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CODE OF FEDERAL REGULATIONS

Title 50
Wildlife and Fisheries

Part 17 (§ 17.99(i) to end of part 17)

Revised as of October 1, 2024

Containing a codification of documents
of general applicability and future effect

As of October 1, 2024

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Cite this Code: CFR

To cite the regulations in this volume use title, part and section number. Thus, 50 CFR 17.99 *refers to title 50, part 17, section 99.*

Explanation

The Code of Federal Regulations is a codification of the general and permanent rules published in the Federal Register by the Executive departments and agencies of the Federal Government. The Code is divided into 50 titles which represent broad areas subject to Federal regulation. Each title is divided into chapters which usually bear the name of the issuing agency. Each chapter is further subdivided into parts covering specific regulatory areas.

Each volume of the Code is revised at least once each calendar year and issued on a quarterly basis approximately as follows:

Title 1 through Title 16.....as of January 1
Title 17 through Title 27.....as of April 1
Title 28 through Title 41.....as of July 1
Title 42 through Title 50.....as of October 1

The appropriate revision date is printed on the cover of each volume.

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The contents of the Federal Register are required to be judicially noticed (44 U.S.C. 1507). The Code of Federal Regulations is prima facie evidence of the text of the original documents (44 U.S.C. 1510).

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The Code of Federal Regulations is kept up to date by the individual issues of the Federal Register. These two publications must be used together to determine the latest version of any given rule.

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EFFECTIVE AND EXPIRATION DATES

Each volume of the Code contains amendments published in the Federal Register since the last revision of that volume of the Code. Source citations for the regulations are referred to by volume number and page number of the Federal Register and date of publication. Publication dates and effective dates are usually not the same and care must be exercised by the user in determining the actual effective date. In instances where the effective date is beyond the cut-off date for the Code a note has been inserted to reflect the future effective date. In those instances where a regulation published in the Federal Register states a date certain for expiration, an appropriate note will be inserted following the text.

OMB CONTROL NUMBERS

The Paperwork Reduction Act of 1980 (Pub. L. 96–511) requires Federal agencies to display an OMB control number with their information collection request.

Many agencies have begun publishing numerous OMB control numbers as amendments to existing regulations in the CFR. These OMB numbers are placed as close as possible to the applicable recordkeeping or reporting requirements.

PAST PROVISIONS OF THE CODE

Provisions of the Code that are no longer in force and effect as of the revision date stated on the cover of each volume are not carried. Code users may find the text of provisions in effect on any given date in the past by using the appropriate List of CFR Sections Affected (LSA). For the convenience of the reader, a ''List of CFR Sections Affected'' is published at the end of each CFR volume. For changes to the Code prior to the LSA listings at the end of the volume, consult previous annual editions of the LSA. For changes to the Code prior to 2001, consult the List of CFR Sections Affected compilations, published for 1949-1963, 1964-1972, 1973-1985, and 1986-2000.

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The term ''[Reserved]'' is used as a place holder within the Code of Federal Regulations. An agency may add regulatory information at a ''[Reserved]'' location at any time. Occasionally ''[Reserved]'' is used editorially to indicate that a portion of the CFR was left vacant and not dropped in error.

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What is incorporation by reference? Incorporation by reference was established by statute and allows Federal agencies to meet the requirement to publish regulations in the Federal Register by referring to materials already published elsewhere. For an incorporation to be valid, the Director of the Federal Register must approve it. The legal effect of incorporation by reference is that the material is treated as if it were published in full in the Federal Register (5 U.S.C. 552(a)). This material, like any other properly issued regulation, has the force of law.

What is a proper incorporation by reference? The Director of the Federal Register will approve an incorporation by reference only when the requirements of 1 CFR part 51 are met. Some of the elements on which approval is based are:

(a) The incorporation will substantially reduce the volume of material published in the Federal Register.

(b) The matter incorporated is in fact available to the extent necessary to afford fairness and uniformity in the administrative process.

(c) The incorporating document is drafted and submitted for publication in accordance with 1 CFR part 51.

