unit 6 (Map 11) follows:

Map 11

Maui—Lowland Dry

Unit 5 and Unit 6



(xii) Maui—Lowland Mesic—Unit 1 (1,882 ac, 762 ha).

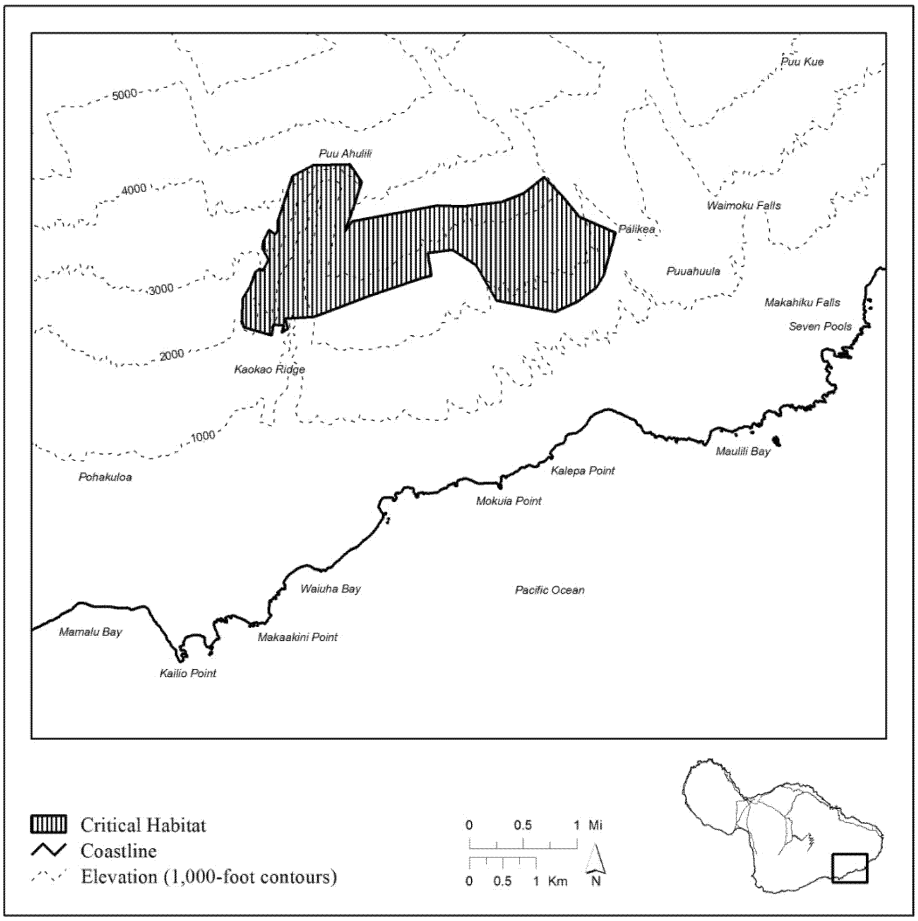
(A) This unit is critical habitat for *Ctenitis squamigera*, *Cyanea asplenifolia*, *Cyanea copelandii* ssp. *haleakalaensis*, *Huperzia mannii*, and *Solanum incompletum*.

(B) Map of Maui—Lowland Mesic—Unit 1 (Map 12) follows:

Map 12

Maui—Lowland Mesic

Unit 1



(xiii) Maui—Lowland Mesic—Unit 2 (1,147 ac, 464 ha) and Maui—Lowland Mesic—Unit 3 (477 ac, 193 ha).

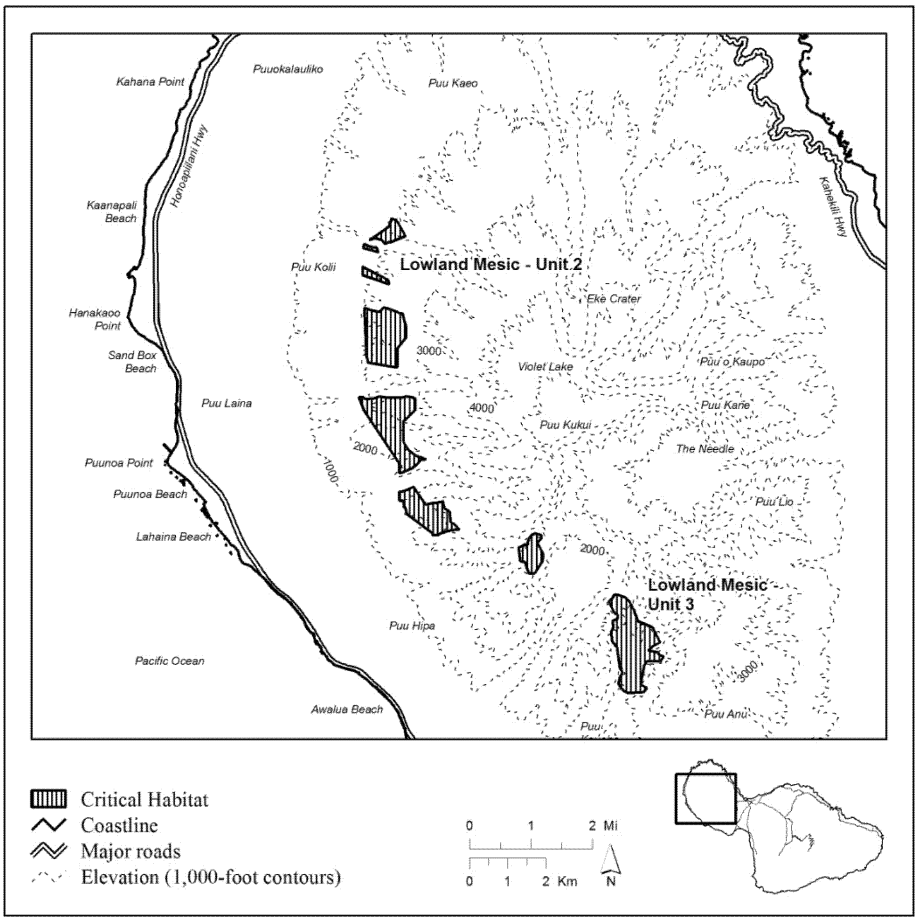
(A) These units are critical habitat for *Asplenium dielerectum*, *Bidens campylotheca* ssp. *pentamera*, *Colubrina oppositifolia*, *Ctenitis squamigera*, *Remya mauiensis*, *Santalum haleakalae* var. *lanaiense*, and *Zanthoxylum hawaiiense*.

(B) Map of Maui—Lowland Mesic—Unit 2 and Maui—Lowland Mesic—Unit 3 (Map 13) follows:

Map 13

Maui—Lowland Mesic

Unit 2 and Unit 3



(xiv) Maui—Lowland Wet—Unit 1 (16,079 ac, 6,507 ha).

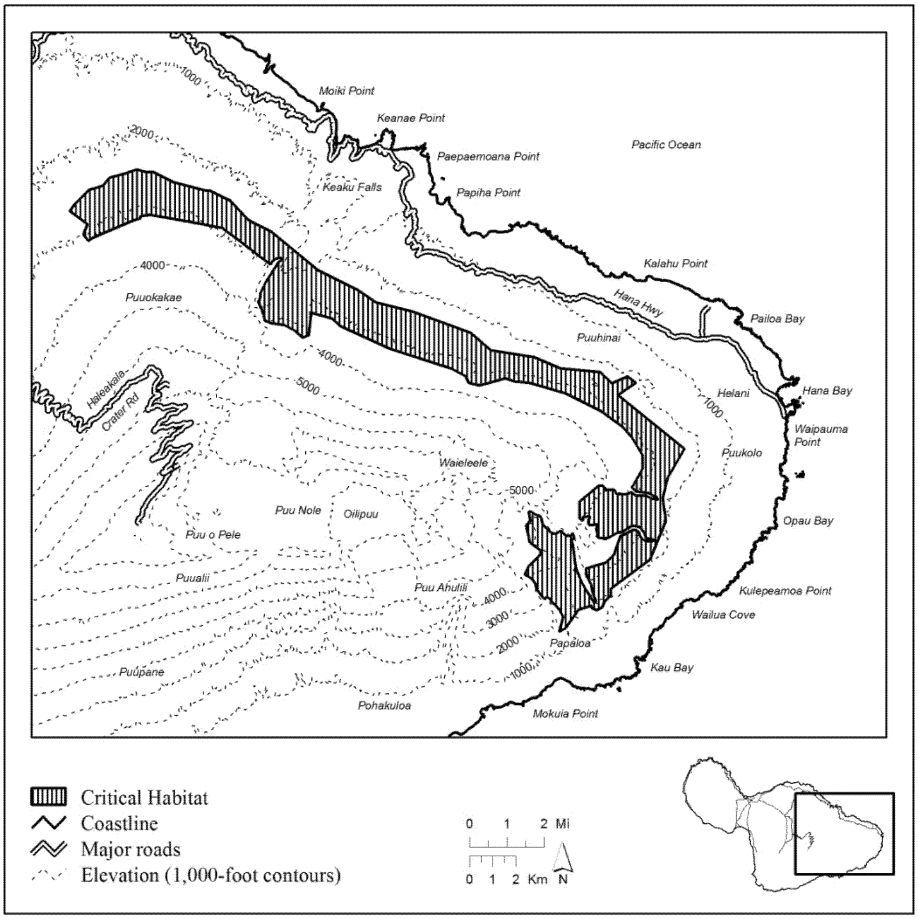
(A) This unit is critical habitat for *Bidens campylotheca* ssp. *waihoiensis*, *Clermontia oblongifolia* ssp. *mauiensis*, *Clermontia peleana*, *Clermontia samuelii*, *Cyanea asplenifolia*, *Cyanea copelandii* ssp. *haleakalaensis*, *Cyanea duvalliorum*, *Cyanea hamatiflora* ssp. *hamatiflora*, *Cyanea kunthiana*, *Cyanea maritae*, *Cyanea mceldowneyi*, *Huperzia mannii*, *Melicope balloui*, *Melicope ovalis*, *Mucuna sloanei* var. *persericea*, *Phyllostegia haliakalae*, and *Wikstroemia villosa*.

(B) Map of Maui—Lowland Wet—Unit 1 (Map 14) follows:

Map 14

Maui—Lowland Wet

Unit 1



(xv) Maui—Lowland Wet—Unit 2 (65 ac, 26 ha), Maui—Lowland Wet—Unit 3 (1,247 ac, 505 ha), Maui—Lowland Wet––Unit 4 (864 ac, 350 ha), and Maui—Lowland Wet—Unit 6 (136 ac, 55 ha).

(A) This unit is critical habitat for *Alectryon macrococcus*, *Asplenium dielerectum*, *Bidens conjuncta*, *Bidens micrantha* ssp. *kalealaha*, *Clermontia oblongifolia* ssp. *mauiensis*, *Ctenitis squamigera*, *Cyanea asplenifolia*, *Cyanea glabra*, *Cyanea kunthiana*, *Cyanea lobata*, *Cyanea magnicalyx*, *Cyrtandra filipes*, *Cyrtandra munroi*, *Diplazium molokaiense*, *Hesperomannia arborescens*, *Hesperomannia arbuscula*, *Huperzia mannii*, *Isodendrion pyrifolium*, *Kadua laxiflora*, *Peucedanum sandwicense*,

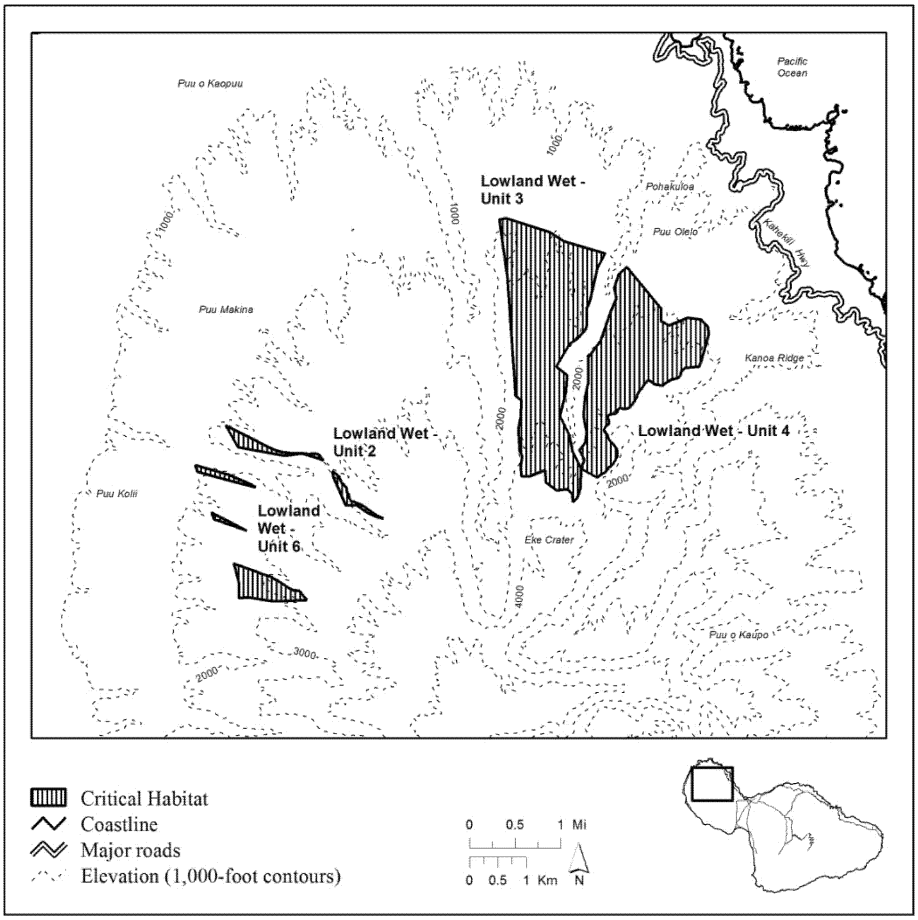
Phyllostegia bracteata, *Pteris lidgatei*, *Remya mauiensis*, *Santalum haleakalae* var. *lanaiense*, and *Wikstroemia villosa*.

(B) Map of Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—–Lowland Wet—Unit 4, and Maui—Lowland Wet—Unit 6 (Map 15) follows:

Map 15

Maui—Lowland Wet

Unit 2, Unit 3, Unit 4, and Unit 6



(xvi) Maui—Lowland Wet—Unit 5 (30 ac, 12 ha), Maui—Lowland Wet—Unit 7 (898 ac, 364 ha), and Maui—Lowland Wet—Unit 8 (230 ac, 93 ha).

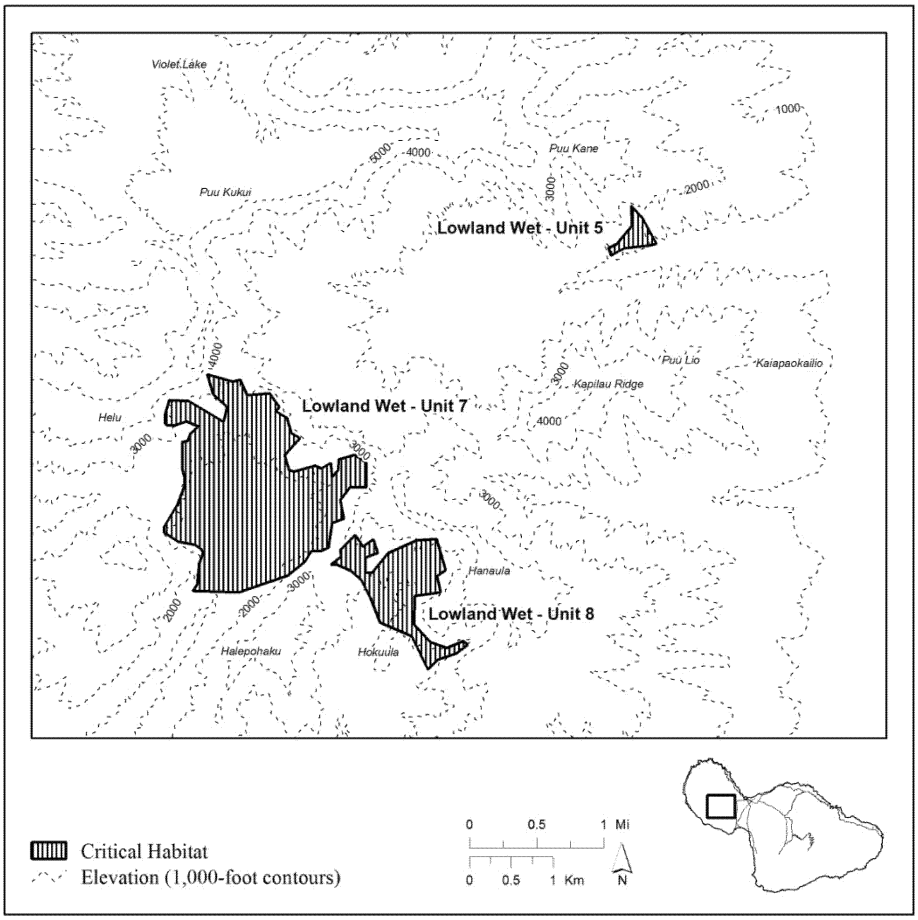
(A) These units are critical habitat for *Alectryon macrococcus*, *Asplenium dielerectum*, *Bidens conjuncta*, *Bidens micrantha* ssp. *kalealaha*, *Clermontia oblongifolia* ssp. *mauiensis*, *Ctenitis squamigera*, *Cyanea asplenifolia*, *Cyanea glabra*, *Cyanea kunthiana*, *Cyanea lobata*, *Cyanea magnicalyx*, *Cyrtandra filipes*, *Cyrtandra munroi*, *Diplazium molokaiense*, *Hesperomannia arborescens*, *Hesperomannia arbuscula*, *Huperzia mannii*, *Isodendrion pyrifolium*, *Kadua laxiflora*, *Peucedanum sandwicense*, *Phyllostegia bracteata*, *Pteris lidgatei*, *Remya mauiensis*, *Santalum haleakalae* var. *lanaiense*, and *Wikstroemia villosa*.

(B) Map of Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 7, and Maui—Lowland Wet—Unit 8 (Map 16) follows:

Map 16

Maui—Lowland Wet

Unit 5, Unit 7, and Unit 8



(A) This unit is critical habitat for *Adenophorus periens*, *Asplenium peruvianum* var. *insulare*, *Bidens campylotheca* ssp. *pentamera*, *Bidens campylotheca* ssp. *waihoiensis*, *Clermontia oblongifolia* ssp. *mauiensis*, *Clermontia samuelii*, *Cyanea copelandii* ssp. *haleakalaensis*, *Cyanea duvalliorum*, *Cyanea glabra*, *Cyanea hamatiflora* ssp. *hamatiflora*, *Cyanea horrida*, *Cyanea kunthiana*, *Cyanea maritae*, *Cyanea mceldowneyi*, *Cyrtandra ferripilosa*, *Diplazium molokaiense*, *Geranium hanaense*, *Geranium multiflorum*, *Huperzia mannii*, *Melicope balloui*, *Melicope ovalis*, *Peperomia subpetiolata*, *Phyllostegia bracteata*, *Phyllostegia haliakalae*, *Phyllostegia mannii*,

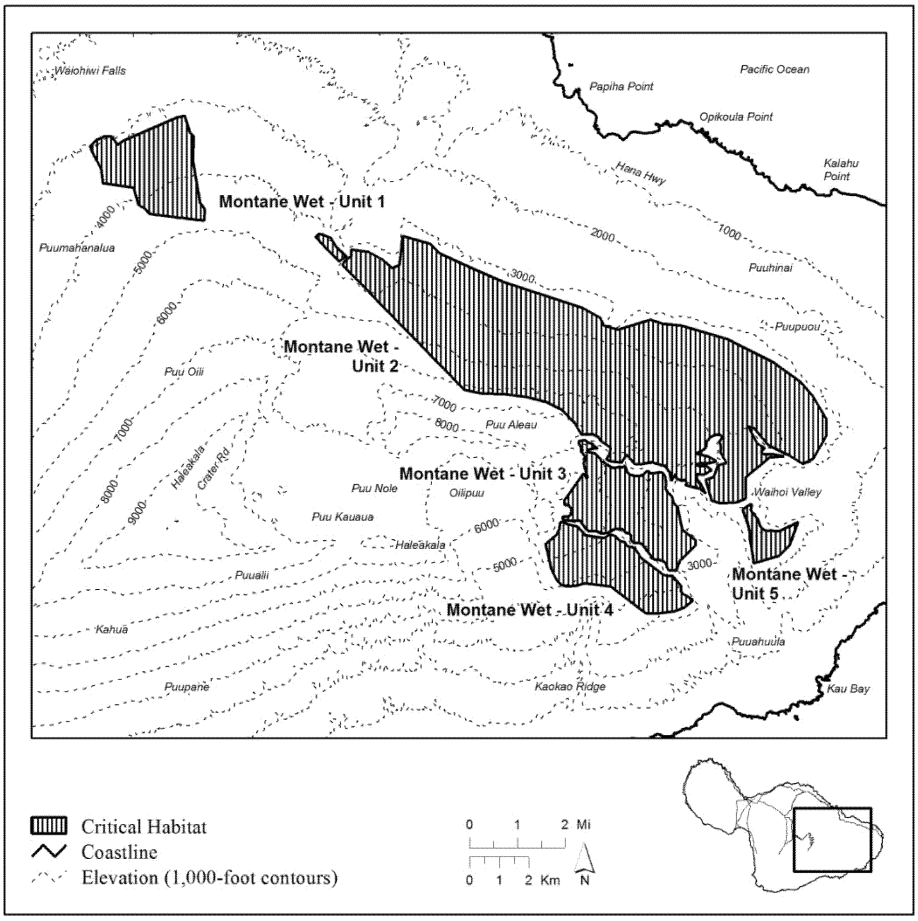
Phyllostegia pilosa, *Platanthera holochila*, *Schiedea jacobii*, and *Wikstroemia villosa*.

(B) Map of Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, and Maui—Montane Wet––Unit 5 (Map 17) follows:

Map 17

Maui—Montane Wet

Unit 1, Unit 2, Unit 3, Unit 4, and Unit 5



(xviii) Maui—Montane Wet—Unit 6 (1,399 ac, 566 ha), and Maui—Montane Wet—Unit 7 (80 ac, 32 ha).

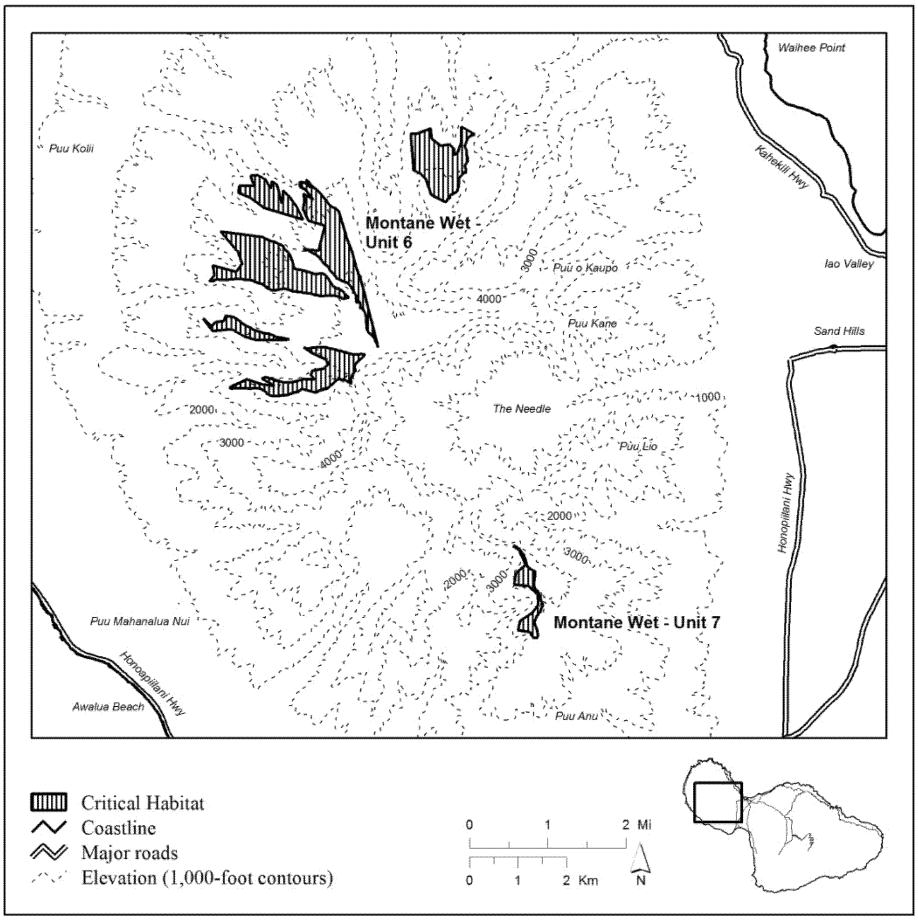
(A) These units are critical habitat for *Acaena exigua*, *Bidens conjuncta*, *Calamagrostis hillebrandii*, *Cyanea kunthiana*, *Cyrtandra oxybapha*, *Geranium hillebrandii*, *Huperzia mannii*, *Myrsine vaccinioides*, *Phyllostegia bracteata*, *Platanthera holochila*, and *Sanicula purpurea*.

(B) Map of Maui—Montane Wet—Unit 6 and Maui—Montane Wet—Unit 7 (Map 18) follows:

Map 18

Maui—Montane Wet

Unit 6 and Unit 7



(xix) Maui—Montane Mesic—Unit 1 (10,972 ac, 4,440 ha).

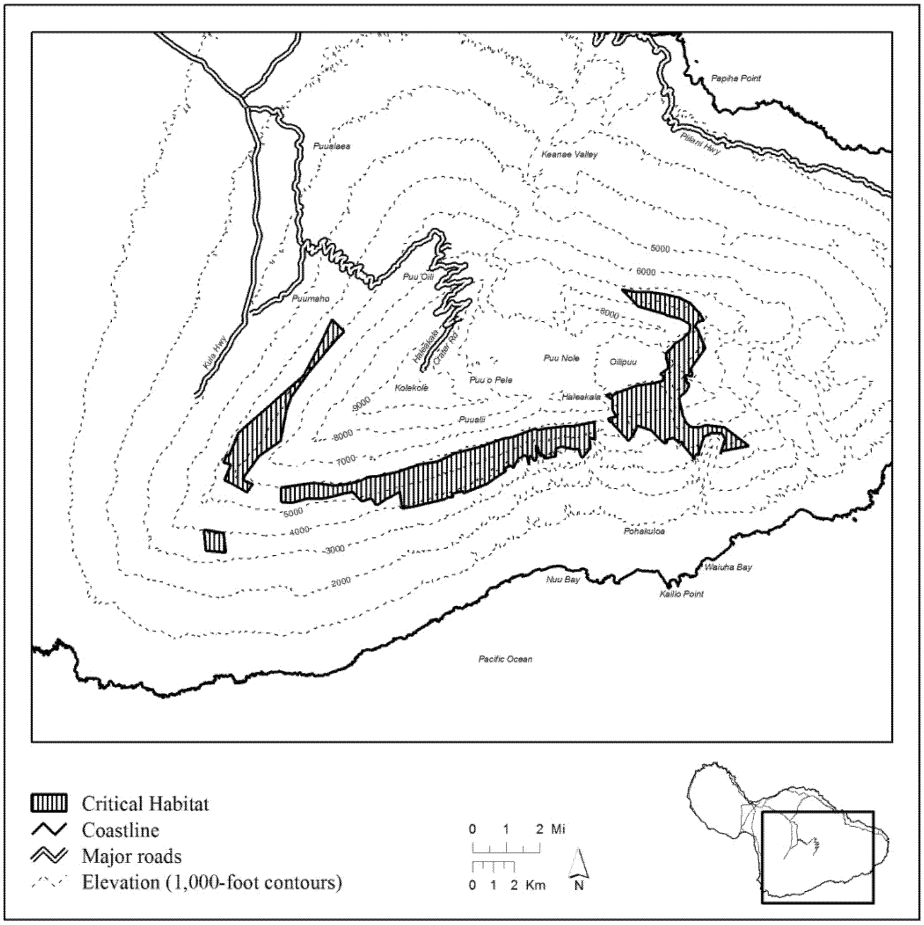
(A) This unit is critical habitat for *Alectryon macrococcus*, *Argyroxiphium sandwicense* ssp. *macrocephalum*, *Asplenium dielerectum*, *Asplenium peruvianum* var. *insulare*, *Bidens campylotheca* ssp. *pentamera*, *Bidens micrantha* ssp. *kalealaha*, *Clermontia lindseyana*, *Cyanea glabra*, *Cyanea hamatiflora* ssp. *hamatiflora*, *Cyanea horrida*, *Cyanea kunthiana*, *Cyanea mceldowneyi*, *Cyanea obtusa*, *Cyrtandra ferripilosa*, *Cyrtandra oxybapha*, *Diplazium molokaiense*, *Geranium arboreum*, *Geranium multiflorum*, *Huperzia mannii*, *Melicope adscendens*, *Neraudia sericea*, *Phyllostegia bracteata*, *Phyllostegia mannii*, *Santalum haleakalae* var. *lanaiense*, *Wikstroemia villosa*, and *Zanthoxylum hawaiiense*.

(B) Map of Maui—Montane Mesic—Unit 1 (Map 19) follows:

Map 19

Maui—Montane Mesic

Unit 1



(xx) Maui—Montane Mesic—Unit 2 (124 ac, 50 ha), Maui—Montane Mesic—Unit 3 (174 ac; 70 ha), Maui—Montane Mesic—Unit 4 (72 ac, 29 ha), and Maui—Montane Mesic—Unit 5 (170 ac, 69 ha).

(A) These units are critical habitat for *Ctenitis squamigera*, *Cyanea magnicalyx*, *Diplazium molokaiense*, *Geranium hillebrandii*, *Huperzia mannii*, *Lysimachia lydgatei*, *Remya mauiensis*, *Santalum haleakalae* var. *lanaiense*, *Stenogyne kauaulaensis*, and *Zanthoxylum hawaiiense*.

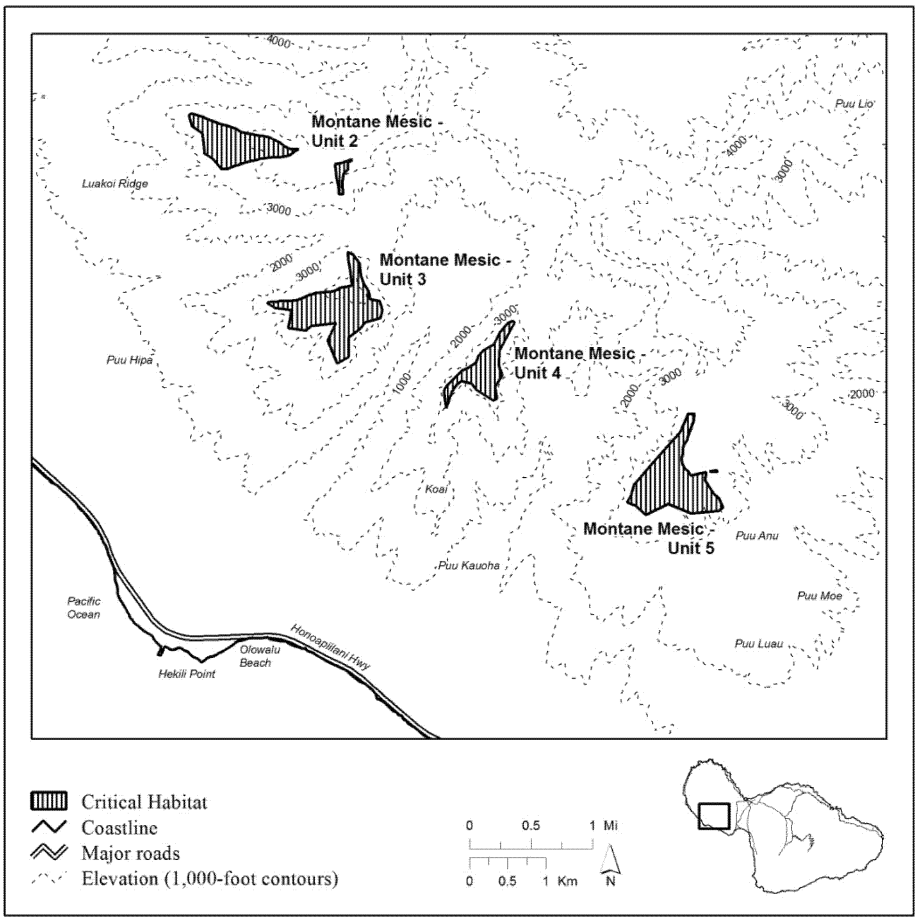
(B) Map of Maui—Montane Mesic—Unit 2, Maui—Montane Mesic—Unit 3, Maui—Montane Mesic—Unit 4, and

Maui—Montane Mesic—Unit 5 (Map 20) follows:

Map 20

Maui—Montane Mesic

Unit 2, Unit 3, Unit 4, and Unit 5



(xxi) Maui—Montane Dry—Unit 1 (3,524 ac, 1,426 ha).

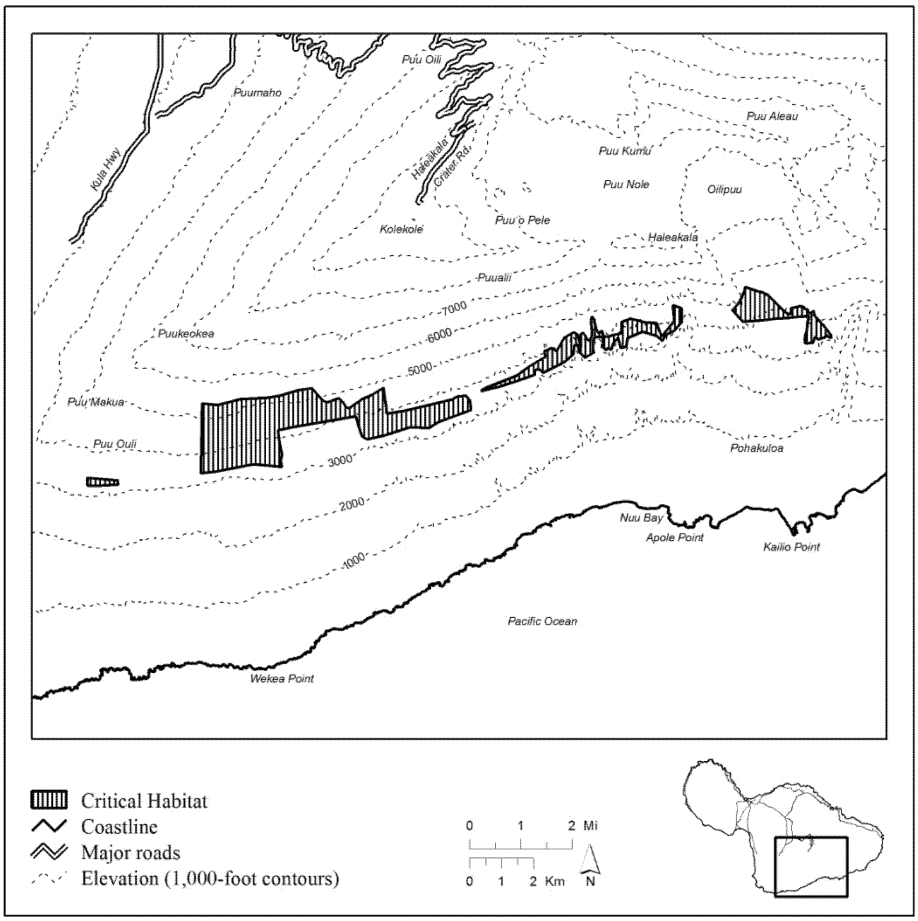
(A) This unit is critical habitat for *Alectryon macrococcus*, *Geranium arboreum*, *Melicope knudsenii*, *Melicope mucronulata*, *Santalum haleakalae* var. *lanaiense*, and *Zanthoxylum hawaiiense*.

(B) Map of Maui—Montane Dry—Unit 1 (Map 21) follows:

Map 21

Maui—Montane Dry

Unit 1



(xxii) Maui—Subalpine—Unit 1 (15,975 ac, 6,465 ha) and Maui—Subalpine—Unit 2 (9,886 ac, 4,001 ha).

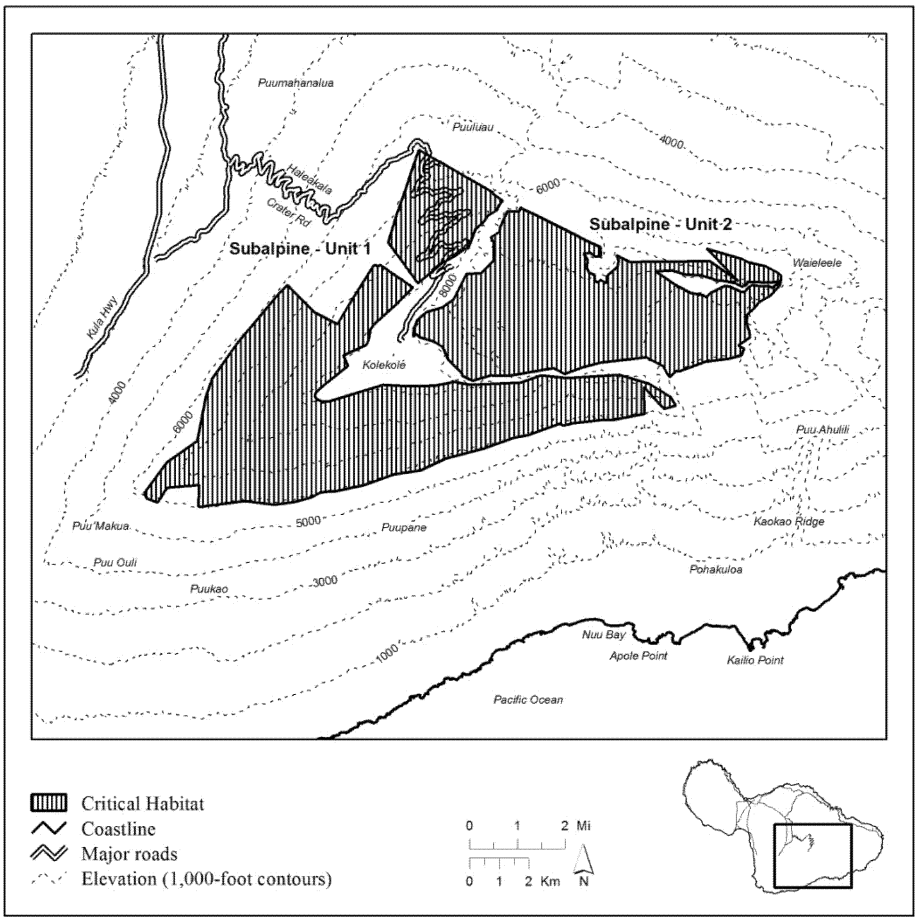
(A) These units are critical habitat for *Argyroxiphium sandwicense* ssp. *macrocephalum*, *Asplenium peruvianum* var. *insulare*, *Bidens micrantha* ssp. *kalealaha*, *Geranium arboreum*, *Geranium multiflorum*, *Phyllostegia bracteata*, *Schiedea haleakalensis*, and *Zanthoxylum hawaiiense*.

(B) Map of Maui—Subalpine—Unit 1 and Maui—Subalpine—Unit 2 (Map 22) follows:

Map 22

Maui—Subalpine

Unit 1 and Unit 2



(xxiii) Maui—Alpine—Unit 1 (1,797 ac, 727 ha).

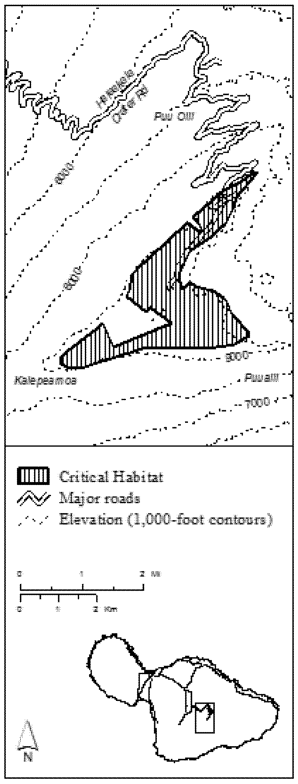
(A) This unit is critical habitat for *Argyroxiphium sandwicense* ssp. *macrocephalum*.

(B) Map of Maui—Alpine—Unit 1 (Map 23) follows:

Map 23

Maui-Alpine

Unit 1



(xxiv) Maui—Dry Cliff—Unit 1 (755 ac, 305 ha), Maui—Dry Cliff—Unit 2 (688 ac, 279 ha), Maui—Dry Cliff—Unit 3 (200 ac, 81 ha), and Maui—;Dry Cliff—Unit 4 (315 ac, 127 ha).

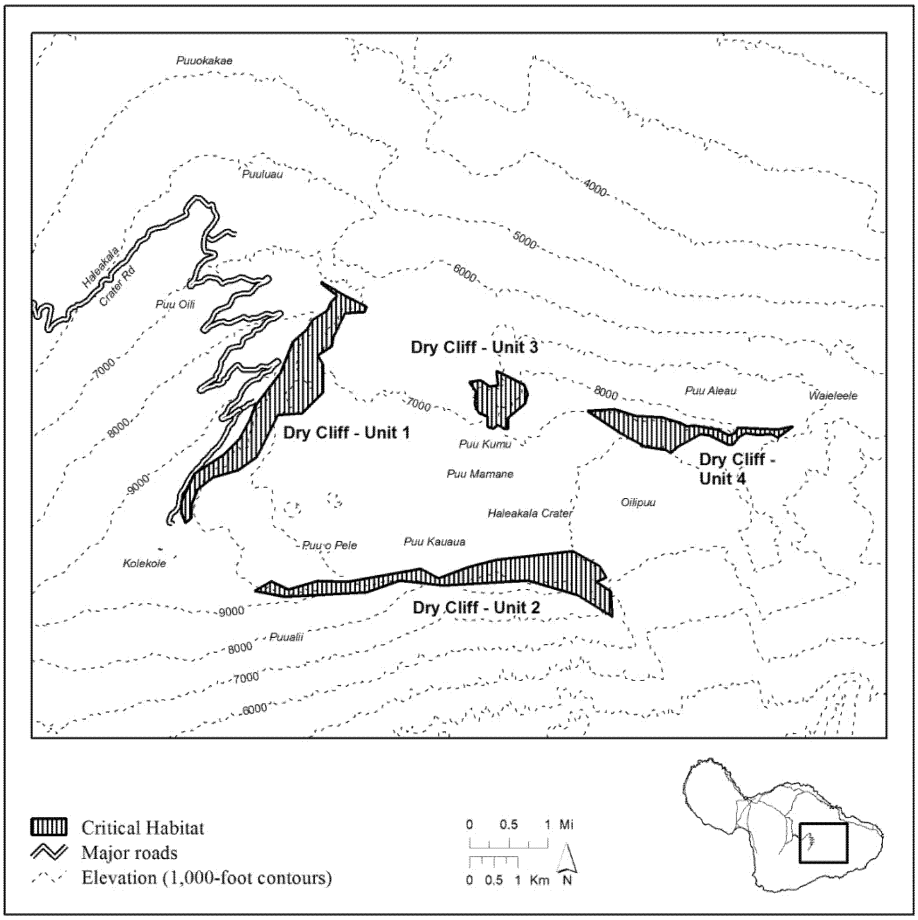
(A) These units are critical habitat for *Argyroxiphium sandwicense* ssp. *macrocephalum*, *Bidens campylotheca* ssp. *pentamera*, *Bidens micrantha* ssp. *kalealaha*, *Diplazium molokaiense*, *Geranium multiflorum*, *Plantago princeps*, and *Schiedea haleakalensis*.

(B) Map of Maui—Dry Cliff—Unit 1, Maui—Dry Cliff—Unit 2, Maui—Dry Cliff—Unit 3, and Maui—Dry Cliff—Unit 4 (Map 24) follows:

Map 24

Maui—Dry Cliff

Unit 1, Unit 2, Unit 3, and Unit 4



(xxv) Maui—Dry Cliff—Unit 5 (1,298 ac, 525 ha) and Maui—Dry Cliff—Unit 6 (279 ac, 113 ha).

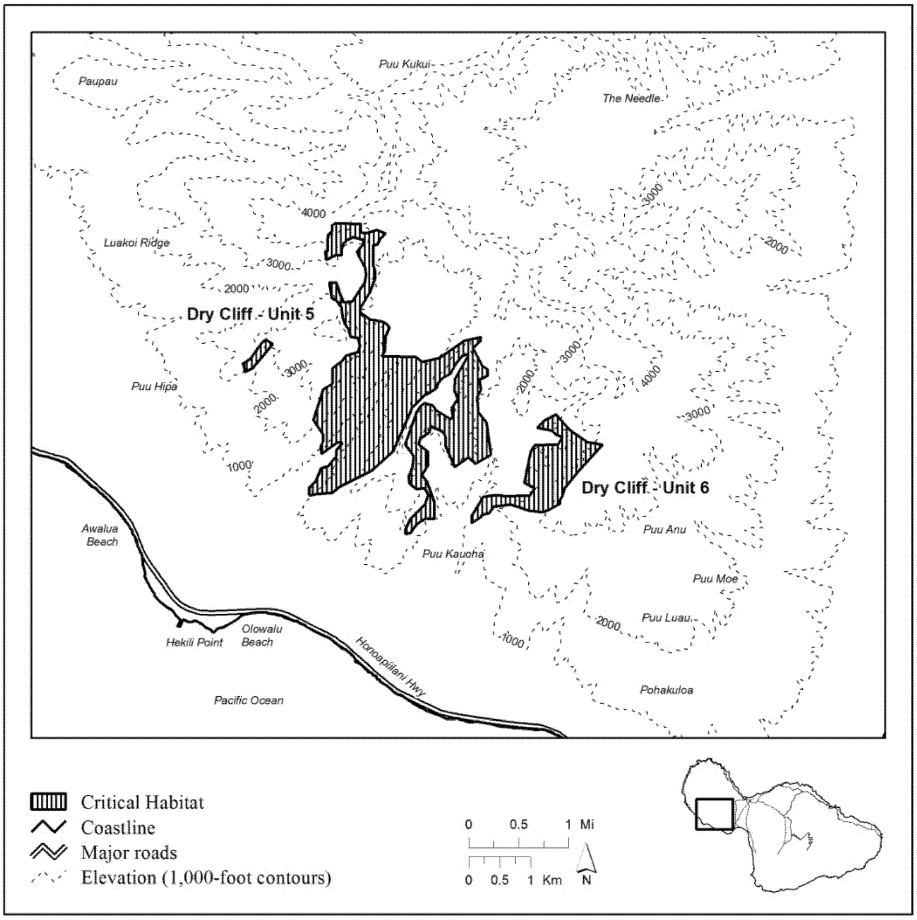
(A) These units are critical habitat for *Bonamia menziesii*, *Diplazium molokaiense*, *Hesperomannia arbuscula*, *Isodendrion pyrifolium*, *Kadua laxiflora*, *Neraudia sericea*, and *Tetramolopium capillare*.

(B) Map of Maui—Dry Cliff—Unit 5 and Maui—Dry Cliff—Unit 6 (Map 25) follows:

Map 25

Maui—Dry Cliff

Unit 5 and Unit 6



(xxvi) Maui—Wet Cliff—Unit 1 (290 ac, 117 ha).

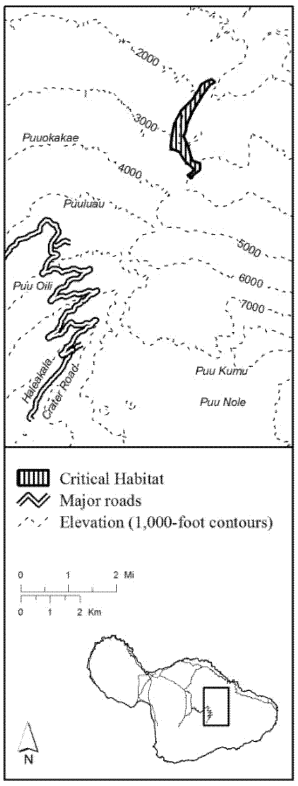
(A) This unit is critical habitat for *Bidens campylotheca* ssp. *pentamera*, *Bidens campylotheca* ssp. *waihoiensis*, *Cyanea copelandii* ssp. *haleakalaensis*, *Cyanea horrida*, *Melicope ovalis*, *Phyllostegia bracteata*, *Phyllostegia haliakalae*, and *Plantago princeps*.

(B) Map of Maui—Wet Cliff—Unit 1 (Map 26) follows:

Map 26

Maui—Wet Cliff

Unit 1



(xxvii) Maui—Wet Cliff—Unit 2 (1,407 ac, 569 ha), Maui—Wet Cliff—Unit 3 (438 ac, 177 ha), and Maui—Wet Cliff—Unit 4 (184 ac, 75 ha).