What if the material incorporated by reference cannot be found? If you have any problem locating or obtaining a copy of material listed as an approved incorporation by reference, please contact the agency that issued the regulation containing that incorporation. If, after contacting the agency, you find the material is not available, please notify the Director of the Federal Register, National Archives and Records Administration, 8601 Adelphi Road, College Park, MD 20740-6001, or call 202-741-6010.

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A subject index to the Code of Federal Regulations is contained in a separate volume, revised annually as of January 1, entitled CFR INDEX AND FINDING AIDS. This volume contains the Parallel Table of Authorities and Rules. A list of CFR titles, chapters, subchapters, and parts and an alphabetical list of agencies publishing in the CFR are also included in this volume.

An index to the text of ''Title 3—The President'' is carried within that volume.

The Federal Register Index is issued monthly in cumulative form. This index is based on a consolidation of the ''Contents'' entries in the daily Federal Register.

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OLIVER A. POTTS,
Director,
Office of the Federal Register
October 1, 2024

THIS TITLE

Title 50—WILDLIFE AND FISHERIES is composed of thirteen volumes. The parts in these volumes are arranged in the following order: Parts 1–16; part 17 (17.1 to 17.95(a)), part 17 (17.95(b)), part 17 (17.95(c) to (e)), part 17 (17.95(f) to end of 17.95), part 17 (17.96 to 17.98), part 17 (17.99(a) to (h)), part 17 (17.99(i) to end of part 17), parts 18–199, parts 200–227, parts 228–599, parts 600–659, and part 660 to end. The first nine volumes consist of parts 1–16, part 17 (17.1 to 17.95(a)), part 17 (17.95(b)), part 17 (17.95(c) to (e)), part 17 (17.95(f) to end of 17.95), part 17 (17.96 to 17.98), part 17 (17.99(a) to 17.99(h)), part 17 (17.99(i) to end of part 17), and parts 18–199 and contain the current regulations issued under chapter I—United States Fish and Wildlife Service, Department of the Interior. The tenth volume (parts 200–227) contains the current regulations issued under chapter II—National Marine Fisheries Service, National Oceanic and Atmospheric Administration, Department of Commerce. The eleventh volume (parts 228–599) contains the remaining current regulations issued under chapter II—National Marine Fisheries Service, National Oceanic and Atmospheric Administration, Department of Commerce; and the current regulations issued under chapter III—International Fishing and Related Activities; chapter IV—Joint Regulations (United States Fish and Wildlife Service, Department of the Interior and National Marine Fisheries Service, National Oceanic and Atmospheric Administration, Department of Commerce); Endangered Species Committee regulations; and chapter V—Marine Mammal Commission. The twelfth and thirteenth volumes (parts 600–659 and part 660 to end) contain the current regulations issued under chapter VI—Fishery Conservation and Management, National Oceanic and Atmospheric Administration, Department of Commerce. The contents of these volumes represent all current regulations codified under this title of the CFR as of October 1, 2024.

Alphabetical listings of endangered and threatened wildlife and plants appear in §§ 17.11 and 17.12.

The OMB control numbers for the National Oceanic and Atmospheric Administration appear in 15 CFR 902.1.

For this volume, Cheryl E. Sirofchuck was Chief Editor. The Code of Federal Regulations publication program is under the direction of John Hyrum Martinez, assisted by Stephen J. Frattini.

Title 50—Wildlife and Fisheries

(This book contains part 17, §17.99(i) to end of part 17)

Part

CHAPTER I—United States Fish and Wildlife Service, Department of the Interior (Continued) 17

CHAPTER I—UNITED STATES FISH AND WILDLIFE SERVICE, DEPARTMENT OF THE INTERIOR (CONTINUED)

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

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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. (Continued)

Subpart J—Manatee Protection Areas

17.100 Purpose.
17.101 Scope.
17.102 Definitions.
17.103 Establishment of protection areas.
17.104 Prohibitions.
17.105 Permits and exceptions.
17.106 Emergency establishment of protection areas.
17.107 Facilitating enforcement.
17.108 List of designated manatee protection areas.
17.109–17.199 [Reserved]

AUTHORITY: 16 U.S.C. 1361–1407; 1531–1544; and 4201–4245, unless otherwise noted.