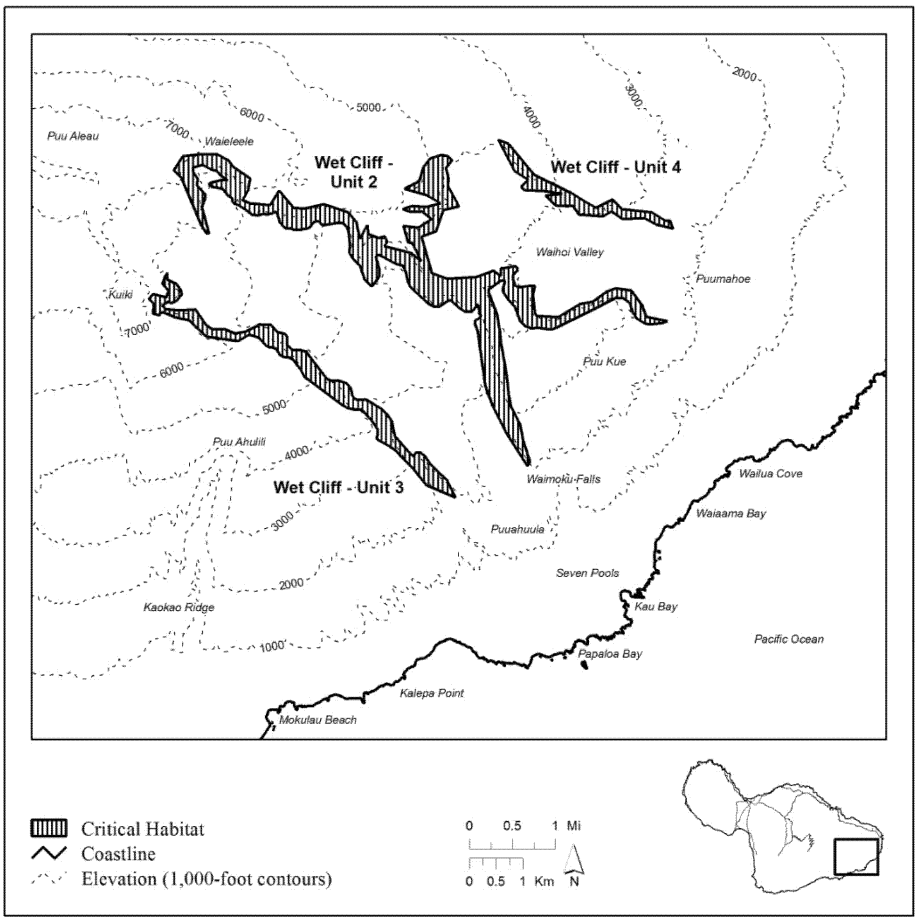
(A) These units are critical habitat for *Bidens campylotheca* ssp. *pentamera*, *Bidens campylotheca* ssp. *waihoiensis*, *Cyanea copelandii* ssp. *haleakalaensis*, *Cyanea horrida*, *Melicope ovalis*, *Phyllostegia bracteata*, *Phyllostegia haliakalae*, and *Plantago princeps*.

(D) Map of Maui—Wet Cliff—Unit 2, Maui—Wet Cliff—Unit 3, and Maui—Wet Cliff—Unit 4 (Map 27) follows:

Map 27

Maui—Wet Cliff

Unit 2, Unit 3, and Unit 4



(xxviii) Maui—Wet Cliff—Unit 6 (2,111 ac, 854 ha), Maui—Wet Cliff—Unit 7 (557 ac, 225 ha), and Maui—Wet Cliff—Unit 8 (337 ac, 137 ha).

(A) These units are critical habitat for *Alectryon macrococcus*, *Bidens campylotheca* ssp. *pentamera*, *Bidens conjuncta*, *Bonamia menziesii*, *Ctenitis squamigera*, *Cyanea glabra*, *Cyanea lobata*, *Cyanea magnicalyx*, *Cyrtandra filipes*, *Cyrtandra munroi*, *Dubautia plantaginea* ssp. *humilis*, *Gouania vitifolia*, *Hesperomannia arborescens*, *Hesperomannia arbuscula*, *Isodendrion pyrifolium*, *Kadua laxiflora*, *Lysimachia lydgatei*, *Plantago princeps*, *Platanthera*

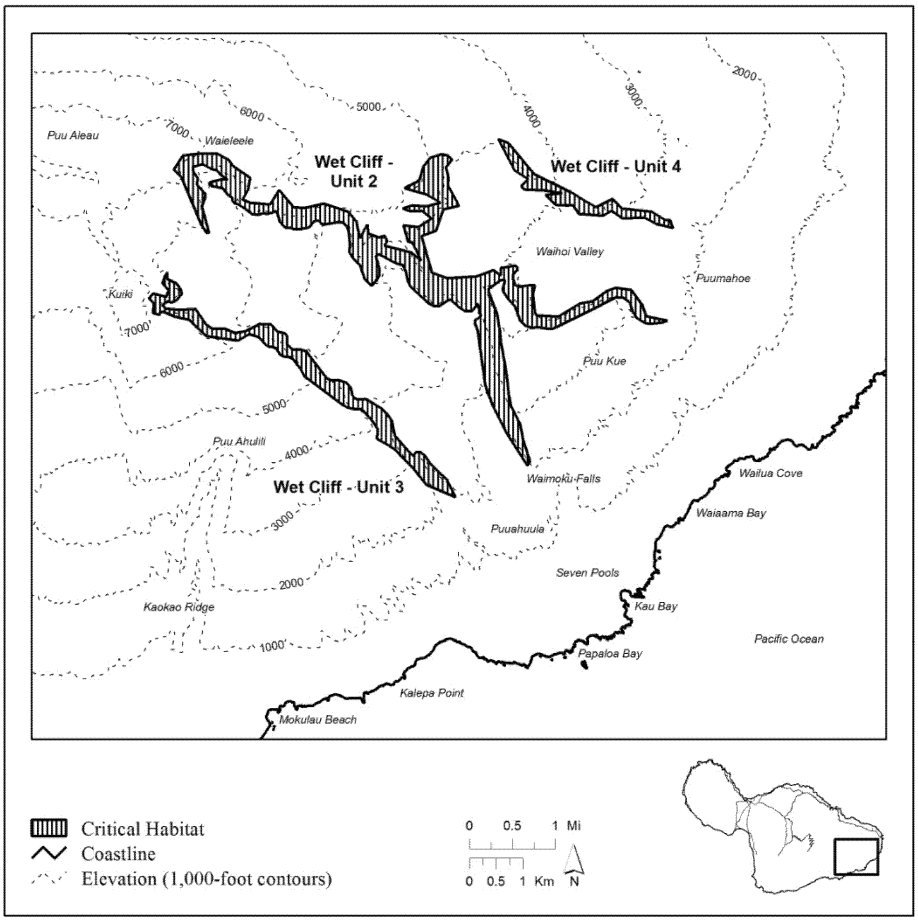
holochila, *Pteris lidgatei*, *Remya mauiensis*, *Santalum haleakalae* var. *lanaiense*, and *Tetramolopium capillare*.

(B) Maui—Wet Cliff—Unit 6, Maui—Wet Cliff—Unit 7, and Maui—Wet Cliff––Unit 8 (Map 28) follows:

Map 27

Maui—Wet Cliff

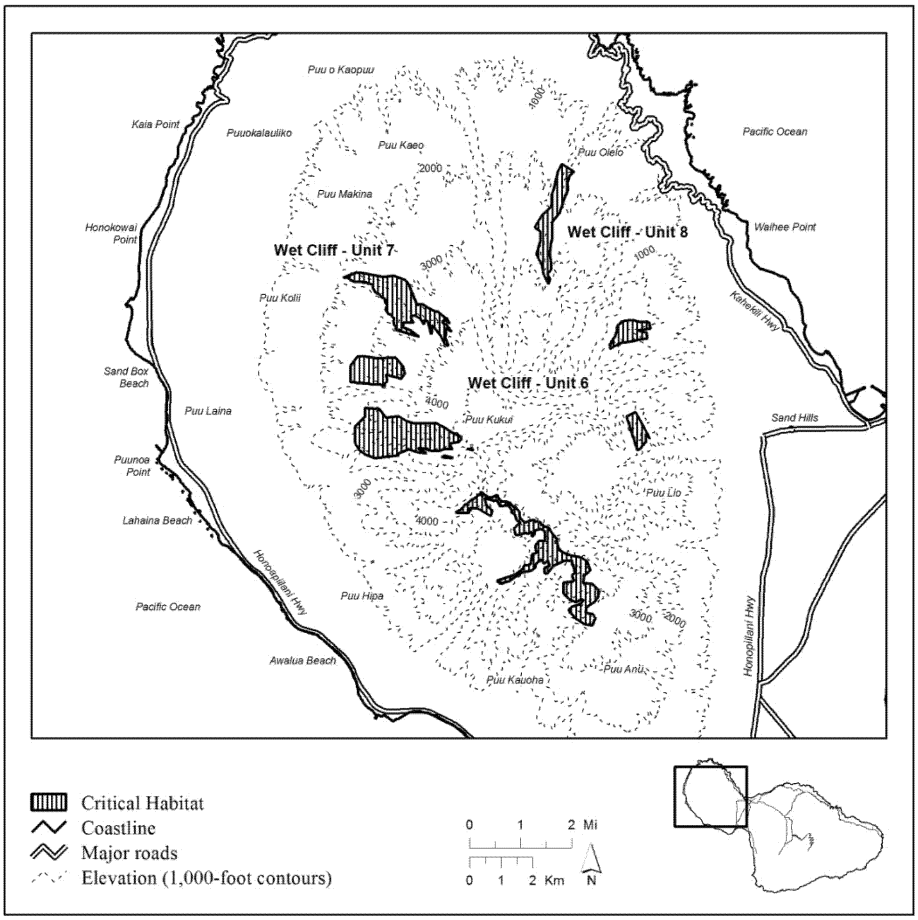
Unit 2, Unit 3, and Unit 4



Map 28

Maui—Wet Cliff

Unit 6, Unit 7, and Unit 8



(xxix) OCCUPANCY OF SPECIES BY DESIGNATED CRITICAL HABITAT UNITS FOR MAUI

Unit name	Species occupied	Species unoccupied
Maui—Coastal—Unit 1	.....	*Brighamia rockii.*
		Cyperus pennatiformis.
		Ischaemum byrone.
	Peucedanum sandwicense.	
		Vigna o-wahuensis.

Unit name	Species occupied	Species unoccupied
Maui—Coastal—Unit 2	.....	*Brighamia rockii.*
		Cyperus pennatiformis.
		Ischaemum byrone.
		Peucedanum sandwicense.
		Vigna o-wahuensis.
Maui—Coastal—Unit 3	.....	*Brighamia rockii.*
		Cyperus pennatiformis.
	Ischaemum byrone.	
		Peucedanum sandwicense.
		Vigna o-wahuensis.
Maui—Coastal—Unit 4	.....	*Brighamia rockii.*
	Cyperus pennatiformis.	
		Ischaemum byrone.
		Peucedanum sandwicense.
		Vigna o-wahuensis.
Maui—Coastal—Unit 5	.....	*Brighamia rockii.*
		Cyperus pennatiformis.
	Ischaemum byrone.	
		Peucedanum sandwicense.
		Vigna o-wahuensis.
Maui—Coastal—Unit 6	.....	*Brighamia rockii.*
		Cyperus pennatiformis.
		Ischaemum byrone.
		Peucedanum sandwicense.
	Vigna o-wahuensis.	
Maui—Coastal—Unit 7	.....	*Brighamia rockii.*
		Cyperus pennatiformis.
		Ischaemum byrone.
		Peucedanum sandwicense.
		Vigna o-wahuensis.
Maui—Coastal—Unit 8	.....	*Brighamia rockii.*
		Cyperus pennatiformis.
		Ischaemum byrone.
		Peucedanum sandwicense.
		Vigna o-wahuensis.
Maui—Coastal—Unit 9	.....	*Brighamia rockii.*
	Schenkia sebaeoides.	
	Sesbania tomentosa.	
Maui—Coastal—Unit 10	.....	*Brighamia rockii.*
	Schenkia sebaeoides.	
		Sesbania tomentosa.
Maui—Coastal—Unit 11	.....	*Brighamia rockii.*
		Schenkia sebaeoides.
		Sesbania tomentosa.
Maui—Lowland Dry—Unit 1	.....	*Alectryon macrococcus.*
		Bidens micrantha ssp. *kalealaha.*
	Bonamia menziesii.	
		Canavalia pubescens.
	Cenchrus agrimonioides.	
		Colubrina oppositifolia.
		Ctenitis squamigera.
	Flueggea neowawraea.	
		Hibiscus brackenridgei.
		Melanthera kamolensis.
	Melicope adscendens.	
		Melicope mucronulata.
		Neraudia sericea.
		Nototrichium humile.
	Santalum haleakalae var. *lanaiense*	
		Sesbania tomentosa.
		Solanum incompletum.
	Spermolepis hawaiiensis.	
		Zanthoxylum hawaiiense.
Maui—Lowland Dry—Unit 2	.....	*Alectryon macrococcus.*
		Bidens micrantha ssp. *kalealaha.*
	Bonamia menziesii.	
	Canavalia pubescens.	
		Cenchrus agrimonioides.
		Colubrina oppositifolia.
		Ctenitis squamigera.
		Flueggea neowawraea.
	Hibiscus brackenridgei.	
		Melanthera kamolensis.
		Melicope mucronulata.

Unit name	Species occupied	Species unoccupied
		Neraudia sericea.
		Nototrichium humile.
		Santalum haleakalae var. *lanaiense.*
		Sesbania tomentosa.
		Solanum incompletum.
		Spermolepis hawaiiensis.
		Zanthoxylum hawaiiense.
Maui—Lowland Dry—Unit 3	.....	*Bidens micrantha* ssp. *kalealaha.*
		Bonamia menziesii.
	Canavalia pubescens.	
		Cenchrus agrimonioides.
		Colubrina oppositifolia.
		Ctenitis squamigera.
		Flueggea neowawraea.
		Hibiscus brackenridgei.
		Melanthera kamolensis.
		Melicope mucronulata.
		Neraudia sericea.
		Nototrichium humile.
		Santalum haleakalae var. *lanaiense.*
		Sesbania tomentosa.
		Solanum incompletum.
		Spermolepis hawaiiensis.
		Zanthoxylum hawaiiense.
Maui—Lowland Dry—Unit 4	.....	*Bidens micrantha* ssp. *kalealaha.*
		Bonamia menziesii.
		Canavalia pubescens.
		Cenchrus agrimonioides.
		Colubrina oppositifolia.
		Ctenitis squamigera.
		Flueggea neowawraea.
		Hibiscus brackenridgei.
		Melanthera kamolensis.
		Melicope mucronulata.
		Neraudia sericea.
		Nototrichium humile.
		Santalum haleakalae var. *lanaiense.*
		Sesbania tomentosa.
		Solanum incompletum.
		Spermolepis hawaiiensis.
		Zanthoxylum hawaiiense.
Maui—Lowland Dry—Unit 5	*Asplenium dielerectum.*	
	Bidens campylotheca ssp. *pentamera.*	
	Cenchrus agrimonioides.	
		Ctenitis squamigera.
		Cyanea obtusa.
	Gouania hillebrandii.	
		Hesperomannia arbuscula.
		Hibiscus brackenridgei.
	Kadua coriacea.	
		Lysimachia lydgatei.
		Neraudia sericea.
	Remya mauiensis.	
	Santalum haleakalae var. *lanaiense.*	
		Schiedea salicaria.
		Sesbania tomentosa.
	Spermolepis hawaiiensis.	
	Tetramolopium capillare.	
		Tetramolopium remyi.
Maui—Lowland Dry—Unit 6	.....	*Asplenium dielerectum.*
		Bidens campylotheca ssp. *pentamera.*
		Cenchrus agrimonioides.
		Ctenitis squamigera.
		Cyanea obtusa.
		Gouania hillebrandii.
		Hesperomannia arbuscula.
	Hibiscus brackenridgei.	
		Kadua coriacea.
		Lysimachia lydgatei.
		Neraudia sericea.
		Remya mauiensis.
		Santalum haleakalae var. *lanaiense.*
	Schiedea salicaria.	
		Sesbania tomentosa.

Unit name	Species occupied	Species unoccupied
		Spermolepis hawaiiensis.
		Tetramolopium capillare.
		Tetramolopium remyi.
Maui—Lowland Mesic—Unit 1	.....	*Ctenitis squamigera.*
	Cyanea asplenifolia.	
	Cyanea copelandii ssp. *haleakalaensis.*	
	Huperzia mannii.	
		Solanum incompletum.
Maui—Lowland Mesic—Unit 2	.....	*Asplenium dielerectum.*
		Bidens campylotheca ssp. *pentamera.*
		Colubrina oppositifolia.
	Ctenitis squamigera.	
	Remya mauiensis.	
	Santalum haleakalae var. *lanaiense.*	
	Zanthoxylum hawaiiense.	
Maui—Lowland Mesic—Unit 3	.....	*Asplenium dielerectum.*
		Bidens campylotheca ssp. *pentamera.*
		Colubrina oppositifolia.
		Ctenitis squamigera.
		Remya mauiensis.
		Santalum haleakalae var. *lanaiense.*
		Zanthoxylum hawaiiense.
Maui—Lowland Wet—Unit 1	*Bidens campylotheca* ssp. *waihoiensis.*	
		Clermontia oblongifolia ssp. *mauiensis.*
		Clermontia peleana.
	Clermontia samuelii.	
	Cyanea asplenifolia.	
	Cyanea copelandii ssp. *haleakalaensis.*	
	Cyanea duvalliorum.	
	Cyanea hamatiflora ssp. *hamatiflora.*	
	Cyanea kunthiana.	
	Cyanea maritae.	
	Cyanea mceldowneyi.	
	Huperzia mannii.	
	Melicope balloui.	
	Melicope ovalis.	
		Mucuna sloanei var. *persericea.*
		Phyllostegia haliakalae.
		Wikstroemia villosa.
Maui—Lowland Wet—Unit 2	.....	*Alectryon macrococcus.*
		Asplenium dielerectum.
		Bidens conjuncta.
		Bidens micrantha ssp. *kalealaha.*
		Clermontia oblongifolia ssp. *mauiensis.*
		Ctenitis squamigera.
		Cyanea asplenifolia.
		Cyanea glabra.
		Cyanea kunthiana.
		Cyanea lobata.
		Cyanea magnicalyx.
		Cyrtandra filipes.
		Cyrtandra munroi.
		Diplazium molokaiense.
		Hesperomannia arborescens.
		Hesperomannia arbuscula.
		Huperzia mannii.
		Isodendrion pyrifolium.
		Kadua laxiflora.
		Peucedanum sandwicense.
		Phyllostegia bracteata.
		Pteris lidgatei.
		Remya mauiensis.
	Santalum haleakalae var. *lanaiense.*	
		Wikstroemia villosa.
Maui—Lowland Wet—Unit 3	.....	*Alectryon macrococcus.*
		Asplenium dielerectum.
	Bidens conjuncta.	
		Bidens micrantha ssp. *kalealaha.*
		Clermontia oblongifolia ssp. *mauiensis.*
		Ctenitis squamigera.
	Cyanea asplenifolia.	
		Cyanea glabra.
		Cyanea kunthiana.
		Cyanea lobata.

Unit name	Species occupied	Species unoccupied
		Cyanea magnicalyx.
		Cyrtandra filipes.
		Cyrtandra munroi.
		Diplazium molokaiense.
		Hesperomannia arborescens.
		Hesperomannia arbuscula.
		Huperzia mannii.
		Isodendrion pyrifolium.
		Kadua laxiflora.
		Peucedanum sandwicense.
		Phyllostegia bracteata.
	Pteris lidgatei.	
		Remya mauiensis.
		Santalum haleakalae var. *lanaiense.*
		Wikstroemia villosa.
Maui—Lowland Wet—Unit 4	.....	*Alectryon macrococcus.*
		Asplenium dielerectum.
		Bidens conjuncta.
		Bidens micrantha ssp. *kalealaha.*
		Clermontia oblongifolia ssp. *mauiensis.*
		Ctenitis squamigera.
	Cyanea asplenifolia.	
		Cyanea glabra.
		Cyanea kunthiana.
		Cyanea lobata.
		Cyanea magnicalyx.
		Cyrtandra filipes.
		Cyrtandra munroi.
		Diplazium molokaiense.
		Hesperomannia arborescens.
		Hesperomannia arbuscula.
		Huperzia mannii.
		Isodendrion pyrifolium.
		Kadua laxiflora.
		Peucedanum sandwicense.
		Phyllostegia bracteata.
		Pteris lidgatei.
		Remya mauiensis.
		Santalum haleakalae var. *lanaiense.*
		Wikstroemia villosa.
Maui—Lowland Wet—Unit 5	.....	*Alectryon macrococcus.*
		Asplenium dielerectum.
		Bidens conjuncta.
		Bidens micrantha ssp. *kalealaha.*
		Clermontia oblongifolia ssp. *mauiensis.*
		Ctenitis squamigera.
		Cyanea asplenifolia.
		Cyanea glabra.
		Cyanea kunthiana.
		Cyanea lobata.
		Cyanea magnicalyx.
		Cyrtandra filipes.
		Cyrtandra munroi.
		Diplazium molokaiense.
		Hesperomannia arborescens.
		Hesperomannia arbuscula.
		Huperzia mannii.
		Isodendrion pyrifolium.
		Kadua laxiflora.
		Peucedanum sandwicense.
		Phyllostegia bracteata.
		Pteris lidgatei.
		Remya mauiensis.
		Santalum haleakalae var. lanaiense.
		Wikstroemia villosa.
Maui—Lowland Wet—Unit 6	.....	*Alectryon macrococcus.*
		Asplenium dielerectum.
		Bidens conjuncta.
		Bidens micrantha ssp. *kalealaha.*
		Clermontia oblongifolia ssp. *mauiensis.*
		Ctenitis squamigera.
		Cyanea asplenifolia.
		Cyanea glabra.
		Cyanea kunthiana.

Unit name	Species occupied	Species unoccupied
		Cyanea lobata.
		Cyanea magnicalyx.
		Cyrtandra filipes.
		Cyrtandra munroi.
		Diplazium molokaiense.
		Hesperomannia arborescens.
		Hesperomannia arbuscula.
		Huperzia mannii.
		Isodendrion pyrifolium.
		Kadua laxiflora.
		Peucedanum sandwicense.
		Phyllostegia bracteata.
		Pteris lidgatei.
		Remya mauiensis.
	Santalum haleakalae var. *lanaiense.*	
		Wikstroemia villosa.
Maui—Lowland Wet—Unit 7	*Alectryon macrococcus*	
		Asplenium dielerectum.
		Bidens conjuncta.
		Bidens micrantha ssp. *kalealaha.*
		Clermontia oblongifolia ssp. *mauiensis.*
		Ctenitis squamigera.
		Cyanea asplenifolia.
		Cyanea glabra.
		Cyanea kunthiana.
		Cyanea lobata.
		Cyanea magnicalyx.
		Cyrtandra filipes.
		Cyrtandra munroi.
		Diplazium molokaiense.
		Hesperomannia arborescens.
		Hesperomannia arbuscula.
		Huperzia mannii.
		Isodendrion pyrifolium.
		Kadua laxiflora.
		Peucedanum sandwicense.
		Phyllostegia bracteata.
		Pteris lidgatei.
		Remya mauiensis.
		Santalum haleakalae var. *lanaiense.*
		Wikstroemia villosa.
Maui—Lowland Wet—Unit 8	.....	*Alectryon macrococcus.*
		Asplenium dielerectum.
		Bidens conjuncta.
		Bidens micrantha ssp. *kalealaha.*
		Clermontia oblongifolia ssp. *mauiensis.*
		Ctenitis squamigera.
		Cyanea asplenifolia.
		Cyanea glabra.
		Cyanea kunthiana.
		Cyanea lobata.
		Cyanea magnicalyx.
		Cyrtandra filipes.
		Cyrtandra munroi.
		Diplazium molokaiense.
		Hesperomannia arborescens.
		Hesperomannia arbuscula.
		Huperzia mannii.
		Isodendrion pyrifolium.
		Kadua laxiflora.
		Peucedanum sandwicense.
		Phyllostegia bracteata.
		Pteris lidgatei.
		Remya mauiensis.
		Santalum haleakalae var. *lanaiense.*
		Wikstroemia villosa.
Maui—Montane Wet—Unit 1	.....	*Adenophorus periens.*
		Asplenium peruvianum var. *insulare.*
		Bidens campylotheca ssp. *pentamera.*
		Bidens campylotheca ssp. *waihoiensis.*
		Clermontia oblongifolia ssp. *mauiensis.*
		Clermontia samuelii.
		Cyanea copelandii ssp. *haleakalaensis.*
	Cyanea duvalliorum.	

Unit name	Species occupied	Species unoccupied
		Cyanea glabra.
		Cyanea hamatiflora ssp. *hamatiflora.*
		Cyanea horrida.
		Cyanea kunthiana.
	Cyanea maritae.	
	Cyanea mceldowneyi.	
		Cyrtandra ferripilosa.
		Diplazium molokaiense.
		Geranium hanaense.
		Geranium multiflorum.
	Huperzia mannii.	
	Melicope balloui.	
		Melicope ovalis.
		Peperomia subpetiolata.
		Phyllostegia bracteata.
		Phyllostegia haliakalae.
		Phyllostegia mannii.
	Phyllostegia pilosa.	
		Platanthera holochila.
		Schiedea jacobii.
		Wikstroemia villosa.
Maui—Montane Wet—Unit 2	.....	*Adenophorus periens.*
		Asplenium peruvianum var. *insulare.*
	Bidens campylotheca ssp. *pentamera.*	
		Bidens campylotheca ssp. *waihoiensis.*
		Clermontia oblongifolia ssp. *mauiensis.*
	Clermontia samuelii.	
	Cyanea copelandii ssp. *haleakalaensis.*	
	Cyanea duvalliorum.	
		Cyanea glabra.
	Cyanea hamatiflora ssp. *hamatiflora.*	
	Cyanea horrida.	
	Cyanea kunthiana.	
		Cyanea maritae.
	Cyanea mceldowneyi.	
		Cyrtandra ferripilosa.
		Diplazium molokaiense.
	Geranium hanaense.	
	Geranium multiflorum.	
		Huperzia mannii.
		Melicope balloui.
		Melicope ovalis.
		Peperomia subpetiolata.
		Phyllostegia bracteata.
		Phyllostegia haliakalae.
		Phyllostegia mannii.
		Phyllostegia pilosa.
		Platanthera holochila.
		Schiedea jacobii.
	Wikstroemia villosa.	
Maui—Montane Wet—Unit 3	.....	*Adenophorus periens.*
		Asplenium peruvianum var. *insulare.*
	Bidens campylotheca ssp. *pentamera.*	
	Bidens campylotheca ssp. *waihoiensis.*	
		Clermontia oblongifolia ssp. *mauiensis.*
		Clermontia samuelii.
	Cyanea copelandii ssp. *haleakalaensis.*	
		Cyanea duvalliorum.
		Cyanea glabra.
	Cyanea hamatiflora ssp. *hamatiflora.*	
		Cyanea horrida.
		Cyanea kunthiana.
	Cyanea maritae.	
		Cyanea mceldowneyi.
		Cyrtandra ferripilosa.
		Diplazium molokaiense.
		Geranium hanaense.
		Geranium multiflorum.
		Huperzia mannii.
		Melicope balloui.
	Melicope ovalis.	
		Peperomia subpetiolata.
		Phyllostegia bracteata.
		Phyllostegia haliakalae.

Unit name	Species occupied	Species unoccupied
		Phyllostegia mannii.
		Phyllostegia pilosa.
		Platanthera holochila.
		Schiedea jacobii.
		Wikstroemia villosa.
Maui—Montane Wet—Unit 4	.....	*Adenophorus periens.*
		Asplenium peruvianum var. *insulare.*
		Bidens campylotheca ssp. *pentamera.*
		Bidens campylotheca ssp. *waihoiensis.*
		Clermontia oblongifolia ssp. *mauiensis.*
	Clermontia samuelii.	
	Cyanea copelandii ssp. *haleakalaensis.*	
		Cyanea duvalliorum.
		Cyanea glabra.
	Cyanea hamatiflora ssp. *hamatiflora.*	
	Cyanea horrida.	
	Cyanea kunthiana.	
	Cyanea maritae.	
		Cyanea mceldowneyi.
	Cyrtandra ferripilosa.	
		Diplazium molokaiense.
		Geranium hanaense.
		Geranium multiflorum.
	Huperzia mannii.	
		Melicope balloui.
		Melicope ovalis.
		Peperomia subpetiolata.
		Phyllostegia bracteata.
		Phyllostegia haliakalae.
		Phyllostegia mannii.
		Phyllostegia pilosa.
		Platanthera holochila.
		Schiedea jacobii.
		Wikstroemia villosa.
Maui—Montane Wet—Unit 5	.....	*Adenophorus periens.*
		Asplenium peruvianum var. *insulare.*
	Bidens campylotheca ssp. *pentamera.*	
		Bidens campylotheca ssp. *waihoiensis.*
		Clermontia oblongifolia ssp. *mauiensis.*
		Clermontia samuelii.
		Cyanea copelandii ssp. *haleakalaensis.*
		Cyanea duvalliorum.
		Cyanea glabra.
		Cyanea hamatiflora ssp. *hamatiflora.*
		Cyanea horrida.
		Cyanea kunthiana.
		Cyanea maritae.
		Cyanea mceldowneyi.
		Cyrtandra ferripilosa.
		Diplazium molokaiense.
		Geranium hanaense.
		Geranium multiflorum.
		Huperzia mannii.
		Melicope balloui.
		Melicope ovalis.
		Peperomia subpetiolata.
		Phyllostegia bracteata.
		Phyllostegia haliakalae.
		Phyllostegia mannii.
		Phyllostegia pilosa.
		Platanthera holochila.
		Schiedea jacobii.
		Wikstroemia villosa.
Maui—Montane Wet—Unit 6	.....	*Acaena exigua.*
	Bidens conjuncta.	
	Calamagrostis hillebrandii.	
	Cyanea kunthiana.	
		Cyrtandra oxybapha.
	Geranium hillebrandii.	
		Huperzia mannii.
	Myrsine vaccinioides.	
		Phyllostegia bracteata.
		Platanthera holochila.
	Sanicula purpurea.	

Unit name	Species occupied	Species unoccupied
Maui—Montane Wet—Unit 7	.....	*Acaena exigua.*
		Bidens conjuncta.
		Calamagrostis hillebrandii.
		Cyanea kunthiana.
	Cyrtandra oxybapha.	
		Geranium hillebrandii.
		Huperzia mannii.
		Myrsine vaccinioides.
		Phyllostegia bracteata.
	Platanthera holochila.	
		Sanicula purpurea.
Maui—Montane Mesic—Unit 1	.....	*Alectryon macrococcus.*
	Argyroxiphium sandwicense ssp. *macrocephalum.*	
	Asplenium dielerectum.	
	Asplenium peruvianum var. *insulare.*	
		Bidens campylotheca ssp. *pentamera.*
		Bidens micrantha ssp. *kalealaha.*
	Clermontia lindseyana.	
		Cyanea glabra.
		Cyanea hamatiflora ssp. *hamatiflora.*
	Cyanea horrida.	
		Cyanea kunthiana.
		Cyanea mceldowneyi.
	Cyanea obtusa.	
	Cyrtandra ferripilosa.	
	Cyrtandra oxybapha.	
	Diplazium molokaiense.	
	Geranium arboreum.	
	Geranium multiflorum.	
	Huperzia mannii.	
	Melicope adscendens.	
	Neraudia sericea.	
		Phyllostegia bracteata.
		Phyllostegia mannii.
		Santalum haleakalae var. *lanaiense.*
		Wikstroemia villosa.
		Zanthoxylum hawaiiense.
Maui—Montane Mesic—Unit 2	*Ctenitis squamigera.*	
	Cyanea magnicalyx.	
	Diplazium molokaiense.	
		Geranium hillebrandii.
		Huperzia mannii.
	Lysimachia lydgatei.	
	Remya mauiensis.	
	Santalum haleakalae var. *lanaiense.*	
		Stenogyne kauaulaensis.
		Zanthoxylum hawaiiense.
Maui—Montane Mesic—Unit 3	.....	*Ctenitis squamigera.*
		Cyanea magnicalyx.
		Diplazium molokaiense.
	Geranium hillebrandii.	
		Huperzia mannii.
		Lysimachia lydgatei.
		Remya mauiensis.
		Santalum haleakalae var. *lanaiense.*
		Stenogyne kauaulaensis.
		Zanthoxylum hawaiiense.
Maui—Montane Mesic—Unit 4	.....	*Ctenitis squamigera.*
		Cyanea magnicalyx.
		Diplazium molokaiense.
		Geranium hillebrandii.
		Huperzia mannii.
		Lysimachia lydgatei.
		Remya mauiensis.
		Santalum haleakalae var. *lanaiense.*
		Stenogyne kauaulaensis.
		Zanthoxylum hawaiiense.
Maui—Montane Mesic—Unit 5	.....	*Ctenitis squamigera.*
		Cyanea magnicalyx.
		Diplazium molokaiense.
		Geranium hillebrandii.
		Huperzia mannii.
		Lysimachia lydgatei.

Unit name	Species occupied	Species unoccupied
	Remya mauiensis. *Santalum haleakalae* var. *lanaiense.*	
Maui—Montane Dry—Unit 1	.....	*Stenogyne kauaulaensis.* *Zanthoxylum hawaiiense.* *Alectryon macrococcus.* *Geranium arboreum.* *Melicope knudsenii.* *Melicope mucronulata.* *Santalum haleakalae* var. *lanaiense.* *Zanthoxylum hawaiiense.*
Maui—Subalpine—Unit 1	.....	*Argyroxiphium sandwicense* ssp. *macrocephalum.* *Asplenium peruvianum* var. *insulare.*
	Bidens micrantha ssp. *kalealaha.* *Geranium arboreum.*	
Maui—Subalpine—Unit 2	*Argyroxiphium sandwicense* ssp. *macrocephalum.*	*Geranium multiflorum.* *Phyllostegia bracteata.* *Schiedea haleakalensis.* *Zanthoxylum hawaiiense.*
	Geranium multiflorum.	*Asplenium peruvianum* var. *insulare.* *Bidens micrantha* ssp. *kalealaha.* *Geranium arboreum.*
	Schiedea haleakalensis.	*Phyllostegia bracteata.* *Zanthoxylum hawaiiense.*
Maui—Alpine—Unit 1	*Argyroxiphium sandwicense* ssp. *macrocephalum.*	
Maui—Dry Cliff—Unit 1	.....	*Argyroxiphium sandwicense* ssp. *macrocephalum.* *Bidens campylotheca* ssp. *pentamera.* *Bidens micrantha* ssp. *kalealaha.* *Diplazium molokaiense.* *Geranium multiflorum.* *Plantago princeps.* *Schiedea haleakalensis.*
Maui—Dry Cliff—Unit 2	*Argyroxiphium sandwicense* ssp. *macrocephalum.*	*Bidens campylotheca* ssp. *pentamera.* *Bidens micrantha* ssp. *kalealaha.* *Diplazium molokaiense.*
	Geranium multiflorum. *Plantago princeps.* *Schiedea haleakalensis.*	
Maui—Dry Cliff—Unit 3	.....	*Argyroxiphium sandwicense* ssp. *macrocephalum.* *Bidens campylotheca* ssp. *pentamera.* *Bidens micrantha* ssp. *kalealaha.* *Diplazium molokaiense.* *Geranium multiflorum.* *Plantago princeps.* *Schiedea haleakalensis.*
Maui—Dry Cliff—Unit 4	.....	*Argyroxiphium sandwicense* ssp. *macrocephalum.* *Bidens campylotheca* ssp. *pentamera.* *Bidens micrantha* ssp. *kalealaha.* *Diplazium molokaiense.* *Geranium multiflorum.* *Plantago princeps.* *Schiedea haleakalensis.*
Maui—Dry Cliff—Unit 5	.....	*Bonamia menziesii.* *Diplazium molokaiense.* *Hesperomannia arbuscula.* *Isodendrion pyrifolium.* *Kadua laxiflora.* *Neraudia sericea.*
	Tetramolopium capillare.	
Maui—Dry Cliff—Unit 6	.....	*Bonamia menziesii.* *Diplazium molokaiense.* *Hesperomannia arbuscula.* *Isodendrion pyrifolium.* *Kadua laxiflora.*

Unit name	Species occupied	Species unoccupied
		Neraudia sericea.
		Tetramolopium capillare.
Maui—Wet Cliff—Unit 1	.....	*Bidens campylotheca* ssp. *pentamera.*
		Bidens campylotheca ssp. *waihoiensis.*
		Cyanea copelandii ssp. *haleakalaensis.*
		Cyanea horrida.
		Melicope ovalis.
		Phyllostegia bracteata.
		Phyllostegia haliakalae.
		Plantago princeps.
Maui—Wet Cliff—Unit 2	.....	*Bidens campylotheca* ssp. *pentamera.*
	Bidens campylotheca ssp. *waihoiensis.*	
	Cyanea copelandii ssp. *haleakalaensis.*	
		Cyanea horrida.
	Melicope ovalis.	
	Phyllostegia bracteata.	
		Phyllostegia haliakalae.
	Plantago princeps.	
Maui—Wet Cliff—Unit 3	.....	*Bidens campylotheca* ssp. *pentamera.*
		Bidens campylotheca ssp. *waihoiensis.*
		Cyanea copelandii ssp. *haleakalaensis.*
		Cyanea horrida.
		Melicope ovalis.
		Phyllostegia bracteata.
		Phyllostegia haliakalae.
		Plantago princeps.
Maui—Wet Cliff—Unit 4	*Bidens campylotheca* ssp. *pentamera.*	
	Bidens campylotheca ssp. *waihoiensis.*	
		Cyanea copelandii ssp. *haleakalaensis.*
		Cyanea horrida.
		Melicope ovalis.
		Phyllostegia bracteata.
		Phyllostegia haliakalae.
		Plantago princeps.
Maui—Wet Cliff—Unit 6	*Alectryon macrococcus.*	
		Bidens campylotheca ssp. *pentamera.*
		Bidens conjuncta.
		Bonamia menziesii.
	Ctenitis squamigera.	
		Cyanea glabra.
		Cyanea lobata.
		Cyanea magnicalyx.
		Cyrtandra filipes.
	Cyrtandra munroi.	
		Dubautia plantaginea ssp. *humilis.*
		Gouania vitifolia.
		Hesperomannia arborescens.
		Hesperomannia arbuscula.
		Isodendrion pyrifolium.
		Kadua laxiflora.
		Lysimachia lydgatei.
		Plantago princeps.
		Platanthera holochila.
		Pteris lidgatei.
	Remya mauiensis.	
	Santalum haleakalae var. *lanaiense.*	
		Tetramolopium capillare.
Maui—Wet Cliff—Unit 7	.....	*Alectryon macrococcus.*
		Bidens campylotheca ssp. *pentamera.*
		Bidens conjuncta.
		Bonamia menziesii.
		Ctenitis squamigera.
		Cyanea glabra.
		Cyanea lobata.
		Cyanea magnicalyx.
	Cyrtandra filipes.	
	Cyrtandra munroi.	
		Dubautia plantaginea ssp. *humilis.*
		Gouania vitifolia.
		Hesperomannia arborescens.
		Hesperomannia arbuscula.
		Isodendrion pyrifolium.
		Kadua laxiflora.
		Lysimachia lydgatei.

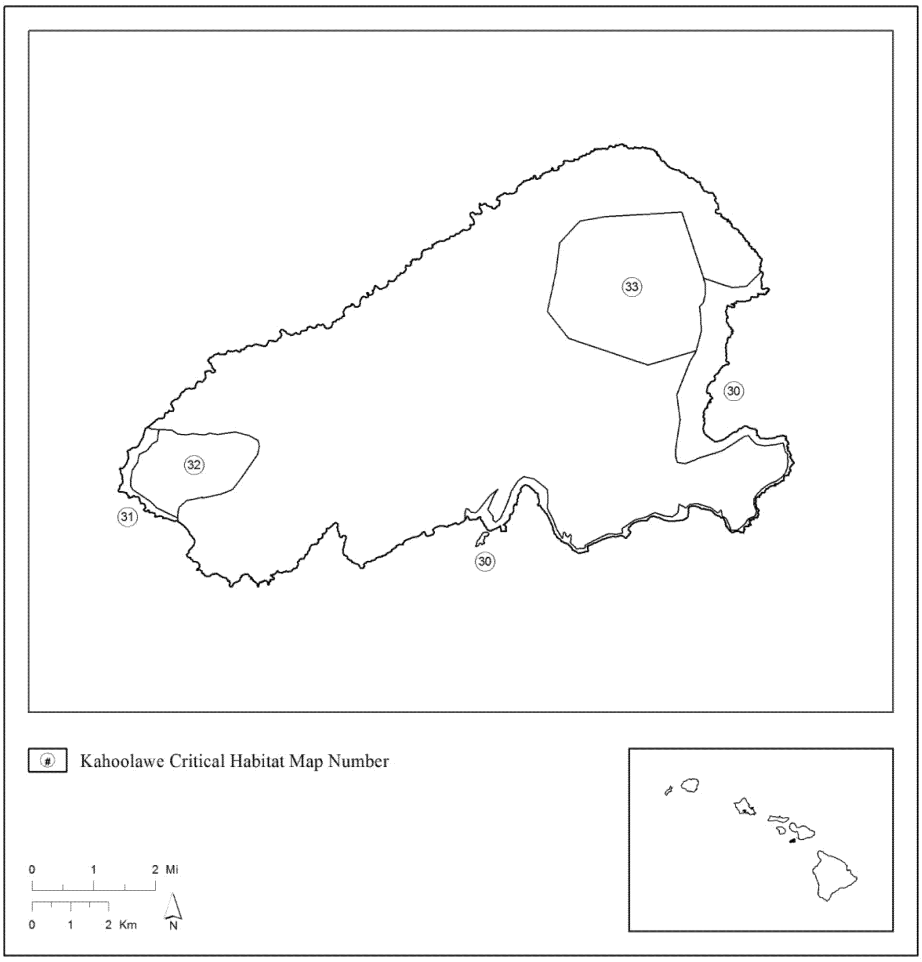
Unit name	Species occupied	Species unoccupied
Maui—Wet Cliff—Unit 8		*Plantago princeps.* *Platanthera holochila.* *Pteris lidgatei.* *Remya mauiensis.* *Santalum haleakalae* var. *lanaiense.* *Tetramolopium capillare.* *Alectryon macrococcus.* *Bidens campylotheca* ssp. *pentamera.* *Bidens conjuncta.* *Bonamia menziesii.* *Ctenitis squamigera.* *Cyanea glabra.* *Cyanea lobata.* *Cyanea magnicalyx.* *Cyrtandra filipes.* *Cyrtandra munroi.* *Dubautia plantaginea* ssp. *humilis.* *Gouania vitifolia.* *Hesperomannia arborescens.* *Hesperomannia arbuscula.* *Isodendrion pyrifolium.* *Kadua laxiflora.* *Lysimachia lydgatei.* *Plantago princeps.* *Platanthera holochila.* *Pteris lidgatei.* *Remya mauiensis.* *Santalum haleakalae* var. *lanaiense.* *Tetramolopium capillare.*

(2) *Kahoolawe*. Critical habitat units are described below. Coordinates are in UTM Zone 4 with units in meters using North American Datum of 1983 (NAD83). The following maps shows the locations of the critical habitat units designated on the island of Kahoolawe. Existing manmade features and structures, such as buildings, roads, railroads, airports, runways, other paved areas, lawns, and other urban landscaped areas, do not contain one or more of the physical and biological features. Federal actions limited to those areas, therefore, would not trigger a consultation under section 7 of the Act unless they may affect the species or physical or biological features in adjacent critical habitat.

(i) NOTE: Map 29, Kahoolawe Index Map, follows:

Map 29

Kahoolawe Critical Habitat—Island Index Map



(ii) Kahoolawe—Coastal—Unit 1 (1,516 ac, 613 ha) and Kahoolawe—Coastal—Unit 2 (12 ac, 5 ha).

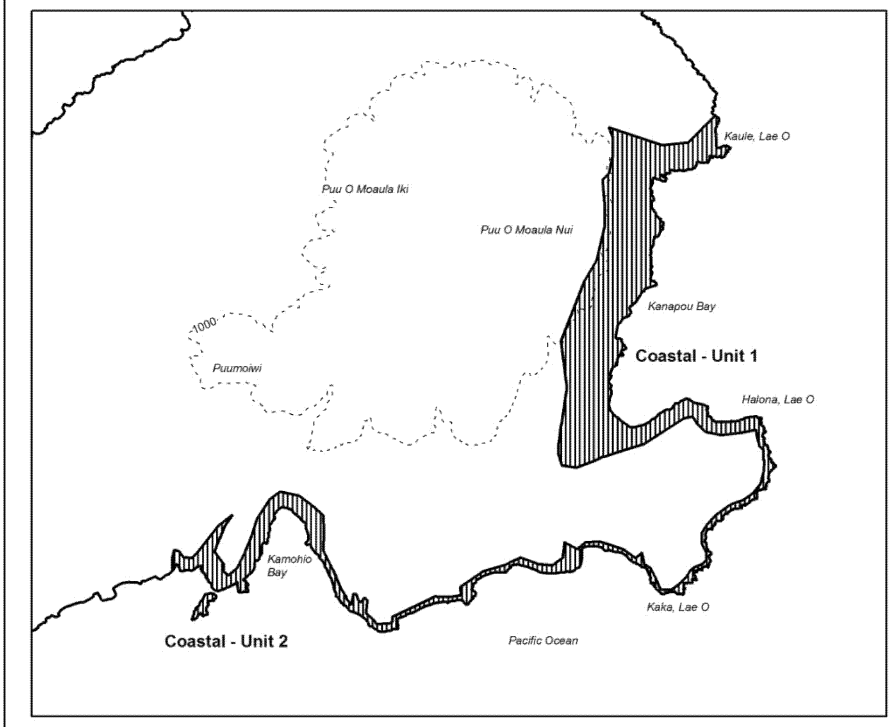
(A) These units are critical habitat for *Kanaloa kahoolawensis*, *Sesbania tomentosa*, and *Vigna o-wahuensis*.

(B) Map of Kahoolawe—Coastal—Unit 1 and Kahoolawe—Coastal—Unit 2 (Map 30) follows:

Map 30

Kahoolawe—Coastal

Unit 1 and Unit 2



Critical Habitat
Coastline
Elevation (1,000-foot contours)

0 0.5 1 Mi
0 0.5 1 Km
N

(iii) Kahoolawe—Coastal—Unit 3 (189 ac, 76 ha).

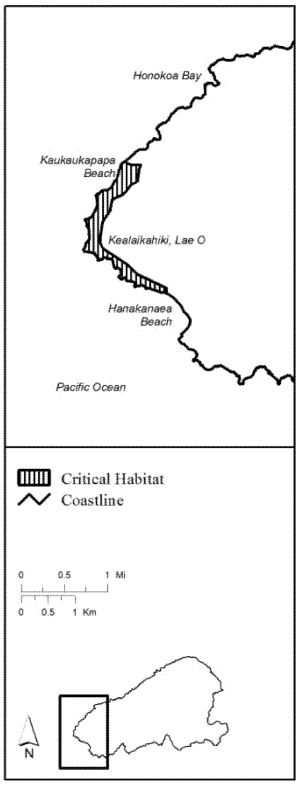
(A) This unit is critical habitat for *Kanaloa kahoolawensis*, *Sesbania tomentosa*, and *Vigna o-wahuensis*.

(B) Map of Kahoolawe—Coastal—Unit 3 (Map 31) follows:

Map 31

Kahoolawe—Coastal

Unit 3



(iv) Kahoolawe—Lowland Dry—Unit 1 (1,220 ac, 494 ha).

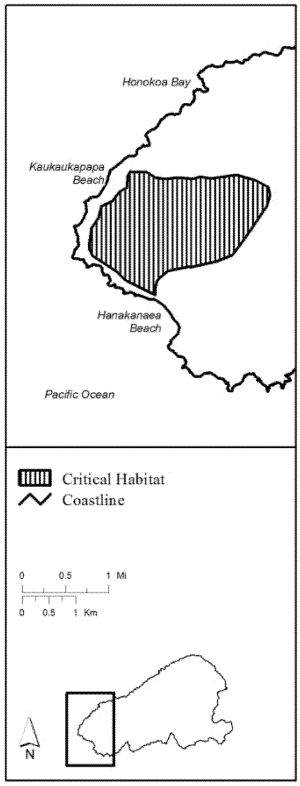
(A) This unit is critical habitat for *Gouania hillebrandii*, *Hibiscus brackenridgei*, *Kanaloa kahoolawensis*, *Neraudia sericea*, *Sesbania tomentosa*, and *Vigna o-wahuensis*.

(B) Map of Kahoolawe—Lowland Dry––Unit 1 (Map 32) follows:

Map 32

Kahoolawe—Lowland Dry

Unit 1



(v) Kahoolawe—Lowland Dry—Unit 2 (3,205 ac, 1,297 ha).

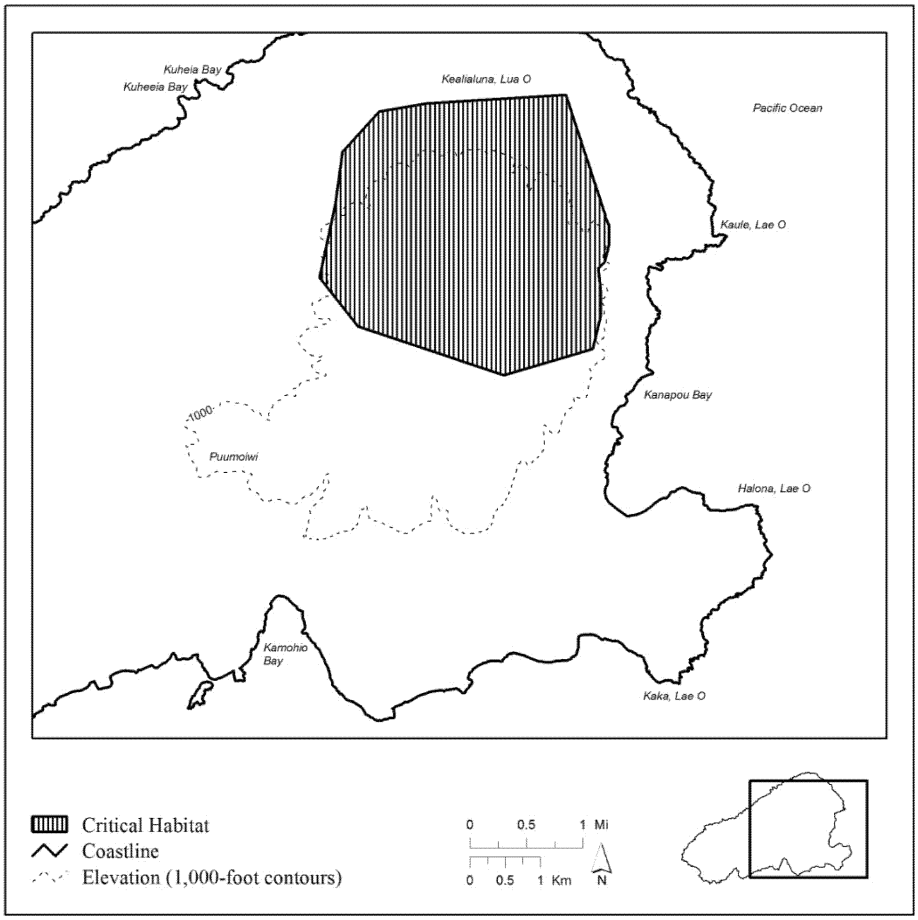
(A) This unit is critical habitat for *Gouania hillebrandii*, *Hibiscus brackenridgei*, *Kanaloa kahoolawensis*, *Neraudia sericea*, *Sesbania tomentosa*, and *Vigna o-wahuensis*.