SOURCE: 40 FR 44415, Sept. 26, 1975. Redesignated at 85 FR 82388, Dec. 18, 2020, and further redesignated at 87 FR 43447, July 21, 2022.

Subpart I—Interagency Cooperation (Continued)

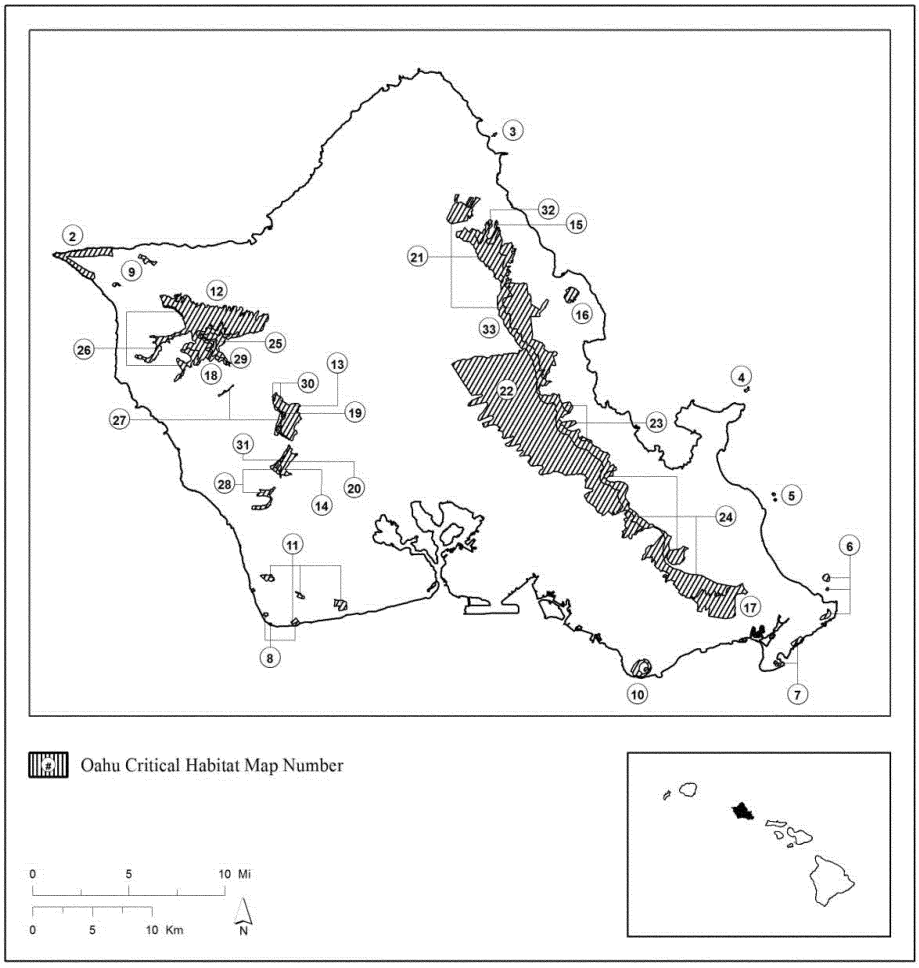
EDITORIAL NOTE: Paragraphs (a)–(h) of §17.99 appear in 50 Part 17, §§17.99(a) to 17.99(h).