(B) Map of Kahoolawe—Lowland Dry––Unit 2 (Map 33) follows:

Map 33

Kahoolawe—Lowland Dry

Unit 2



(VI) OCCUPANCY OF SPECIES BY DESIGNATED CRITICAL HABITAT UNITS FOR KAHOOLAWE

Unit name	Species occupied	Species unoccupied
Kahoolawe—Coastal—Unit 1	*Kanaloa kahoolawensis.*	*Sesbania tomentosa.* *Vigna o-wahuensis.*
Kahoolawe—Coastal—Unit 2	*Sesbania tomentosa.*	*Kanaloa kahoolawensis.* *Vigna o-wahuensis.*
Kahoolawe—Coastal—Unit 3		*Kanaloa kahoolawensis.* *Sesbania tomentosa.* *Vigna o-wahuensis.*

(VI) OCCUPANCY OF SPECIES BY DESIGNATED CRITICAL HABITAT UNITS FOR KAHOOLAWE—Continued

Unit name	Species occupied	Species unoccupied
Kahoolawe—Lowland Dry—Unit 1		*Gouania hillebrandii.* *Hibiscus brackenridgei.* *Kanaloa kahoolawensis.* *Neraudia sericea.* *Sesbania tomentosa.* *Vigna o-wahuensis.*
Kahoolawe—Lowland Dry—Unit 2		*Gouania hillebrandii.* *Hibiscus brackenridgei.* *Kanaloa kahoolawensis.* *Neraudia sericea.* *Sesbania tomentosa.* *Vigna o-wahuensis.*

(f) *Plants on Maui and Kahoolawe; Constituent elements*—(1) *Flowering plants.*

FAMILY AMARANTHACEAE

Nototrichium humile (KULUI)

Maui—Lowland Dry—Unit 1, Maui—Lowland Dry—Unit 2, Maui—Lowland Dry—Unit 3, and Maui—Lowland Dry—Unit 4, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Nototrichium humile* on Maui. In units Maui—Lowland Dry—Unit 1, Maui—Lowland Dry—Unit 2, Maui—Lowland Dry—Unit 3, and Maui—Lowland Dry—Unit 4, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: Less than 50 in (130 cm).

(iii) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(iv) Canopy: *Diospyros, Myoporum, Pleomele, Santalum.*

(v) Subcanopy: *Chamaesyce, Dodonaea, Leptecophylla, Osteomeles, Psydrax, Scaevola, Wikstroemia.*

(vi) Understory: *Alyxia, Artemisia, Bidens, Chenopodium, Nephrolepis, Peperomia, Sicyos.*

FAMILY APIACEAE

Peucedanum sandwicense (MAKOU)

Maui—Coastal—Unit 1, Maui—Coastal—Unit 2, Maui—Coastal—Unit 3, Maui—Coastal—Unit 4, Maui—Coastal—Unit 5, Maui—Coastal—Unit 6, Maui—Coastal—Unit 7, Maui—Coastal—Unit 8, Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, and Maui—Lowland Wet—Unit 8, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Peucedanum sandwicense* on Maui.

(i) In units Maui—Coastal—Unit 1, Maui—Coastal—Unit 2, Maui—Coastal—Unit 3, Maui—Coastal—Unit 4, Maui—Coastal—Unit 5, Maui—Coastal—Unit 6, Maui—Coastal—Unit 7, and Maui—Coastal—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Less than 980 ft (300 m).

(B) Annual precipitation: Less than 20 in (50 cm).

(C) Substrate: Well-drained, calcareous, talus slopes; dunes; weathered clay soils; ephemeral pools; mudflats.

(D) Canopy: *Hibiscus, Myoporum, Santalum, Scaevola.*

(E) Subcanopy: *Gossypium, Sida, Vitex.*

(F) Understory: *Eragrostis, Jacquemontia, Lyceum, Nama, Sesuvium, Sporobolus, Vigna.*

(ii) In units Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, and Maui—Lowland Wet—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

Sanicula purpurea (NCN)

Maui—Montane Wet—Unit 6 and Maui—Montane Wet—Unit 7, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Sanicula purpurea* on Maui. In units Maui—Montane Wet—Unit 6 and Maui—Montane Wet—Unit 7, the physical and biological features of critical habitat are:

(i) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(ii) Annual precipitation: Greater than 75 in (190 cm).

(iii) Substrate: Well-developed soils, montane bogs.

(iv) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(v) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(vi) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

Spermolepis hawaiiensis (NCN)

Maui—Lowland Dry—Unit 1, Maui—Lowland Dry—Unit 2, Maui—Lowland Dry—Unit 3, Maui—Lowland Dry—Unit 4, Maui—Lowland Dry—Unit 5, and Maui—Lowland Dry—Unit 6, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Spermolepis hawaiiensis* on Maui. In units Maui—Lowland Dry—Unit 1, Maui—Lowland Dry—Unit 2, Maui—Lowland Dry—Unit 3, Maui—Lowland Dry—Unit 4, Maui—Lowland Dry—Unit 5, and Maui—Lowland Dry—Unit 6, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: Less than 50 in (130 cm).

(iii) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(iv) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*.

(v) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(vi) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

FAMILY ASTERACEAE

Argyroxiphium sandwicense ssp. *macrocephalum* (AHINAHINA)

Maui—Montane Mesic—Unit 1, Maui—Subalpine—Unit 1, Maui—Subalpine—Unit 2, Maui—Alpine—Unit 1, Maui—Dry Cliff—Unit 1, Maui—Dry Cliff—Unit 2, Maui—Dry Cliff—Unit 3, and Maui—Dry Cliff—Unit 4, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Argyroxiphium sandwicense* ssp. *macrocephalum* on Maui.

(i) In unit Maui—Montane Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Deep ash deposits, thin silty loams.

(D) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(E) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

(F) Understory: Ferns, *Carex*, *Peperomia*.

(ii) In units Maui—Subalpine—Unit 1 and Maui—Subalpine—Unit 2, the physical and biological features of critical habitat are:

(A) Elevation: 6,500 to 9,800 ft (2,000 to 3,000 m).

(B) Annual precipitation: 15 to 40 in (38 to 100 cm).

(C) Substrate: Dry ash; sandy loam; rocky, undeveloped soils; weathered lava.

(D) Canopy: *Chamaesyce*, *Chenopodium*, *Metrosideros*, *Myoporum*, *Santalum*, *Sophora*.

(E) Subcanopy: *Coprosma*, *Dodonaea*, *Dubautia*, *Geranium*, *Leptecophylla*, *Vaccinium*, *Wikstroemia*.

(F) Understory: Ferns, *Bidens*, *Carex*, *Deschampsia*, *Eragrostis*, *Gahnia*, *Luzula*, *Panicum*, *Pseudognaphalium*, *Sicyos*, *Tetramolopium*.

(iii) In unit Maui—Alpine–Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: Greater than 9,800 ft (3,000 m).

(B) Annual precipitation: 30 to 50 in (75 to 125 cm).

(C) Substrate: Barren gravel, debris, cinders.

(D) Canopy: None.

(E) Subcanopy: *Argyroxiphium*, *Dubautia*, *Silene*, *Tetramolopium*.

(F) Understory: None.

(iv) In units Maui—Dry Cliff—Unit 1, Maui—Dry Cliff—Unit 2, Maui—Dry Cliff—Unit 3, and Maui—Dry Cliff—Unit 4, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

Bidens campylotheca ssp. *pentamera* (KOOKOOLAU)

Maui—Lowland Dry—Unit 5, Maui—Lowland Dry—Unit 6, Maui—Lowland Mesic—Unit 2, Maui—Lowland Mesic—Unit 3, Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, Maui—Montane Wet—Unit 5, Maui—Montane Mesic—Unit 1, Maui—Dry Cliff—Unit 1, Maui—Dry Cliff—Unit 2, Maui—Dry Cliff—Unit 3, Maui—Dry Cliff—Unit 4, Maui—Wet Cliff—Unit 1, Maui—Wet Cliff—Unit 2, Maui—Wet Cliff—Unit 3, Maui—Wet Cliff—Unit 4, Maui—Wet Cliff—Unit 6, Maui—Wet Cliff—Unit 7, and Maui—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Bidens campylotheca* ssp. *pentamera* on Maui.

(i) In units Maui—Lowland Dry—Unit 5 and Maui—Lowland Dry—Unit 6, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Less than 50 in (130 cm).

(C) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(D) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

(ii) In units Maui—Lowland Mesic—Unit 2 and Maui—Lowland Mesic—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(iii) In units Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, and Maui—Montane Wet—Unit 5, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(iv) In unit Maui—Montane Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Deep ash deposits, thin silty loams.

(D) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(E) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

(F) Understory: Ferns, *Carex*, *Peperomia*.

(v) In units Maui—Dry Cliff—Unit 1, Maui—Dry Cliff—Unit 2, Maui—Dry Cliff—Unit 3, and Maui—Dry Cliff—Unit 4, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

(vi) In units Maui—Wet Cliff—Unit 1, Maui—Wet Cliff—Unit 2, Maui—Wet Cliff—Unit 3, Maui—Wet Cliff—Unit 4, Maui—Wet Cliff—Unit 6, Maui–Wet Cliff—Unit 7, and Maui—Wet Cliff–Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

Bidens campylotheca ssp. *waihoiensis* (KOOKOOLAU)

Maui–Lowland Wet—Unit 1, Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, Maui—Montane Wet—Unit 5, Maui—Wet Cliff—Unit 1, Maui—Wet Cliff—Unit 2, Maui—Wet Cliff—Unit 3, and Maui—Wet Cliff—Unit 4, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Bidens campylotheca* ssp. *waihoiensis* on Maui.

(i) In unit Maui—Lowland Wet—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In units Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, and Maui—Montane Wet—Unit 5, and the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(iii) In units Maui—Wet Cliff—Unit 1, Maui—Wet Cliff—Unit 2, Maui—Wet Cliff—Unit 3, and Maui—Wet Cliff—Unit 4, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

Bidens conjuncta (KOOKOOLAU)

Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit

5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, Maui—Lowland Wet—Unit 8, Maui—Montane Wet—Unit 6, Maui—Montane Wet—Unit 7, Maui—Wet Cliff—Unit 6, Maui—Wet Cliff—Unit 7, and Maui—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Bidens conjuncta* on Maui.

(i) In units Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, and Maui—Lowland Wet—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In units Maui—Montane Wet—Unit 6 and Maui—Montane Wet—Unit 7, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(iii) In units Maui—Wet Cliff—Unit 6, Maui—Wet Cliff—Unit 7, and Maui—Wet Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

Bidens micrantha ssp. *kalealaha* (KOOKOOLAU)

Maui—Lowland Dry—Unit 1, Maui—Lowland Dry—Unit 2, Maui—Lowland Dry—Unit 3, Maui—Lowland Dry—Unit 4, Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, Maui—Lowland Wet—Unit 8, Maui—Montane Mesic—Unit 1, Maui—Subalpine—Unit 1, Maui—Subalpine—Unit 2, Maui—Dry Cliff—Unit 1, Maui—Dry Cliff—Unit 2, Maui—Dry Cliff—Unit 3, and Maui—Dry Cliff—Unit 4, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Bidens micrantha* ssp. *kalealaha* on Maui.

(i) In units Maui—Lowland Dry—Unit 1, Maui—Lowland Dry—Unit 2, Maui—Lowland Dry—Unit 3, and Maui—Lowland Dry—Unit 4, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Less than 50 in (130 cm).

(C) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(D) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

(ii) In units Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, and Maui—Lowland Wet—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(iii) In unit Maui—Montane Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Deep ash deposits, thin silty loams.

(D) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(E) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

(F) Understory: Ferns, *Carex*, *Peperomia*.

(iv) In units Maui—Subalpine—Unit 1 and Maui—Subalpine—Unit 2, the physical and biological features of critical habitat are:

(A) Elevation: 6,500 to 9,800 ft (2,000 to 3,000 m).

(B) Annual precipitation: 15 to 40 in (38 to 100 cm).

(C) Substrate: Dry ash; sandy loam; rocky, undeveloped soils; weathered lava.

(D) Canopy: *Chamaesyce*, *Chenopodium*, *Metrosideros*, *Myoporum*, *Santalum*, *Sophora*.

(E) Subcanopy: *Coprosma*, *Dodonaea*, *Dubautia*, *Geranium*, *Leptecophylla*, *Vaccinium*, *Wikstroemia*.

(F) Understory: Ferns, *Bidens*, *Carex*, *Deschampsia*, *Eragrostis*, *Gahnia*, *Luzula*, *Panicum*, *Pseudognaphalium*, *Sicyos*, *Tetramolopium*.

(v) In units Maui—Dry Cliff—Unit 1, Maui—Dry Cliff—Unit 2, Maui—Dry Cliff—Unit 3, and Maui—Dry Cliff—Unit 4, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

Dubautia plantaginea ssp. *humilis* (NAENAE)

Maui—Wet Cliff–Unit 6, Maui—Wet Cliff—Unit 7, and Maui—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Dubautia plantaginea* ssp. *humilis* on Maui. In units Maui—Wet Cliff—Unit 6, Maui—Wet Cliff—Unit 7, and Maui—Wet Cliff—Unit 8, the physical and biological features of critical habitat are:

(i) Elevation: Unrestricted.

(ii) Annual precipitation: Greater than 75 in (190 cm).

(iii) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(iv) Canopy: None.

(v) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(vi) Understory: Bryophytes, ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

Hesperomannia arborescens (NCN)

Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, Maui—Lowland Wet—Unit 8, Maui—Wet Cliff—Unit 6, Maui—Wet Cliff—Unit 7, and Maui—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Hesperomannia arborescens* on Maui.

(i) In units Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, and Maui—Lowland Wet—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In units Maui—Wet Cliff—Unit 6, Maui—Wet Cliff—Unit 7, and Maui—Wet Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

Hesperomannia arbuscula (NCN)

Maui—Lowland Dry—Unit 5, Maui—Lowland Dry—Unit 6, Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, Maui—Lowland Wet—Unit 8, Maui—Dry Cliff—Unit 5, Maui—Dry Cliff—Unit 6, Maui—Wet Cliff—Unit 6, Maui—Wet Cliff—Unit 7, and Maui—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Hesperomannia arbuscula* on Maui.

(i) In units Maui—Lowland Dry—Unit 5 and Maui—Lowland Dry—Unit 6, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Less than 50 in (130 cm).

(C) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(D) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

(ii) In units Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, and Maui—Lowland Wet—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(iii) In units Maui—Dry Cliff—Unit 5 and Maui—Dry Cliff—Unit 6, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

(iv) In units Maui—Wet Cliff—Unit 6, Maui—Wet Cliff—Unit 7, and Maui—Wet Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

Melanthera kamolensis (NEHE)

Maui—Lowland Dry—Unit 1, Maui—Lowland Dry—Unit 2, Maui—Lowland Dry—Unit 3, and Maui—Lowland Dry—Unit 4, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Melanthera kamolensis* on Maui. In units Maui—Lowland Dry—Unit 1, Maui—Lowland Dry—Unit 2, Maui—Lowland Dry—Unit 3, and Maui—Lowland Dry—

Unit 4, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: Less than 50 in (130 cm).

(iii) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(iv) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*.

(v) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(vi) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

Remya mauiensis (MAUI REMYA)

Maui—Lowland Dry—Unit 5, Maui—Lowland Dry—Unit 6, Maui—Lowland Mesic—Unit 2, Maui—Lowland Mesic—Unit 3, Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, Maui—Lowland Wet—Unit 8, Maui—Montane Mesic—Unit 2, Maui—Montane Mesic—Unit 3, Maui—Montane Mesic—Unit 4, Maui—Montane Mesic—Unit 5, Maui—Wet Cliff—Unit 6, Maui—Wet Cliff—Unit 7, and Maui—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Remya mauiensis* on Maui.

(i) In units Maui—Lowland Dry—Unit 5 and Maui—Lowland Dry—Unit 6, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Less than 50 in (130 cm).

(C) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(D) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

(ii) In units Maui—Lowland Mesic—Unit 2 and Maui—Lowland Mesic—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(iii) In units Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, and Maui—Lowland Wet—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(iv) In units Maui—Montane Mesic—Unit 2, Maui—Montane Mesic—Unit 3, Maui—Montane Mesic—Unit 4, and Maui–Montane Mesic—Unit 5, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Deep ash deposits, thin silty loams.

(D) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(E) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

(F) Understory: Ferns, *Carex*, *Peperomia*.

(v) In units Maui—Wet Cliff—Unit 6, Maui—Wet Cliff—Unit 7, and Maui—Wet Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

Tetramolopium capillare (PAMAKANI)

Maui—Lowland Dry—Unit 5, Maui—Lowland Dry—Unit 6, Maui—Dry Cliff—Unit 5, Maui—Dry Cliff—Unit 6, Maui—Wet Cliff—Unit 6, Maui—Wet Cliff—Unit 7, and Maui—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Tetramolopium capillare* on Maui.

(i) In units Maui—Lowland Dry—Unit 5 and Maui—Lowland Dry—Unit 6, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Less than 50 in (130 cm).

(C) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(D) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

(ii) In units Maui—Dry Cliff—Unit 5 and Maui—Dry Cliff—Unit 6, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

(iii) In units Maui—Wet Cliff—Unit 6, Maui—Wet Cliff—Unit 7, and Maui—Wet Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

Tetramolopium remyi (NCN)

Maui—Lowland Dry—Unit 5 and Maui—Lowland Dry—Unit 6, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Tetramolopium remyi* on Maui. In units Maui—Lowland Dry—Unit 5 and Maui—Lowland Dry—Unit 6, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: Less than 50 in (130 cm).

(iii) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(iv) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*.

(v) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(vi) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

FAMILY CAMPANULACEAE:

Brighamia rockii (PUA ALA)

Maui—Coastal—Unit 1, Maui—Coastal—Unit 2, Maui—Coastal—Unit 3, Maui—Coastal—Unit 4, Maui—Coastal—Unit 5, Maui—Coastal—Unit 6, Maui—Coastal—Unit 7, Maui—Coastal—Unit 8, Maui—Coastal—Unit 9, Maui—Coastal—Unit 10, and Maui—Coastal—Unit 11, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Brighamia rockii* on Maui. In units Maui—Coastal—Unit 1, Maui—Coastal—Unit 2, Maui—Coastal—Unit 3,

Maui—Coastal—Unit 4, Maui—Coastal—Unit 5, Maui—Coastal—Unit 6, Maui—Coastal—Unit 7, Maui—Coastal—Unit 8, Maui—Coastal—Unit 9, Maui—Coastal—Unit 10, and Maui—Coastal—Unit 11, the physical and biological features of critical habitat are:

(i) Elevation: Less than 980 ft (300 m).

(ii) Annual precipitation: Less than 20 in (50 cm).

(iii) Substrate: Well-drained, calcareous, talus slopes; dunes; weathered clay soils; ephemeral pools; mudflats.

(iv) Canopy: *Hibiscus*, *Myoporum*, *Santalum*, *Scaevola*.

(v) Subcanopy: *Gossypium*, *Sida*, *Vitex*.

(vi) Understory: *Eragrostis*, *Jacquemontia*, *Lyceum*, *Nama*, *Sesuvium*, *Sporobolus*, *Vigna*.

Clermontia lindseyana (OHA WAI)

Maui—Montane Mesic—Unit 1, identified in the legal descriptions in paragraph (e)(1) of this section, constitutes critical habitat for *Clermontia lindseyana* on Maui. In unit Maui—Montane Mesic—Unit 1, the physical and biological features of critical habitat are:

(i) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(ii) Annual precipitation: 50 to 75 in (130 to 190 cm).

(ii) Substrate: Deep ash deposits, thin silty loams.

(iv) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(v) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

(vi) Understory: Ferns, *Carex*, *Peperomia*.

Clermontia oblongifolia ssp. *mauiensis* (OHA WAI)

Maui—Lowland Wet—Unit 1, Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, Maui—Lowland Wet—Unit 8, Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, and Maui—Montane Wet—Unit 5, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Clermontia oblongifolia* ssp. *mauiensis* on Maui.

(i) In units Maui—Lowland Wet–Unit 1, Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, and Maui—Lowland Wet—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In units Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui–Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, and Maui—Montane Wet—Unit 5, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

Clermontia peleana (OHA WAI)

Maui—Lowland Wet—Unit 1, identified in the legal descriptions in paragraph (e)(1) of this section, constitutes critical habitat for *Clermontia peleana* on Maui. In unit Maui—Lowland Wet—Unit 1, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: Greater than 75 in (190 cm).

(iii) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(iv) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(v) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(vi) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

Clermontia samuelii (OHA WAI)

Maui—Lowland Wet—Unit 1, Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, and Maui—Montane Wet—Unit 5, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Clermontia samuelii* on Maui.

(i) In unit Maui—Lowland Wet—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In units Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, and Maui—Montane Wet—Unit 5, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

Cyanea asplenifolia (HAHA)

Maui—Lowland Mesic—Unit 1, Maui—Lowland Wet—Unit 1, Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, and Maui—Lowland Wet—Unit 8, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Cyanea asplenifolia* on Maui.

(i) In unit Maui—Lowland Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Maui—Lowland Wet—Unit 1, Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, and Maui—Lowland Wet—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

Cyanea copelandii ssp. *haleakalaensis* (HAHA)

Maui—Lowland Mesic—Unit 1, Maui—Lowland Wet—Unit 1, Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, Maui—Montane Wet—Unit 5, Maui—Wet Cliff—Unit 1, Maui—Wet Cliff—Unit 2, Maui—Wet Cliff—Unit 3, and Maui—Wet Cliff—Unit 4, identified in

the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Cyanea copelandii* ssp. *haleakalaensis* on Maui.

(i) In unit Maui—Lowland Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In unit Maui—Lowland Wet—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(iii) In units Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, and Maui—Montane Wet—Unit 5, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(iv) In units Maui—Wet Cliff—Unit 1, Maui—Wet Cliff—Unit 2, Maui—Wet Cliff—Unit 3, and Maui—Wet Cliff—Unit 4, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

Cyanea duvalliorum (HAHA)

Maui—Lowland Wet—Unit 1, Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, and Maui—Montane Wet—Unit 5, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Cyanea duvalliorum* on Maui.

(i) In unit Maui—Lowland Wet—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In units Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, and Maui—Montane Wet—Unit 5, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

Cyanea glabra (HAHA)

Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, Maui—Lowland Wet—Unit 8, Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, Maui—Montane Wet—Unit 5, Maui—Montane Mesic—Unit 1, Maui—Wet Cliff—Unit 6, Maui—Wet Cliff—Unit 7, and Maui—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Cyanea glabra* on Maui.

(i) In units Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, and Maui—Lowland Wet—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In units Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, and Maui—Montane Wet—Unit 5, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(iii) In unit Maui—Montane Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Deep ash deposits, thin silty loams.

(D) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(E) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

(F) Understory: Ferns, *Carex*, *Peperomia*.

(iv) In units Maui—Wet Cliff—Unit 6, Maui—Wet Cliff—Unit7, and Maui—Wet Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

Cyanea hamatiflora ssp. *hamatiflora* (HAHA)

Maui—Lowland Wet—Unit 1, Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, Maui—Montane Wet—Unit 5, and Maui—Montane Mesic—Unit 1, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Cyanea hamatiflora* ssp. *hamatiflora* on Maui.

(i) In unit Maui—Lowland Wet—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In units Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, and Maui—Montane Wet—Unit 5, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(iii) In unit Maui—Montane Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Deep ash deposits, thin silty loams.

(D) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(E) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

(F) Understory: Ferns, *Carex*, *Peperomia*.

Cyanea horrida (HAHA NUI)

Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, Maui—Montane Wet—Unit 5, Maui—Montane Mesic—Unit 1, Maui—Wet Cliff—Unit 1, Maui—Wet Cliff—Unit 2, Maui—Wet Cliff—Unit 3, and Maui—Wet Cliff—Unit 4, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Cyanea horrida* on Maui.

(i) In units Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, and Maui—Montane Wet—Unit 5, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(ii) In unit Maui—Montane Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Deep ash deposits, thin silty loams.

(D) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(E) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

(F) Understory: Ferns, *Carex*, *Peperomia*.

(iii) In units Maui—Wet Cliff—Unit 1, Maui—Wet Cliff—Unit 2, Maui—Wet Cliff—Unit 3, and Maui—Wet Cliff—Unit 4, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

Cyanea kunthiana (HAHA)

Maui—Lowland Wet—Unit 1, Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit

4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, Maui—Lowland Wet—Unit 8, Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, Maui—Montane Wet—Unit 5, Maui—Montane Wet—Unit 6, Maui—Montane Wet—Unit 7, and Maui—Montane Mesic—Unit 1, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Cyanea kunthiana* on Maui.

(i) In units Maui—Lowland Wet—Unit 1, Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, and Maui—Lowland Wet—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In units Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, Maui—Montane Wet—Unit 5, Maui—Montane Wet—Unit 6, and Maui—Montane Wet—Unit 7, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(iii) In unit Maui—Montane Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Deep ash deposits, thin silty loams.

(D) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(E) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

(F) Understory: Ferns, *Carex*, *Peperomia*.

Cyanea lobata (HAHA)

Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, Maui—Lowland Wet—Unit 8, Maui—Wet Cliff—Unit 6, Maui—Wet Cliff—Unit 7, and Maui—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Cyanea lobata* on Maui.

(i) In units Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, and Maui—Lowland Wet—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In units Maui—Wet Cliff—Unit 6, Maui—Wet Cliff—Unit 7, and Maui—Wet Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

Cyanea magnicalyx (HAHA)

Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, Maui—Lowland Wet—Unit 8, Maui—Montane Mesic—Unit 2, Maui—Montane Mesic—Unit 3, Maui—Montane Mesic—Unit 4, Maui—Montane Mesic—Unit 5, Maui—Wet Cliff—Unit 6, Maui—Wet Cliff—Unit 7, and Maui—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Cyanea magnicalyx* on Maui.

(i) In units Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, and Maui—Lowland Wet—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In units Maui—Montane Mesic—Unit 2, Maui—Montane Mesic—Unit 3, Maui—Montane Mesic—Unit 4, and Maui—Montane Mesic—Unit 5, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Deep ash deposits, thin silty loams.

(D) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(E) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

(F) Understory: Ferns, *Carex*, *Peperomia*.

(iii) In units Maui—Wet Cliff—Unit 6, Maui—Wet Cliff—Unit 7, and Maui—Wet Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

Cyanea maritae (HAHA)

Maui—Lowland Wet—Unit 1, Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, and Maui—Montane Wet—Unit 5, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Cyanea maritae* on Maui.

(i) In unit Maui—Lowland Wet—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In units Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, and Maui—Montane Wet—Unit 5, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

Cyanea mceldowneyi (HAHA)

Maui—Lowland Wet—Unit 1, Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, Maui—Montane Wet—Unit 5, and Maui—Montane Mesic—Unit 1, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Cyanea mceldowneyi* on Maui.

(i) In unit Maui—Lowland Wet—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In units Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, and Maui—Montane Wet—Unit 5, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(iii) In unit Maui—Montane Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Deep ash deposits, thin silty loams.

(D) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(E) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

(F) Understory: Ferns, *Carex*, *Peperomia*.

Cyanea obtusa (HAHA)

Maui—Lowland Dry—Unit 5, Maui—Lowland Dry—Unit 6, and Maui—Montane Mesic—Unit 1, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Cyanea obtusa* on Maui.

(i) In units Maui—Lowland Dry—Unit 5 and Maui—Lowland Dry—Unit 6, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Less than 50 in (130 cm).

(C) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(D) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

(ii) In unit Maui—Montane Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Deep ash deposits, thin silty loams.

(D) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(E) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

(F) Understory: Ferns, *Carex*, *Peperomia*.

FAMILY CARYOPHYLLACEAE

Schiedea haleakalensis (NCN)

Maui—Subalpine—Unit 1, Maui—Subalpine—Unit 2, Maui—Dry Cliff—Unit 1, Maui—Dry Cliff—Unit 2, Maui—Dry Cliff—Unit 3, and Maui—Dry Cliff—Unit 4, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Schiedea haleakalensis* on Maui.

(i) In units Maui—Subalpine—Unit 1 and Maui—Subalpine—Unit 2, the physical and biological features of critical habitat are:

(A) Elevation: 6,500 to 9,800 ft (2,000 to 3,000 m).

(B) Annual precipitation: 15 to 40 in (38 to 100 cm).

(C) Substrate: Dry ash; sandy loam; rocky, undeveloped soils; weathered lava.

(D) Canopy: *Chamaesyce*, *Chenopodium*, *Metrosideros*, *Myoporum*, *Santalum*, *Sophora*.

(E) Subcanopy: *Coprosma*, *Dodonaea*, *Dubautia*, *Geranium*, *Leptecophylla*, *Vaccinium*, *Wikstroemia*.

(F) Understory: Ferns, *Bidens*, *Carex*, *Deschampsia*, *Eragrostis*, *Gahnia*, *Luzula*, *Panicum*, *Pseudognaphalium*, *Sicyos*, *Tetramolopium*.

(ii) In units Maui—Dry Cliff—Unit 1, Maui—Dry Cliff—Unit 2, Maui—Dry Cliff—Unit 3, and Maui—Dry Cliff—Unit 4, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

Schiedea jacobii (NCN)

Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, and Maui—Montane Wet—Unit 5, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Schiedea jacobii* on Maui. In units Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, and Maui—Montane Wet—Unit 5, the physical and biological features of critical habitat are:

(i) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(ii) Annual precipitation: Greater than 75 in (190 cm).

(iii) Substrate: Well-developed soils, montane bogs.

(iv) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(v) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(vi) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

Schiedea salicaria (NCN)

Maui—Lowland Dry—Unit 5 and Maui—Lowland Dry—Unit 6, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Schiedea salicaria* on Maui. In units Maui—Lowland Dry—Unit 5 and Maui—Lowland Dry—Unit 6, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: Less than 50 in (130 cm).

(iii) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(iv) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*.

(v) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(vi) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

FAMILY CONVOLVULACEAE

Bonamia menziesii (NCN)

Maui—Lowland Dry—Unit 1, Maui—Lowland Dry—Unit 2, Maui—Lowland Dry—Unit 3, Maui—Lowland Dry—Unit 4, Maui—Dry Cliff—Unit 5, Maui—Dry Cliff—Unit 6, Maui—Wet Cliff—Unit 6, Maui—Wet Cliff—Unit 7, and Maui—

Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Bonamia menziesii* on Maui.

(i) In units Maui—Lowland Dry—Unit 1, Maui—Lowland Dry—Unit 2, Maui—Lowland Dry—Unit 3, and Maui—Lowland Dry—Unit 4, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Less than 50 in (130 cm).

(C) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(D) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

(ii) In units Maui—Dry Cliff—Unit 5 and Maui—Dry Cliff—Unit 6, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

(iii) In units Maui—Wet Cliff—Unit 6, Maui—Wet Cliff—Unit 7, and Maui—Wet Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

FAMILY CYPERACEAE

Cyperus pennatiformis (NCN)

Maui—Coastal—Unit 1, Maui—Coastal—Unit 2, Maui—Coastal—Unit 3, Maui—Coastal—Unit 4, Maui—Coastal—Unit 5, Maui—Coastal—Unit 6, Maui—Coastal—Unit 7, and Maui—Coastal—Unit 8, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Cyperus pennatiformis* on Maui. In units Maui—Coastal—Unit 1, Maui—Coastal—Unit 2, Maui—Coastal—Unit 3, Maui—Coastal—Unit 4, Maui—Coastal—Unit 5, Maui—Coastal—Unit 6, Maui—Coastal—Unit 7, and Maui—Coastal—Unit 8, the physical and biological features of critical habitat are:

(i) Elevation: Less than 980 ft (300 m).

(ii) Annual precipitation: Less than 20 in (50 cm).

(iii) Substrate: Well-drained, calcareous, talus slopes; dunes; weathered clay soils; ephemeral pools; mudflats.

(iv) Canopy: *Hibiscus*, *Myoporum*, *Santalum*, *Scaevola*.

(v) Subcanopy: *Gossypium*, *Sida*, *Vitex*.

(vi) Understory: *Eragrostis*, *Jacquemontia*, *Lyceum*, *Nama*, *Sesuvium*, *Sporobolus*, *Vigna*.

FAMILY EUPHORBIACEAE

Flueggea neowawraea (MEHAMEHAME)

Maui—Lowland Dry—Unit 1, Maui—Lowland Dry—Unit 2, Maui—Lowland Dry—Unit 3, and Maui—Lowland Dry—Unit 4, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Flueggea neowawraea* on Maui. In units Maui—Lowland Dry—Unit 1, Maui—Lowland Dry—Unit 2, Maui—Lowland Dry—Unit 3, and Maui—Lowland Dry—Unit 4, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: Less than 50 in (130 cm).

(iii) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(iv) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*..

(v) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(vi) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

FAMILY FABACEAE

Canavalia pubescens (AWIKIWIKI)

Maui—Lowland Dry—Unit 1, Maui—Lowland Dry—Unit 2, Maui—Lowland Dry—Unit 3, and Maui—Lowland Dry—Unit 4, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Canavalia pubescens* on Maui. In units Maui—Lowland Dry—Unit 1, Maui—Lowland Dry—Unit 2, Maui—Lowland Dry—Unit 3, and Maui—Lowland Dry—Unit 4, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: Less than 50 in (130 cm).

(iii) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(iv) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*..

(v) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(vi) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

Kanaloa kahoolawensis (KOHE MALAMA MALAMA O KANALOA)

Kahoolawe—Coastal—Unit 1, Kahoolawe—Coastal—Unit 2, Kahoolawe—Coastal—Unit 3, Kahoolawe—Lowland Dry—Unit 1, and Kahoolawe—Lowland Dry—Unit 2, identified in the legal descriptions in paragraph (e)(2) of this section, constitute critical habitat for *Kanaloa kahoolawensis* on Kahoolawe.

(i) In units Kahoolawe—Coastal—Unit 1, Kahoolawe—Coastal—Unit 2, and Kahoolawe—Coastal—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 980 ft (300 m).

(B) Annual precipitation: Less than 20 in (50 cm).

(C) Substrate: Well-drained, calcareous, talus slopes; dunes; weathered clay soils; ephemeral pools; mudflats.

(D) Canopy: *Hibiscus*, *Myoporum*, *Santalum*, *Scaevola*.

(E) Subcanopy: *Gossypium*, *Sida*, *Vitex*.

(F) Understory: *Eragrostis*, *Jacquemontia*, *Lyceum*, *Nama*, *Sesuvium*, *Sporobolus*, *Vigna*.

(ii) In units Kahoolawe—Lowland Dry—Unit 1 and Kahoolawe—Lowland Dry—Unit 2, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Less than 50 in (130 cm).

(C) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(D) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

Mucuna sloanei var. persericea (SEA BEAN)

Maui—Lowland Wet—Unit 1, identified in the legal descriptions in paragraph (e)(1) of this section, constitutes critical habitat for *Mucuna sloanei* var. *persericea* on Maui. In unit Maui—Lowland Wet—Unit 1, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: Greater than 75 in (190 cm).

(iii) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(iv) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(v) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(vi) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

Sesbania tomentosa (OHAI)

Maui—Coastal—Unit 9, Maui—Coastal—Unit 10, Maui—Coastal—Unit 11, Kahoolawe—Coastal—Unit 1, Kahoolawe—Coastal—Unit 2, Kahoolawe–Coastal—Unit 3, Maui—Lowland Dry—Unit 1, Maui—Lowland Dry—Unit 2, Maui—Lowland Dry—Unit 3, Maui—Lowland Dry—Unit 4, Maui—Lowland Dry—Unit 5, Maui—Lowland Dry–Unit 6, Kahoolawe—Lowland Dry–Unit 1, and Kahoolawe–Lowland Dry—

Unit 2, identified in the legal descriptions in paragraphs (e)(1) and (e)(2) of this section, constitute critical habitat for *Sesbania tomentosa* on Maui and Kahoolawe.

(i) In units Maui—Coastal—Unit 9, Maui—Coastal–Unit 10, Maui—Coastal––Unit 11, Kahoolawe—Coastal—Unit 1, Kahoolawe—Coastal—Unit 2, and Kahoolawe—Coastal—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 980 ft (300 m).

(B) Annual precipitation: Less than 20 in (50 cm).

(C) Substrate: Well-drained, calcareous, talus slopes; dunes; weathered clay soils; ephemeral pools; mudflats.

(D) Canopy: *Hibiscus*, *Myoporum*, *Santalum*, *Scaevola*.

(E) Subcanopy: *Gossypium*, *Sida*, *Vitex*.

(F) Understory: *Eragrostis*, *Jacquemontia*, *Lyceum*, *Nama*, *Sesuvium*, *Sporobolus*, *Vigna*.

(ii) In units Maui—Lowland Dry—Unit 1, Maui—Lowland Dry—Unit 2, Maui—Lowland Dry—Unit 3, Maui—Lowland Dry—Unit 4, Maui—Lowland Dry—Unit 5, Maui—Lowland Dry—Unit 6, Kahoolawe—Lowland Dry—Unit 1, and Kahoolawe—Lowland Dry—Unit 2, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Less than 50 in (130 cm).

(C) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(D) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

Vigna o-wahuensis (NCN)

Maui—Coastal—Unit 1, Maui—Coastal—Unit 2, Maui—Coastal—Unit 3, Maui—Coastal—Unit 4, Maui—Coastal––Unit 5, Maui—Coastal—Unit 6, Maui—Coastal—Unit 7, Maui—Coastal—Unit 8, Kahoolawe—Coastal—Unit 1, Kahoolawe—Coastal—Unit 2, Kahoolawe—Coastal—Unit 3, Kahoolawe—Lowland Dry—Unit 1, and Kahoolawe—Lowland Dry—Unit 2, identified in the legal descriptions in paragraphs (e)(1) and (e)(2) of this section, constitute critical habitat for *Vigna o-wahuensis* on Maui and Kahoolawe.

(i) In units Maui—Coastal—Unit 1, Maui—Coastal—Unit 2, Maui—Coastal––Unit 3, Maui—Coastal—Unit 4, Maui—Coastal—Unit 5, Maui—Coastal—Unit 6, Maui—Coastal—Unit 7, Maui—Coastal—Unit 8, Kahoolawe–Coastal–Unit 1, Kahoolawe–Coastal–Unit 2, and Kahoolawe–Coastal–Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 980 ft (300 m).

(B) Annual precipitation: Less than 20 in (50 cm).

(C) Substrate: Well-drained, calcareous, talus slopes; dunes; weathered clay soils; ephemeral pools; mudflats.

(D) Canopy: *Hibiscus*, *Myoporum*, *Santalum*, *Scaevola*.

(E) Subcanopy: *Gossypium*, *Sida*, *Vitex*.

(F) Understory: *Eragrostis*, *Jacquemontia*, *Lyceum*, *Nama*, *Sesuvium*, *Sporobolus*, *Vigna*.

(ii) In units Kahoolawe—Lowland Dry—Unit 1 and Kahoolawe—Lowland Dry—Unit 2, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Less than 50 in (130 cm).

(C) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(D) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*..

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

FAMILY GENTIANACEAE

Schenkia sebaeoides (AWIWI)

Maui—Coastal—Unit 9, Maui—Coastal—Unit 10, and Maui—Coastal—Unit 11, identified in the legal descriptions

in paragraph (e)(1) of this section, constitute critical habitat for *Schenkia sebaeoides* on Maui. In units Maui—Coastal—Unit 9, Maui—Coastal—Unit 10, and Maui–Coastal—Unit—11, the physical and biological features of critical habitat are:

(i) Elevation: Less than 980 ft (300 m).

(ii) Annual precipitation: Less than 20 in (50 cm).

(iii) Substrate: Well-drained, calcareous, talus slopes; dunes; weathered clay soils; ephemeral pools; mudflats.

(iv) Canopy: *Hibiscus*, *Myoporum*, *Santalum*, *Scaevola*.

(v) Subcanopy: *Gossypium*, *Sida*, *Vitex*.

(vi) Understory: *Eragrostis*, *Jacquemontia*, *Lyceum*, *Nama*, *Sesuvium*, *Sporobolus*, *Vigna*.

FAMILY GERANIACEAE

Geranium arboreum (HAWAIIAN RED–FLOWERED GERANIUM)

Maui—Montane Mesic—Unit 1, Maui––Montane Dry—Unit 1, Maui—Subalpine—Unit 1, and Maui—Subalpine—Unit 2, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Geranium arboreum* on Maui.

(i) In unit Maui—Montane Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Deep ash deposits, thin silty loams.

(D) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(E) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

(F) Understory: Ferns, *Carex*, *Peperomia*.

(ii) In unit Maui—Montane Dry—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Less than 50 in (130 cm).

(C) Substrate: Dry cinder or ash soils, loamy volcanic sands, blocky lava, rock outcroppings.

(D) Canopy: *Acacia*, *Metrosideros*, *Myoporum*, *Santalum*, *Sophora*.

(E) Subcanopy: *Chamaesyce*, *Coprosma*, *Dodonaea*, *Dubautia*, *Leptecophylla*, *Osteomeles*, *Wikstroemia*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Vaccinium*.

(iii) In units Maui—Subalpine—Unit 1 and Maui—Subalpine—Unit 2, the physical and biological features of critical habitat are:

(A) Elevation: 6,500 to 9,800 ft (2,000 to 3,000 m).

(B) Annual precipitation: 15 to 40 in (38 to 100 cm).

(C) Substrate: Dry ash; sandy loam; rocky, undeveloped soils; weathered lava.

(D) Canopy: *Chamaesyce*, *Chenopodium*, *Metrosideros*, *Myoporum*, *Santalum*, *Sophora*.

(E) Subcanopy: *Coprosma*, *Dodonaea*, *Dubautia*, *Geranium*, *Leptecophylla*, *Vaccinium*, *Wikstroemia*.

(F) Understory: Ferns, *Bidens*, *Carex*, *Deschampsia*, *Eragrostis*, *Gahnia*, *Luzula*, *Panicum*, *Pseudognaphalium*, *Sicyos*, *Tetramolopium*.

Geranium hanaense (NOHOANU)

Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, and Maui—Montane Wet—Unit 5, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Geranium hanaense* on Maui. In units Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, and Maui—Montane Wet—Unit 5, the physical and biological features of critical habitat are:

(i) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(ii) Annual precipitation: Greater than 75 in (190 cm).

(iii) Substrate: Well-developed soils, montane bogs.

(iv) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(v) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(vi) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

Geranium hillebrandii (NOHOANU)

Maui—Montane Wet—Unit 6, Maui—Montane Wet—Unit 7, Maui—Montane Mesic—Unit 2, Maui—Montane Mesic—Unit 3, Maui—Montane Mesic—Unit 4, and Maui—Montane Mesic—Unit 5, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Geranium hillebrandii* on Maui.

(i) In units Maui—Montane Wet—Unit 6 and Maui—Montane Wet—Unit 7, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(ii) In units Maui—Montane Mesic—Unit 2, Maui—Montane Mesic—Unit 3, Maui—Montane Mesic—Unit 4, and Maui—Montane Mesic—Unit 5, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Deep ash deposits, thin silty loams.

(D) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(E) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

(F) Understory: Ferns, *Carex*, *Peperomia*.

Geranium multiflorum (NOHOANU)

Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, Maui—Montane Wet—Unit 5, Maui—Montane Mesic—Unit 1, Maui—Subalpine—Unit 1, Maui—Subalpine—Unit 2, Maui—Dry Cliff—Unit 1, Maui—Dry Cliff—Unit 2, Maui—Dry Cliff—Unit 3, and Maui—Dry Cliff—Unit 4, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Geranium multiflorum* on Maui.

(i) In units Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, and Maui—Montane Wet—Unit 5, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(ii) In unit Maui—Montane Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Deep ash deposits, thin silty loams.

(D) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(E) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

(F) Understory: Ferns, *Carex*, *Peperomia*.

(iii) In units Maui—Subalpine—Unit 1 and Maui—Subalpine—Unit 2, the physical and biological features of critical habitat are:

(A) Elevation: 6,500 to 9,800 ft (2,000 to 3,000 m).

(B) Annual precipitation: 15 to 40 in (38 to 100 cm).

(C) Substrate: Dry ash; sandy loam; rocky, undeveloped soils; weathered lava.

(D) Canopy: *Chamaesyce*, *Chenopodium*, *Metrosideros*, *Myoporum*, *Santalum*, *Sophora*.

(E) Subcanopy: *Coprosma*, *Dodonaea*, *Dubautia*, *Geranium*, *Leptecophylla*, *Vaccinium*, *Wikstroemia*.

(F) Understory: Ferns, *Bidens*, *Carex*, *Deschampsia*, *Eragrostis*, *Gahnia*, *Luzula*, *Panicum*, *Pseudognaphalium*, *Sicyos*, *Tetramolopium*.

(iv) In units Maui—Dry Cliff—Unit 1, Maui—Dry Cliff—Unit 2, Maui—Dry Cliff—Unit 3, and Maui—Dry Cliff—Unit 4, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

FAMILY GESNERIACEAE

Cyrtandra ferripilosa (HAIWALE)

Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, Maui—Montane Wet—Unit 5, and Maui—Montane Mesic—Unit 1, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Cyrtandra ferripilosa* on Maui.

(i) In units Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, and Maui—Montane Wet—Unit 5, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(ii) In unit Maui—Montane Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Deep ash deposits, thin silty loams.

(D) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(E) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla Vaccinium*.

(F) Understory: Ferns, *Carex*, *Peperomia*.

Cyrtandra filipes (HAIWALE)

Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, Maui—Lowland Wet—Unit 8, Maui—Wet Cliff—Unit 6, Maui—Wet Cliff—Unit 7, and Maui—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Cyrtandra filipes* on Maui.

(i) In units Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, and Maui—Lowland Wet—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In units Maui—Wet Cliff—Unit 6, Maui—Wet Cliff—Unit 7, and Maui—Wet Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

Cyrtandra munroi (HAIWALE)

Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, Maui—Lowland Wet—Unit 8, Maui—Wet Cliff—Unit 6, Maui—Wet Cliff—Unit 7, and Maui—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Cyrtandra munroi* on Maui.

(i) In units Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, and Maui—Lowland Wet—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In units Maui—Wet Cliff—Unit 6, Maui—Wet Cliff—Unit 7, and Maui—Wet Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

Cyrtandra oxybapha (HAIWALE)

Maui—Montane Wet—Unit 6, Maui—Montane Wet—Unit 7, and Maui—Montane Mesic—Unit 1, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Cyrtandra oxybapha* on Maui.

(i) In units Maui—Montane Wet—Unit 6 and Maui—Montane Wet—Unit 7, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(ii) In unit Maui—Montane Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Deep ash deposits, thin silty loams.

(D) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(E) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

(F) Understory: Ferns, *Carex*, *Peperomia*.

FAMILY LAMIACEAE

Phyllostegia bracteata (NCN)

Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, Maui—Lowland Wet—Unit 8, Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, Maui—Montane Wet—Unit 5, Maui—Montane Wet—Unit 6, Maui—Montane Wet—Unit 7, Maui—Montane Mesic—Unit 1, Maui—Subalpine—Unit 1, Maui—Subalpine—Unit 2, Maui—Wet Cliff—Unit 1, Maui—Wet Cliff—Unit 2, Maui—Wet Cliff—Unit 3, and Maui—Wet Cliff—Unit 4,

identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Phyllostegia bracteata* on Maui.

(i) In units Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, and Maui—Lowland Wet—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In units Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, Maui—Montane Wet—Unit 5, Maui—Montane Wet—Unit 6, and Maui—Montane Wet—Unit 7, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(iii) In unit Maui—Montane Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Deep ash deposits, thin silty loams.

(D) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(E) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

(F) Understory: Ferns, *Carex*, *Peperomia*.

(iv) In units Maui—Subalpine—Unit 1 and Maui—Subalpine—Unit 2, the physical and biological features of critical habitat are:

(A) Elevation: 6,500 to 9,800 ft (2,000 to 3,000 m).

(B) Annual precipitation: 15 to 40 in (38 to 100 cm).

(C) Substrate: Dry ash; sandy loam; rocky, undeveloped soils; weathered lava.

(D) Canopy: *Chamaesyce*, *Chenopodium*, *Metrosideros*, *Myoporum*, *Santalum*, *Sophora*.

(E) Subcanopy: *Coprosma*, *Dodonaea*, *Dubautia*, *Geranium*, *Leptecophylla*, *Vaccinium*, *Wikstroemia*.

(F) Understory: Ferns, *Bidens*, *Carex*, *Deschampsia*, *Eragrostis*, *Gahnia*, *Luzula*, *Panicum*, *Pseudognaphalium*, *Sicyos*, *Tetramolopium*.

(v) In units Maui—Wet Cliff—Unit 1, Maui—Wet Cliff—Unit 2, Maui—Wet Cliff—Unit 3, and Maui—Wet Cliff—Unit 4, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

Phyllostegia haliakalae (NCN)

Maui—Lowland Wet—Unit 1, Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, Maui—Montane Wet—Unit 5, Maui—Wet Cliff—Unit 1, Maui—Wet Cliff—Unit 2, Maui—Wet Cliff—Unit 3, and Maui—Wet Cliff—Unit 4, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Phyllostegia haliakalae* on Maui.

(i) In unit Maui—Lowland Wet—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In units Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, and Maui—Montane Wet—Unit 5, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(iii) In units Maui—Wet Cliff—Unit 1, Maui—Wet Cliff—Unit 2, Maui—Wet Cliff—Unit 3, and Maui—Wet Cliff—Unit 4, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

Phyllostegia mannii (NCN)

Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, Maui—Montane Wet—Unit 5, and Maui—Montane Mesic—Unit 1, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Phyllostegia mannii* on Maui.

(i) In units Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, and Maui—Montane Wet—Unit 5, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(ii) In unit Maui—Montane Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Deep ash deposits, thin silty loams.

(D) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(E) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

(F) Understory: Ferns, *Carex*, *Peperomia*.

Phyllostegia pilosa (NCN)

Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, and Maui—Montane Wet—Unit 5, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Phyllostegia pilosa* on Maui. In units Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, and Maui—Montane Wet—Unit 5, the physical and biological features of critical habitat are:

(i) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(ii) Annual precipitation: Greater than 75 in (190 cm).

(iii) Substrate: Well-developed soils, montane bogs.

(iv) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(v) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(vi) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

Stenogyne kauaulaensis (NCN)

Maui—Montane Mesic—Unit 2, Maui—Montane Mesic—Unit 3, Maui—Montane Mesic—Unit 4, and Maui—Montane Mesic—Unit 5, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Stenogyne kauaulaensis* on Maui. In unit Maui—Montane Mesic—Unit 2, Maui—Montane Mesic—Unit 3, Maui—Montane Mesic—Unit 4, and Maui—Montane Mesic—Unit 5, the physical and biological features of critical habitat are:

(i) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(ii) Annual precipitation: 50 to 75 in (130 to 190 cm).

(iii) Substrate: Deep ash deposits, thin silty loams.

(iv) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(v) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

(vi) Understory: Ferns, *Carex*, *Peperomia*.

FAMILY MALVACEAE:

Hibiscus brackenridgei (MAO HAU HELE)

Maui—Lowland Dry—Unit 1, Maui—Lowland Dry—Unit 2, Maui—Lowland Dry—Unit 3, Maui—Lowland Dry—Unit 4, Maui—Lowland Dry—Unit 5, Maui—Lowland Dry—Unit 6, Kahoolawe—Lowland Dry—Unit 1, and Kahoolawe—Lowland Dry—Unit 2, identified in the legal descriptions in paragraphs (e)(1) and (e)(2) of this section, constitute critical habitat for *Hibiscus brackenridgei* on Maui and Kahoolawe. In units Maui—Lowland Dry—Unit 1, Maui—Lowland Dry—Unit 2, Maui—Lowland Dry—Unit 3, Maui—Lowland Dry—Unit 4, Maui—Lowland Dry—Unit 5, Maui—Lowland Dry—Unit 6, Kahoolawe—Lowland Dry—Unit 1, and Kahoolawe—Lowland Dry—Unit 2, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: Less than 50 in (130 cm).

(iii) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(iv) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*.

(v) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(vi) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

FAMILY MYRSINACEAE

Myrsine vaccinioides (KOLEA)

Maui—Montane Wet—Unit 6 and Maui—Montane Wet—Unit 7, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Myrsine vaccinioides* on Maui. In units Maui—Montane Wet—Unit 6 and Maui—Montane Wet—Unit 7, the physical and biological features of critical habitat are:

(i) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(ii) Annual precipitation: Greater than 75 in (190 cm).

(iii) Substrate: Well-developed soils, montane bogs.

(iv) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(v) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(vi) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

FAMILY ORCHIDACEAE

Platanthera holochila (NCN)

Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, Maui—Montane Wet—Unit 5, Maui—Montane Wet—Unit 6, Maui—Montane Wet—Unit 7, Maui—Wet Cliff—Unit 6, Maui—Wet Cliff—Unit 7,

and Maui—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Platanthera holochila* on Maui.

(i) In units Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, Maui—Montane Wet—Unit 5, Maui—Montane Wet—Unit 6, and Maui—Montane Wet—Unit 7, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(ii) In units Maui—Wet Cliff—Unit 6, Maui—Wet Cliff—Unit 7, and Maui—Wet Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

FAMILY PIPERACEAE

Peperomia subpetiolata (ALAALA WAI NUI)

Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, and Maui—Montane Wet—Unit 5, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Peperomia subpetiolata* on Maui. In units Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, and Maui—Montane Wet—Unit 5, the physical and biological features of critical habitat are:

(i) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(ii) Annual precipitation: Greater than 75 in (190 cm).

(iii) Substrate: Well-developed soils, montane bogs.

(iv) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(v) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(vi) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

FAMILY PLANTAGINACEAE

Plantago princeps (LAUKAHI KUAHIWI)

Maui—Dry Cliff—Unit 1, Maui—Dry Cliff—Unit 2, Maui—Dry Cliff—Unit 3, Maui—Dry Cliff—Unit 4, Maui—Wet Cliff—Unit 1, Maui—Wet Cliff—Unit 2, Maui—Wet Cliff—Unit 3, Maui—Wet Cliff—Unit 4, Maui—Wet Cliff—Unit 6, Maui—Wet Cliff—Unit 7, and Maui—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Plantago princeps* on Maui.

(i) In units Maui—Dry Cliff—Unit 1, Maui—Dry Cliff—Unit 2, Maui—Dry Cliff—Unit 3, and Maui—Dry Cliff—Unit 4, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

(ii) In units Maui—Wet Cliff—Unit 1, Maui—Wet Cliff—Unit 2, Maui—Wet Cliff—Unit 3, Maui—Wet Cliff—Unit 4, Maui—Wet Cliff—Unit 6, Maui—Wet Cliff—Unit 7, and Maui—Wet Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

FAMILY POACEAE

Calamagrostis hillebrandii (NCN)

Maui—Montane Wet—Unit 6 and Maui—Montane Wet—Unit 7, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Calamagrostis hillebrandii* on Maui. In units Maui—Montane Wet—Unit 6 and Maui—Montane Wet—Unit 7, the physical and biological features of critical habitat are:

(i) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(ii) Annual precipitation: Greater than 75 in (190 cm).

(iii) Substrate: Well-developed soils, montane bogs.

(iv) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(v) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(vi) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

Cenchrus agrimonioides (KAMANOMANO (= SANDBUR, AGRIMONY))

Maui—Lowland Dry—Unit 1, Maui—Lowland Dry—Unit 2, Maui—Lowland Dry—Unit 3, Maui—Lowland Dry—Unit 4, Maui—Lowland Dry—Unit 5, and Maui—Lowland Dry—Unit 6, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Cenchrus agrimonioides* on Maui. In units Maui—Lowland Dry—Unit 1, Maui—Lowland Dry—Unit 2, Maui—Lowland Dry—Unit 3, Maui—Lowland Dry—Unit 4, Maui—Lowland Dry—Unit 5, and Maui—Lowland Dry—Unit 6, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: Less than 50 in (130 cm).

(iii) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(iv) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*.

(v) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(vi) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

Ischaemum byrone (HILO ISCHAEMUM)

Maui—Coastal—Unit 1, Maui—Coastal—Unit 2, Maui—Coastal—Unit 3, Maui—Coastal—Unit 4, Maui—Coastal—Unit 5, Maui—Coastal—Unit 6, Maui—Coastal—Unit 7, and Maui—Coastal—Unit 8, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Ischaemum byrone* on Maui. In units Maui—Coastal—Unit 1, Maui—Coastal—Unit 2, Maui—Coastal—Unit 3, Maui—Coastal—Unit 4, Maui—Coastal—Unit 5, Maui—Coastal—Unit 6, Maui—Coastal—Unit 7, and Maui—Coastal—Unit 8, the physical and biological features of critical habitat are:

(i) Elevation: Less than 980 ft (300 m).

(ii) Annual precipitation: Less than 20 in (50 cm).

(iii) Substrate: Well-drained, calcareous, talus slopes; dunes; weathered clay soils; ephemeral pools; mudflats.

(iv) Canopy: *Hibiscus*, *Myoporum*, *Santalum*, *Scaevola*.

(v) Subcanopy: *Gossypium*, *Sida*, *Vitex*.

(vi) Understory: *Eragrostis*, *Jacquemontia*, *Lyceum*, *Nama*, *Sesuvium*, *Sporobolus*, *Vigna*.

FAMILY PRIMULACEAE

Lysimachia lydgatei (NCN)

Maui—Lowland Dry—Unit 5, Maui—Lowland Dry—Unit 6, Maui—Montane Mesic—Unit 2, Maui—Montane Mesic—Unit 3, Maui—Montane Mesic—Unit 4, Maui—Montane Mesic—Unit 5, Maui—Wet Cliff—Unit 6, Maui—Wet Cliff—Unit 7, and Maui—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Lysimachia lydgatei* on Maui.

(i) In units Maui—Lowland Dry—Unit 5 and Maui—Lowland Dry—Unit 6, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Less than 50 in (130 cm).

(C) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(D) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

(ii) In units Maui—Montane Mesic—Unit 2, Maui—Montane Mesic—Unit 3, Maui—Montane Mesic—Unit 4, and Maui—Montane Mesic—Unit 5, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Deep ash deposits, thin silty loams.

(D) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(E) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

(F) Understory: Ferns, *Carex*, *Peperomia*.

(iii) In units Maui—Wet Cliff—Unit 6, Maui—Wet Cliff–Unit 7, and Maui–Wet Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

FAMILY RHAMNACEAE

Colubrina oppositifolia (KAUILA)

Maui—Lowland Dry—Unit 1, Maui—Lowland Dry—Unit 2, Maui—Lowland Dry—Unit 3, Maui—Lowland Dry—Unit 4, Maui—Lowland Mesic—Unit 2, and Maui—Lowland Mesic—Unit 3, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Colubrina oppositifolia* on Maui.

(i) In units Maui—Lowland Dry—Unit 1, Maui—Lowland Dry—Unit 2, Maui—Lowland Dry—Unit 3, and Maui—Lowland Dry—Unit 4, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Less than 50 in (130 cm).

(C) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(D) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

(ii) In units Maui—Lowland Mesic—Unit 2 and Maui—Lowland Mesic—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

Gouania hillebrandii (NCN)

Maui—Lowland Dry—Unit 5, Maui—Lowland Dry—Unit 6, Kahoolawe—Lowland Dry—Unit 1, and Kahoolawe—Lowland Dry—Unit 2, identified in the legal descriptions in paragraphs (e)(1) and (e)(2) of this section, constitute critical habitat for *Gouania hillebrandii* on Maui and Kahoolawe. In units Maui—Lowland Dry—Unit 5, Maui—Lowland Dry—Unit 6, Kahoolawe—Lowland Dry—Unit 1, and Kahoolawe—Lowland Dry—Unit 2, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: Less than 50 in (130 cm).

(iii) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(iv) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*.

(v) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(vi) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

Gouania vitifolia (NCN)

Maui—Wet Cliff—Unit 6, Maui—Wet Cliff—Unit 7, and Maui—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Gouania vitifolia* on Maui. In units Maui—Wet Cliff—Unit 6, Maui—Wet Cliff—Unit 7, and Maui—Wet Cliff—Unit 8, the physical and biological features of critical habitat are:

(i) Elevation: Unrestricted.

(ii) Annual precipitation: Greater than 75 in (190 cm).

(iii) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(iv) Canopy: None.

(v) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(vi) Understory: Bryophytes, ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

FAMILY ROSACEAE

Acaena exigua (LILIWAI)

Maui—Montane Wet—Unit 6 and Maui—Montane Wet—Unit 7, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Acaena exigua* on Maui. In units Maui—Montane Wet—Unit 6 and Maui—Montane Wet—Unit 7, the physical and biological features of critical habitat are:

(i) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(ii) Annual precipitation: Greater than 75 in (190 cm).

(iii) Substrate: Well-developed soils, montane bogs.

(iv) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(v) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(vi) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

FAMILY RUBIACEAE

Kadua coriacea (KIOELE)

Maui—Lowland Dry—Unit 5 and Maui—Lowland Dry—Unit 6, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Kadua coriacea* on Maui. In units Maui—Lowland Dry—Unit 5 and Maui—Lowland Dry—Unit 6, the physical and biological features of critical habitat are:

(i) Elevation: Less than 3,300 ft (1,000 m).

(ii) Annual precipitation: Less than 50 in (130 cm).

(iii) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(iv) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*..

(v) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(vi) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

Kadua laxiflora (PILO)

Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, Maui—Lowland Wet—Unit 8, Maui—Dry Cliff—Unit 5, Maui—Dry Cliff—Unit 6, Maui—Wet Cliff—Unit 6, Maui—Wet Cliff—Unit 7, and Maui—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Kadua laxiflora* on Maui.

(i) In units Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, and Maui—Lowland Wet—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In units Maui—Dry Cliff—Unit 5 and Maui—Dry Cliff—Unit 6, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

(iii) In units Maui—Wet Cliff—Unit 6, Maui—Wet Cliff—Unit 7, and Maui—Wet Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

FAMILY RUTACEAE

Melicope adscendens (ALANI)

Maui—Lowland Dry—Unit 1 and Maui—Montane Mesic—Unit 1, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Melicope adscendens* on Maui.

(i) In unit Maui—Lowland Dry—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m), but greater than 3,200 ft (914 m).

(B) Annual precipitation: Less than 50 in (130 cm).

(C) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(D) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

(ii) In unit Maui—Montane Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Deep ash deposits, thin silty loams.

(D) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(E) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

(F) Understory: Ferns, *Carex*, *Peperomia*.

Melicope balloui (ALANI)

Maui—Lowland Wet—Unit 1, Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, and Maui—Montane Wet—Unit 5, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Melicope balloui* on Maui.

(i) In unit Maui—Lowland Wet—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In units Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, and Maui—Montane Wet—Unit 5, the physical and

biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

Melicope knudsenii (ALANI)

Maui—Montane Dry—Unit 1, identified in the legal descriptions in paragraph (e)(1) of this section, constitutes critical habitat for *Melicope knudsenii* on Maui. In unit Maui—Montane Dry—Unit 1, the physical and biological features of critical habitat are:

(i) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(ii) Annual precipitation: Less than 50 in (130 cm).

(ii) Substrate: Dry cinder or ash soils, loamy volcanic sands, blocky lava, rock outcroppings.

(iv) Canopy: *Acacia*, *Metrosideros*, *Myoporum*, *Santalum*, *Sophora*.

(v) Subcanopy: *Chamaesyce*, *Coprosma*, *Dodonaea*, *Dubautia*, *Leptecophylla*, *Osteomeles*, *Wikstroemia*.

(vi) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Vaccinium*.

Melicope mucronulata (ALANI)

Maui—Lowland Dry—Unit 1, Maui—Lowland Dry—Unit 2, Maui—Lowland Dry—Unit 3, Maui—Lowland Dry—Unit 4, and Maui—Montane Dry—Unit 1, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Melicope mucronulata* on Maui.

(i) In units Maui—Lowland Dry—Unit 1, Maui—Lowland Dry—Unit 2, Maui—Lowland Dry—Unit 3, and Maui—Lowland Dry—Unit 4, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Less than 50 in (130 cm).

(C) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(D) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*..

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

(ii) In unit Maui—Montane Dry—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Less than 50 in (130 cm).

(C) Substrate: Dry cinder or ash soils, loamy volcanic sands, blocky lava, rock outcroppings.

(D) Canopy: *Acacia*, *Metrosideros*, *Myoporum*, *Santalum*, *Sophora*.

(E) Subcanopy: *Chamaesyce*, *Coprosma*, *Dodonaea*, *Dubautia*, *Leptecophylla*, *Osteomeles*, *Wikstroemia*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Vaccinium*.

Melicope ovalis (ALANI)

Maui—Lowland Wet—Unit 1, Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, Maui—Montane Wet—Unit 5, Maui—Wet Cliff—Unit 1, Maui—Wet Cliff—Unit 2, Maui—Wet Cliff—Unit 3, and Maui—Wet Cliff—Unit 4, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Melicope ovalis* on Maui.

(i) In unit Maui—Lowland Wet—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In units Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2,

Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, and Maui—Montane Wet—Unit 5, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(iii) In units Maui—Wet Cliff—Unit 1, Maui—Wet Cliff—Unit 2, Maui—Wet Cliff—Unit 3, and Maui—Wet Cliff—Unit 4, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

Zanthoxylum hawaiiense (AE)

Maui—Lowland Dry—Unit 1, Maui—Lowland Dry—Unit 2, Maui—Lowland Dry—Unit 3, Maui—Lowland Dry—Unit 4, Maui—Lowland Mesic—Unit 2, Maui—Lowland Mesic—Unit 3, Maui—Montane Mesic—Unit 1, Maui—Montane Mesic—Unit 2, Maui—Montane Mesic—Unit 3, Maui—Montane Mesic—Unit 4, Maui—Montane Mesic—Unit 5, Maui—Montane Dry—Unit 1, Maui—Subalpine—Unit 1, and Maui—Subalpine—Unit 2, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Zanthoxylum hawaiiense* on Maui.

(i) In units Maui—Lowland Dry—Unit 1, Maui—Lowland Dry—Unit 2, Maui—Lowland Dry—Unit 3, and Maui—Lowland Dry—Unit 4, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Less than 50 in (130 cm).

(C) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(D) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

(ii) In units Maui—Lowland Mesic—Unit 2 and Maui—Lowland Mesic—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(iii) In units Maui—Montane Mesic—Unit 1, Maui—Montane Mesic—Unit 2, Maui—Montane Mesic—Unit 3, Maui—Montane Mesic—Unit 4, and Maui—Montane Mesic—Unit 5, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Deep ash deposits, thin silty loams.

(D) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(E) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

(F) Understory: Ferns, *Carex*, *Peperomia*.

(iv) In unit Maui—Montane Dry—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Less than 50 in (130 cm).

(C) Substrate: Dry cinder or ash soils, loamy volcanic sands, blocky lava, rock outcroppings.

(D) Canopy: *Acacia*, *Metrosideros*, *Myoporum*, *Santalum*, *Sophora*.

(E) Subcanopy: *Chamaesyce*, *Coprosma*, *Dodonaea*, *Dubautia*, *Leptecophylla*, *Osteomeles*, *Wikstroemia*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Vaccinium*.

(v) In units Maui—Subalpine—Unit 1 and Maui—Subalpine—Unit 2, the physical and biological features of critical habitat are:

(A) Elevation: 6,500 to 9,800 ft (2,000 to 3,000 m).

(B) Annual precipitation: 15 to 40 in (38 to 100 cm).

(C) Substrate: Dry ash; sandy loam; rocky, undeveloped soils; weathered lava.

(D) Canopy: *Chamaesyce*, *Chenopodium*, *Metrosideros*, *Myoporum*, *Santalum*, *Sophora*.

(E) Subcanopy: *Coprosma*, *Dodonaea*, *Dubautia*, *Geranium*, *Leptecophylla*, *Vaccinium*, *Wikstroemia*.

(F) Understory: Ferns, *Bidens*, *Carex*, *Deschampsia*, *Eragrostis*, *Gahnia*, *Luzula*, *Panicum*, *Pseudognaphalium*, *Sicyos*, *Tetramolopium*.

FAMILY SANTALACEAE

Santalum haleakalae var. *lanaiense* (LANAI SANDALWOOD, ILIAHI)

Maui—Lowland Dry—Unit 1, Maui—Lowland Dry—Unit 2, Maui—Lowland Dry—Unit 3, Maui—Lowland Dry—Unit 4, Maui—Lowland Dry—Unit 5, Maui—Lowland Dry—Unit 6, Maui—Lowland Mesic—Unit 2, Maui—Lowland Mesic—Unit 3, Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, Maui—Lowland Wet—Unit 8, Maui—Montane Mesic—Unit 1, Maui—Montane Mesic—Unit 2, Maui—Montane Mesic—Unit 3, Maui—Montane Mesic—Unit 4, Maui—Montane Mesic—Unit 5, Maui—Montane Dry—Unit 1, Maui—Wet Cliff—Unit 6, Maui—Wet Cliff—Unit 7, and Maui—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Santalum haleakalae* var. *lanaiense* on Maui.

(i) In units Maui—Lowland Dry—Unit 1, Maui—Lowland Dry—Unit 2, Maui—Lowland Dry—Unit 3, Maui—Lowland Dry—Unit 4, Maui—Lowland Dry—Unit 5, and Maui—Lowland Dry—Unit 6, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Less than 50 in (130 cm).

(C) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(D) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

(ii) In units Maui—Lowland Mesic—Unit 2 and Maui—Lowland Mesic—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(iii) In units Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, and Maui—Lowland Wet—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(iv) In units Maui—Montane Mesic—Unit 1, Maui—Montane Mesic—Unit 2, Maui—Montane Mesic—Unit 3, Maui—Montane Mesic—Unit 4, and Maui—Montane Mesic—Unit 5, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Deep ash deposits, thin silty loams.

(D) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(E) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

(F) Understory: Ferns, *Carex*, *Peperomia*.

(v) In unit Maui—Montane Dry—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Less than 50 in (130 cm).

(C) Substrate: Dry cinder or ash soils, loamy volcanic sands, blocky lava, rock outcroppings.

(D) Canopy: *Acacia*, *Metrosideros*, *Myoporum*, *Santalum*, *Sophora*.

(E) Subcanopy: *Chamaesyce*, *Coprosma*, *Dodonaea*, *Dubautia*, *Leptecophylla*, *Osteomeles*, *Wikstroemia*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Vaccinium*.

(vi) In units Maui—Wet Cliff—Unit 6, Maui—Wet Cliff—Unit 7, and Maui—Wet Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

FAMILY SAPINDACEAE

Alectryon macrococcus (MAHOE)

Maui—Lowland Dry—Unit 1, Maui—Lowland Dry—Unit 2, Maui—Lowland Mesic—Unit 1, Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, Maui—Lowland Wet—Unit 8, Maui—Montane Mesic—Unit 1, Maui—Montane Dry—Unit 1, Maui—Wet Cliff—Unit 6, Maui—Wet Cliff—Unit 7, and Maui—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Alectryon macrococcus* on Maui.

(i) In units Maui—Lowland Dry—Unit 1 and Maui—Lowland Dry—Unit 2, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Less than 50 in (130 cm).

(C) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(D) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

(ii) In unit Maui—Lowland Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(iii) In units Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, and Maui—Lowland Wet—Unit 8, the

physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(iv) In unit Maui—Montane Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Deep ash deposits, thin silty loams.

(D) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(E) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

(F) Understory: Ferns, *Carex*, *Peperomia*.

(v) In unit Maui—Montane Dry—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Less than 50 in (130 cm).

(C) Substrate: Dry cinder or ash soils, loamy volcanic sands, blocky lava, rock outcroppings.

(D) Canopy: *Acacia*, *Metrosideros*, *Myoporum*, *Santalum*, *Sophora*.

(E) Subcanopy: *Chamaesyce*, *Coprosma*, *Dodonaea*, *Dubautia*, *Leptecophylla*, *Osteomeles*, *Wikstroemia*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Vaccinium*.

(vi) In units Maui—Wet Cliff—Unit 6, Maui—Wet Cliff—Unit 7, and Maui—Wet Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

FAMILY SOLANACEAE

Solanum incompletum (POPOLO KU MAI)

Maui—Lowland Dry—Unit 1, Maui—Lowland Dry—Unit 2, Maui—Lowland Dry—Unit 3, Maui—Lowland Dry—Unit 4, and Maui—Lowland Mesic—Unit 1, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Solanum incompletum* on Maui.

(i) In units Maui—Lowland Dry—Unit 1, Maui—Lowland Dry—Unit 2, Maui—Lowland Dry—Unit 3, and Maui—Lowland Dry—Unit 4, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Less than 50 in (130 cm).

(C) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(D) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

(ii) In unit Maui—Lowland Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

FAMILY THYMELAEACEAE

Wikstroemia villosa (AKIA)

Maui—Lowland Wet—Unit 1, Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, Maui—Lowland Wet—Unit 8, Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, Maui—Montane Wet—Unit 5, and Maui—Montane Mesic—Unit 1, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Wikstroemia villosa* on Maui.

(i) In units Maui—Lowland Wet—Unit 1, Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, and Maui—Lowland Wet—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In units Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, and Maui—Montane Wet—Unit 5, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(iii) In unit Maui—Montane Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Deep ash deposits, thin silty loams.

(D) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(E) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

(F) Understory: Ferns, *Carex*, *Peperomia*.

FAMILY URTICACEAE

Neraudia sericea (NCN)

Maui—Lowland Dry—Unit 1, Maui—Lowland Dry—Unit 2, Maui—Lowland Dry—Unit 3, Maui—Lowland Dry—Unit 4, Maui—Lowland Dry—Unit 5, Maui—Lowland Dry—Unit 6, Kahoolawe—Lowland Dry—Unit 1, Kahoolawe—Lowland Dry—Unit 2, Maui—Montane Mesic—Unit 1, Maui—Dry Cliff—Unit 5, and Maui—Dry Cliff—Unit 6, identified in the legal descriptions in paragraphs (e)(1) and (e)(2) of this section, constitute critical habitat for *Neraudia sericea* on Maui and Kahoolawe.

(i) In units Maui—Lowland Dry—Unit 1, Maui—Lowland Dry—Unit 2, Maui—Lowland Dry—Unit 3, Maui—Lowland Dry—Unit 4, Maui—Lowland Dry—Unit 5, Maui—Lowland Dry—Unit 6, Kahoolawe—Lowland Dry—Unit 1, and Kahoolawe—Lowland Dry—Unit 2, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Less than 50 in (130 cm).

(C) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(D) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

(ii) In unit Maui—Montane Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Deep ash deposits, thin silty loams.

(D) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(E) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

(F) Understory: Ferns, *Carex*, *Peperomia*.

(iii) In units Maui—Dry Cliff—Unit 5 and Maui—Dry Cliff—Unit 6, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

FAMILY VIOLACEAE

Isodendrion pyrifolium (WAHINE NOHO KULA)

Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, Maui—Lowland Wet—Unit 8, Maui—Dry Cliff—Unit 5, Maui—Dry Cliff—Unit 6, Maui—Wet Cliff—Unit 6, Maui—Wet Cliff—Unit 7, and Maui—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Isodendrion pyrifolium* on Maui.

(i) In units Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, and Maui—Lowland Wet—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In units Maui—Dry Cliff—Unit 5 and Maui—Dry Cliff—Unit 6, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

(iii) In units Maui—Wet Cliff—Unit 6, Maui—Wet Cliff—Unit 7, and Maui—Wet Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

(2) *Ferns and allies*.

FAMILY ADIANTACEAE

Pteris lidgatei (NCN)

Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, Maui—Lowland Wet—Unit 8, Maui—Wet Cliff—Unit 6, Maui—Wet Cliff—Unit 7, and Maui—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (e)(1) of

this section, constitute critical habitat for *Pteris lidgatei* on Maui.

(i) In units Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, and Maui—Lowland Wet—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In units Maui—Wet Cliff—Unit 6, Maui—Wet Cliff—Unit 7, and Maui—Wet Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

FAMILY ASPLENIACEAE

Asplenium dielerectum (ASPLENIUM–LEAVED DIELLIA)

Maui—Lowland Dry—Unit 5, Maui—Lowland Dry—Unit 6, Maui—Lowland Mesic—Unit 2, Maui—Lowland Mesic—Unit 3, Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, Maui—Lowland Wet—Unit 8, and Maui—Montane Mesic—Unit 1, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Asplenium dielerectum* on Maui.

(i) In units Maui—Lowland Dry—Unit 5 and Maui—Lowland Dry—Unit 6, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Less than 50 in (130 cm).

(C) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(D) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

(ii) In units Maui—Lowland Mesic—Unit 2 and Maui—Lowland Mesic—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(iii) In units Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, and Maui—Lowland Wet—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(iv) In unit Maui—Montane Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Deep ash deposits, thin silty loams.

(D) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(E) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

(F) Understory: Ferns, *Carex*, *Peperomia*.

Asplenium peruvianum var. *insulare* (NCN)

Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, Maui—Montane Wet—Unit 5, Maui—Montane Mesic—Unit 1, Maui—Subalpine—Unit 1, and Maui—Subalpine—Unit 2, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Asplenium peruvianum* var. *insulare* on Maui.

(i) In units Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, and Maui—Montane Wet—Unit 5, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(ii) In unit Maui—Montane Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Deep ash deposits, thin silty loams.

(D) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(E) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

(F) Understory: Ferns, *Carex*, *Peperomia*.

(iii) In units Maui—Subalpine—Unit 1 and Maui—Subalpine—Unit 2, the physical and biological features of critical habitat are:

(A) Elevation: 6,500 to 9,800 ft (2,000 to 3,000 m).

(B) Annual precipitation: 15 to 40 in (38 to 100 cm).

(C) Substrate: Dry ash; sandy loam; rocky, undeveloped soils; weathered lava.

(D) Canopy: *Chamaesyce*, *Chenopodium*, *Metrosideros*, *Myoporum*, *Santalum*, *Sophora*.

(E) Subcanopy: *Coprosma*, *Dodonaea*, *Dubautia*, *Geranium*, *Leptecophylla*, *Vaccinium*, *Wikstroemia*.

(F) Understory: Ferns, *Bidens*, *Carex*, *Deschampsia*, *Eragrostis*, *Gahnia*, *Luzula*, *Panicum*, *Pseudognaphalium*, *Sicyos*, *Tetramolopium*.

Ctenitis squamigera (PAUOA)

Maui—Lowland Dry—Unit 1, Maui—Lowland Dry—Unit 2, Maui—Lowland Dry—Unit 3, Maui—Lowland Dry—Unit 4, Maui—Lowland Dry—Unit 5, Maui—Lowland Dry—Unit 6, Maui—Lowland Mesic—Unit 1, Maui—Lowland Mesic—Unit 2, Maui—Lowland Mesic—Unit 3, Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, Maui—Lowland Wet—Unit 8, Maui—Montane Mesic—Unit 2, Maui—Montane Mesic—Unit 3, Maui—Montane Mesic—Unit 4, Maui—Montane Mesic—Unit 5, Maui—Wet Cliff—Unit 6, Maui—Wet Cliff—Unit 7, and Maui—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Ctenitis squamigera* on Maui.

(i) In units Maui—Lowland Dry—Unit 1, Maui—Lowland Dry—Unit 2, Maui—Lowland Dry—Unit 3, Maui—Lowland Dry—Unit 4, Maui—Lowland Dry—Unit 5, and Maui—Lowland Dry—Unit 6, the

physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Less than 50 in (130 cm).

(C) Substrate: Weathered silty loams to stony clay, rocky ledges, little-weathered lava.

(D) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

(ii) In units Maui—Lowland Mesic—Unit 1, Maui—Lowland Mesic—Unit 2, and Maui—Lowland Mesic—Unit 3, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(iii) In units Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, and Maui—Lowland Wet—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(iv) In units Maui—Montane Mesic—Unit 2, Maui—Montane Mesic—Unit 3, Maui—Montane Mesic—Unit 4, and Maui—Montane Mesic—Unit 5, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Deep ash deposits, thin silty loams.

(D) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(E) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

(F) Understory: Ferns, *Carex*, *Peperomia*.

(v) In units Maui—Wet Cliff—Unit 6, Maui—Wet Cliff—Unit 7, and Maui—Wet Cliff—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, shallow soils, weathered lava.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Bryophytes, ferns, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

Diplazium molokaiense (NCN)

Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, Maui—Lowland Wet—Unit 8, Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, Maui—Montane Wet—Unit 5, Maui—Montane Mesic—Unit 1, Maui—Montane Mesic—Unit 2, Maui—Montane Mesic—Unit 3, Maui—Montane Mesic—Unit 4, Maui—Montane Mesic—Unit 5, Maui—Dry Cliff—Unit 1, Maui—Dry Cliff—Unit 2, Maui—Dry Cliff—Unit 3, Maui—Dry Cliff—Unit 4, Maui—Dry Cliff—Unit 5, and Maui—Dry Cliff—Unit 6, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Diplazium molokaiense* on Maui.

(i) In units Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, and Maui—Lowland Wet—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(ii) In units Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, and Maui—Montane Wet—Unit 5, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(iii) In units Maui—Montane Mesic—Unit 1, Maui—Montane Mesic—Unit 2, Maui—Montane Mesic—Unit 3, Maui—Montane Mesic—Unit 4, and Maui—Montane Mesic—Unit 5, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Deep ash deposits, thin silty loams.

(D) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(E) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

(F) Understory: Ferns, *Carex*, *Peperomia*.

(iv) In units Maui—Dry Cliff—Unit 1, Maui—Dry Cliff—Unit 2, Maui—Dry Cliff—Unit 3, Maui—Dry Cliff—Unit 4, Maui—Dry Cliff—Unit 5, and Maui—Dry Cliff—Unit 6, the physical and biological features of critical habitat are:

(A) Elevation: Unrestricted.

(B) Annual precipitation: Less than 75 in (190 cm).

(C) Substrate: Greater than 65 degree slope, rocky talus.

(D) Canopy: None.

(E) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(F) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

FAMILY GRAMMITIDACEAE

Adenophorus periens (PENDANT KIHI FERN)

Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, and Maui—Montane Wet—Unit 5, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Adenophorus periens* on Maui. In units Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, and Maui—Montane Wet—Unit 5, the physical and biological features of critical habitat are:

(i) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(ii) Annual precipitation: Greater than 75 in (190 cm).

(iii) Substrate: Well-developed soils, montane bogs.

(iv) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(v) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(vi) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

FAMILY LYCOPODIACEAE

Huperzia mannii (WAWAEIOLE)

Maui—Lowland Mesic—Unit 1, Maui—Lowland Wet—Unit 1, Maui—

Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, Maui—Lowland Wet—Unit 8, Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, Maui—Montane Wet—Unit 5, Maui—Montane Wet—Unit 6, Maui—Montane Wet—Unit 7, Maui—Montane Mesic—Unit 1, Maui—Montane Mesic—Unit 2, Maui—Montane Mesic—Unit 3, Maui—Montane Mesic—Unit 4, and Maui—Montane Mesic—Unit 5, identified in the legal descriptions in paragraph (e)(1) of this section, constitute critical habitat for *Huperzia mannii* on Maui.

(i) In unit Maui—Lowland Mesic—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Shallow soils, little to no herbaceous layer.

(D) Canopy: *Acacia*, *Diospyros*, *Metrosideros*, *Myrsine*, *Pouteria*, *Santalum*.

(E) Subcanopy: *Dodonaea*, *Freycinetia*, *Leptecophylla*, *Melanthera*, *Osteomeles*, *Pleomele*, *Psydrax*.

(F) Understory: *Carex*, *Dicranopteris*, *Diplazium*, *Elaphoglossum*, *Peperomia*.

(ii) In units Maui—Lowland Wet—Unit 1, Maui—Lowland Wet—Unit 2, Maui—Lowland Wet—Unit 3, Maui—Lowland Wet—Unit 4, Maui—Lowland Wet—Unit 5, Maui—Lowland Wet—Unit 6, Maui—Lowland Wet—Unit 7, and Maui—Lowland Wet—Unit 8, the physical and biological features of critical habitat are:

(A) Elevation: Less than 3,300 ft (1,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Clays; ashbeds; deep, well-drained soils; lowland bogs.

(D) Canopy: *Antidesma*, *Metrosideros*, *Myrsine*, *Pisonia*, *Psychotria*.

(E) Subcanopy: *Cibotium*, *Claoxylon*, *Kadua*, *Melicope*.

(F) Understory: *Alyxia*, *Cyrtandra*, *Dicranopteris*, *Diplazium*, *Machaerina*, *Microlepia*.

(iii) In units Maui—Montane Wet—Unit 1, Maui—Montane Wet—Unit 2, Maui—Montane Wet—Unit 3, Maui—Montane Wet—Unit 4, Maui—Montane Wet—Unit 5, Maui—Montane Wet—Unit 6, and Maui—Montane Wet—Unit 7, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: Greater than 75 in (190 cm).

(C) Substrate: Well-developed soils, montane bogs.

(D) Canopy: *Acacia*, *Charpentiera*, *Cheirodendron*, *Metrosideros*.

(E) Subcanopy: *Broussaisia*, *Cibotium*, *Eurya*, *Ilex*, *Myrsine*.

(F) Understory: Ferns, *Carex*, *Coprosma*, *Leptecophylla*, *Oreobolus*, *Rhynchospora*, *Vaccinium*.

(iv) In units Maui—Montane Mesic–Unit 1, Maui—Montane Mesic—Unit 2, Maui—Montane Mesic—Unit 3, Maui—Montane Mesic—Unit 4, and Maui—Montane Mesic—Unit 5, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,500 ft (1,000 to 2,000 m).

(B) Annual precipitation: 50 to 75 in (130 to 190 cm).

(C) Substrate: Deep ash deposits, thin silty loams.

(D) Canopy: *Acacia*, *Ilex*, *Metrosideros*, *Myrsine*, *Nestegis*, *Nothocestrum*, *Pisonia*, *Pittosporum*, *Psychotria*, *Sophora*, *Zanthoxylum*.

(E) Subcanopy: *Alyxia*, *Charpentiera*, *Coprosma*, *Dodonaea*, *Kadua*, *Labordia*, *Leptecophylla*, *Phyllostegia*, *Vaccinium*.

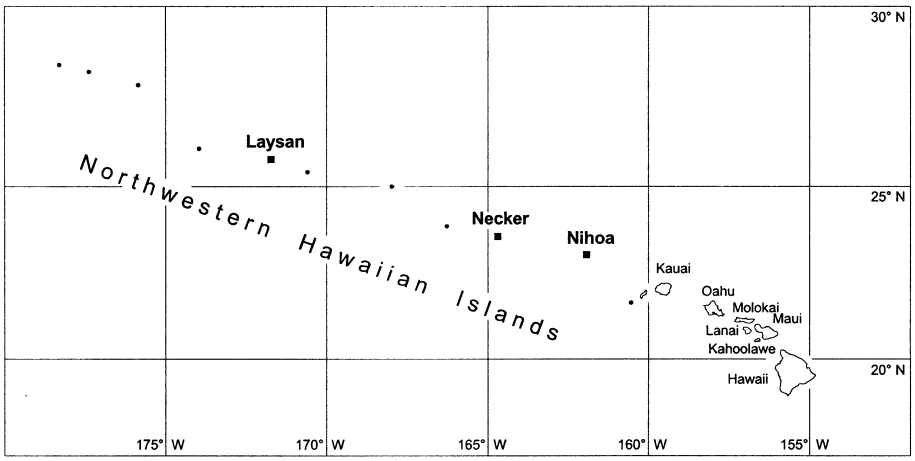
(F) Understory: Ferns, *Carex*, *Peperomia*.

(g) *Maps and critical habitat unit descriptions for the Northwestern Hawaiian Islands*. The following paragraphs contain the legal descriptions of the critical habitat units designated for the Northwestern Hawaiian Islands. Existing manmade features within boundaries of the mapped areas, such as water features, telecommunications equipment, arboreta and gardens, and heiau (indigenous places of worship or shrines) and other archaeological sites do not contain one or more of the primary constituent elements described for each species in paragraphs (h) of

this section and therefore are not included in the critical habitat designations. Coordinates are in WGS84 datum. See Map 1 for the general locations of the seven critical habitat units designated for the islands of Laysan, Nihoa, and Necker.

(1) Index map—Map 1—follows:

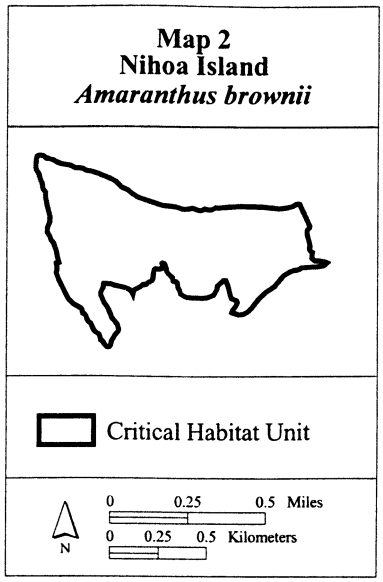
Map 1 - General Locations of Units for Five Species of Plants
Islands of Laysan, Necker, and Nihoa



(2) Nihoa 1—*Amaranthus brownii*—entire island (approximately 69 ha; 171 ac).

(i) Nihoa Island is located between 23°3′ N. and 23°4′ N. and between 161°54′ W. and 161°56′ W.

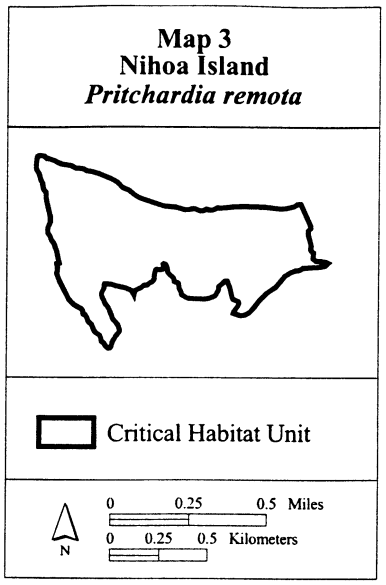
(ii) NOTE: Map 2 follows:



(3) Nihoa 2—*Pritchardia remota*—entire island (approximately 69 ha; 171 ac).

(i) Nihoa Island is located between 23°3′ N. and 23°4′ N. and between 161°54′ W. and 161°56′ W.

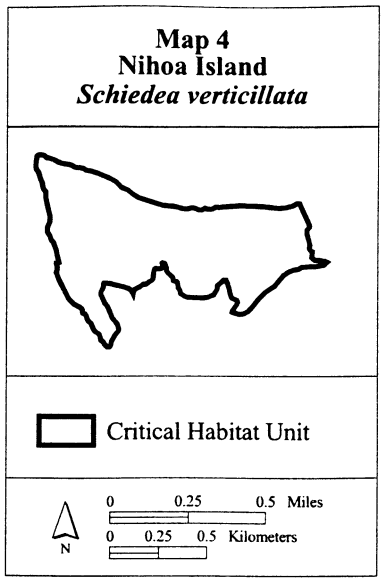
(ii) NOTE: Map 3 follows:



(4) Nihoa 3—*Schiedea verticillata*—entire island (approximately 69 ha; 171 ac).

(i) Nihoa Island is located between 23°3′ N. and 23°4′ N. and between 161°54′ W. and 161°56′ W.

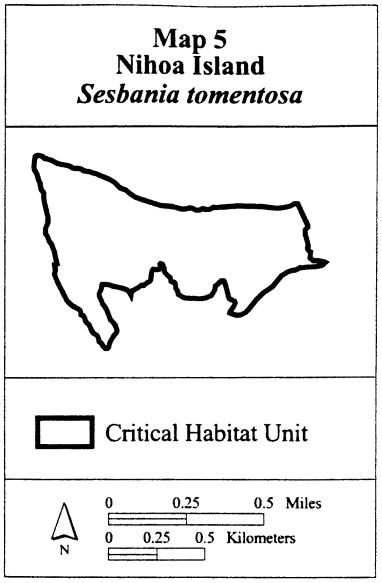
(ii) NOTE: Map 4 follows:



(5) Nihoa 4—*Sesbania tomentosa*—entire island (approximately 69 ha; 171 ac).

(i) Nihoa Island is located between 23°3′ N. and 23°4′ N. and between 161°54′ W. and 161°56′ W.

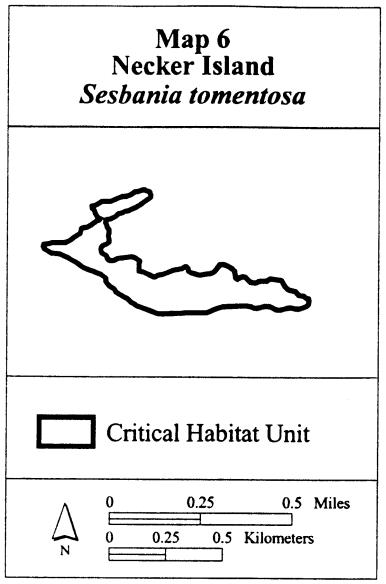
(ii) NOTE: Map 5 follows:



(6) Necker 1—*Sesbania tomentosa*—entire island (approximately 18 ha; 46 ac).

(i) Necker Island is located between 23°34′ N. and 23°35′ N. and between 164°41′ W. and 164°43′ W.

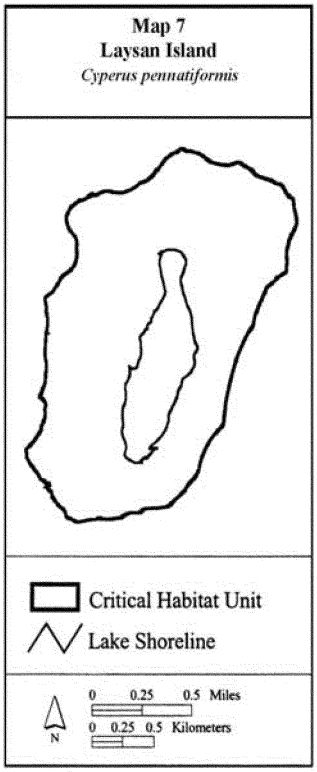
(ii) NOTE: Map 6 follows:



(7) Laysan 1—*Cyperus pennatiformis*—entire island (approximately 405 ha; 1,219 ac).

(i) Laysan Island is located between 25°45′ N. and 25°47′ N. and between 171°43′ W. and 171°45′ W.

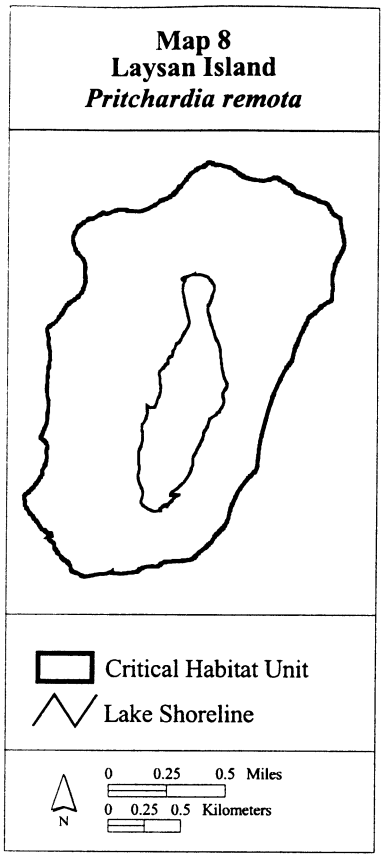
(ii) NOTE: Map 7 follows:


Map 7
Laysan Island
Cyperus pennatiformis
Critical Habitat Unit
Lake Shoreline
0 0.25 0.5 Miles
0 0.25 0.5 Kilometers
N

(8) Laysan 2—*Pritchardia remota*—entire island (approximately 405 ha; 1,219 ac).

(i) Laysan Island is located between 25°45′ N. and 25°47′ N. and between 171°43′ W. and 171°45′ W.

(ii) NOTE: Map 8 follows:



(9) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR THE NORTHWESTERN HAWAIIAN ISLANDS.

Island	Species—Occupied	Species—Unoccupied
Laysan	*Cyperus pennatiformis*	*Pritchardia remota*
Necker	*Sesbania tomentosa.*	
Nihoa	*Pritchardia remota, Schiedea verticillata, Sesbania tomentosa.*	*Amaranthus brownii*

(h) *Plants on the Northwestern Hawaiian Islands; Constituent elements.*

FAMILY AMARANTHACEAE: ***Amaranthus brownii*** (NCN)

Nihoa 1—*Amaranthus brownii*, identified in the legal description in paragraph (g) of this section, constitutes critical habitat for *Amaranthus brownii*. On Nihoa, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(1) Shallow soil in fully exposed locations on rocky outcrops and containing one or more of the following associated native plant species: *Chenopodium oahuense*, *Eragrostis variabilis*, *Ipomoea indica*, *Ipomoea pes-caprae* ssp. *brasiliensis*, *Panicum torridum*, *Scaevola sericea*, *Schiedea verticillata*, *Sicyos pachycarpus*, *Sida fallax*, or *Solanum nelsonii;* and (2) Elevations between 30 and 242 m (100 and 800 ft).

FAMILY ARECACEAE: ***Pritchardia remota*** (LOULU)

Nihoa 2—*Pritchardia remota*, and Laysan 2—*Pritchardia remota*, identified in the legal descriptions in paragraph (g) of this section, consitute critical habitat for *Pritchardia remota*.

(1) On Nihoa, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) *Pritchardia remota* coastal forest community and containing one or more of the following associated native plant species: *Chenopodium oahuense*, *Sesbania tomentosa*, *Sida fallax*, or *Solanum nelsonii;* and

(ii) Elevations between sea level and 151 m (500 ft).

(2) On Laysan Island, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Coastal strand habitat with *Chenopodium oahuensee* and *Solanum nelsonii;* and

(ii) Elevations between sea level to 12 m (0 to 40 ft).

FAMILY CARYOPHYLLACEAE: ***Schiedea verticillata*** (NCN)

Nihoa 3—*Schiedea verticillata*, identified in the legal description in paragraph (g) of this section, constitutes

critical habitat for *Schiedea verticillata*. On Nihoa, the currently known primary constituent elements of critical habitat for *Schiedea verticillata* include, but are not limited to, the habitat components provided by:

(1) Rocky scree, soil pockets, and cracks on coastal cliff faces and in *Pritchardia remota* coastal mesic forest and containing one or more of the following associated native plant species: *Eragrostis variabilis*, *Rumex albescens*, *Tribulus cistoides*, or lichens; and

(2) Elevations between 30 and 242 m (100 and 800 ft).

FAMILY CYPERACEAE: ***Cyperus pennatiformis*** (NCN)

Laysan 1—*Cyperus pennatiformis*, identified in the legal description in paragraph (g) of this section, constitutes critical habitat for *Cyperus pennatiformis*. On Laysan Island, the currently known primary constituent elements of critical habitat for *Cyperus pennatiformis* include, but are not limited to, habitat components provided by:

(1) Coastal sandy substrate containing one or more of the following associated native plant species: *Cyperus laevigatus*, *Eragrostis variabilis*, or *Ipomoea* sp.; and

(2) Elevation of 5 m (16 ft).

FAMILY FABACEAE: ***Sesbania tomentosa*** (OHAI)

Nihoa 4—*Sesbania tomentosa*, and Necker 1—*Sesbania tomentosa*, identified in the legal descriptions in paragraph (g) of this section, constitute critical habitat for *Sesbania tomentosa*. On Nihoa and Necker, the currently known primary constituent elements of critical habitat for *Sesbania tomentosa* include, but are not limited to, habitat components provided by:

(1) Shallow soil on sandy beaches and dunes in *Chenopodium oahuense* coastal dry shrubland or mixed coastal dry cliffs and containing one or more of the following associated native plant species: *Pritchardia remota*, *Scaevola sericea*, *Sida fallax*, or *Solanum nelsonii;* and

(2) Elevations between sea level and 84 m (0 and 276 ft).

[68 FR 9241, Feb. 27, 2003, as amended at 68 FR 13055, Mar. 18, 2003; 68 FR 26038, May 14, 2003; 68 FR 28072, May 22, 2003; 68 FR 36080, June 17, 2003; 68 FR 39704, July 2, 2003; 75 FR 19097, Apr. 13, 2010; 77 FR 57767, Sept. 18, 2012]

EDITORIAL NOTE: The remainder of §17.99 appears in 50 Part 17, §17.99(i)–end of part 17.