§17.99 Critical habitat; plants on the Hawaiian Islands. (Continued)

(i) *Oahu.* Critical habitat units are described below. Maps were created in GIS, with coordinates in UTM Zone 4 with units in meters using North American Datum of 1983 (NAD83). The maps in this entry, as modified by any accompanying regulatory text, establish the boundaries of the critical habitat designation. The coordinates or plot points or both on which each map is based are available to the public at the Service's Internet site, *http://www.fws.gov/pacificislands*; at *http://www.regulations.gov* at Docket No. FWS–R1–ES–2010–0043; and at the field office responsible for the designation. You may obtain field office location information by contacting one of the Service regional offices, the addresses of which are listed at 50 CFR 2.2. Existing manmade features and structures, such as buildings, roads, railroads, airports, runways, other paved areas, lawns, and other urban landscaped areas, existing trails, campgrounds and their immediate surrounding landscaped area, scenic lookouts, remote helicopter landing sites, and existing fences are not included in the critical habitat designation. 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) Map 1—Index map follows:

Map 1
Oahu Critical Habitat–Island Index Map

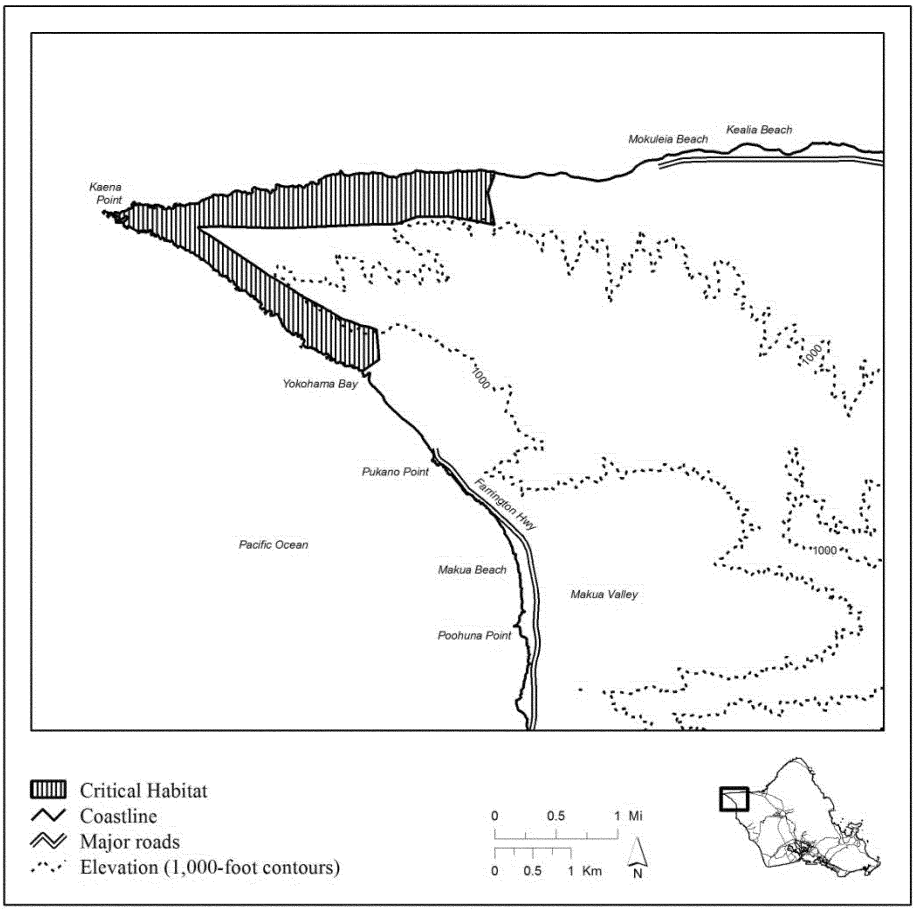


(2) Oahu—Coastal—Unit 1 (958 ac; 388 ha).

(i) This unit is critical habitat for *Achyranthes splendens* var. *rotundata*, *Bidens amplectens*, *Schenkia sebaeoides*, *Chamaesyce celastroides* var. *kaenana*, *Schiedea kealiae*, *Sesbania tomentosa*, and *Vigna o-wahuensis*.

(ii) Map of Oahu—Coastal—Unit 1 (Map 2) follows:

Map 2
Oahu–Coastal
Unit 1

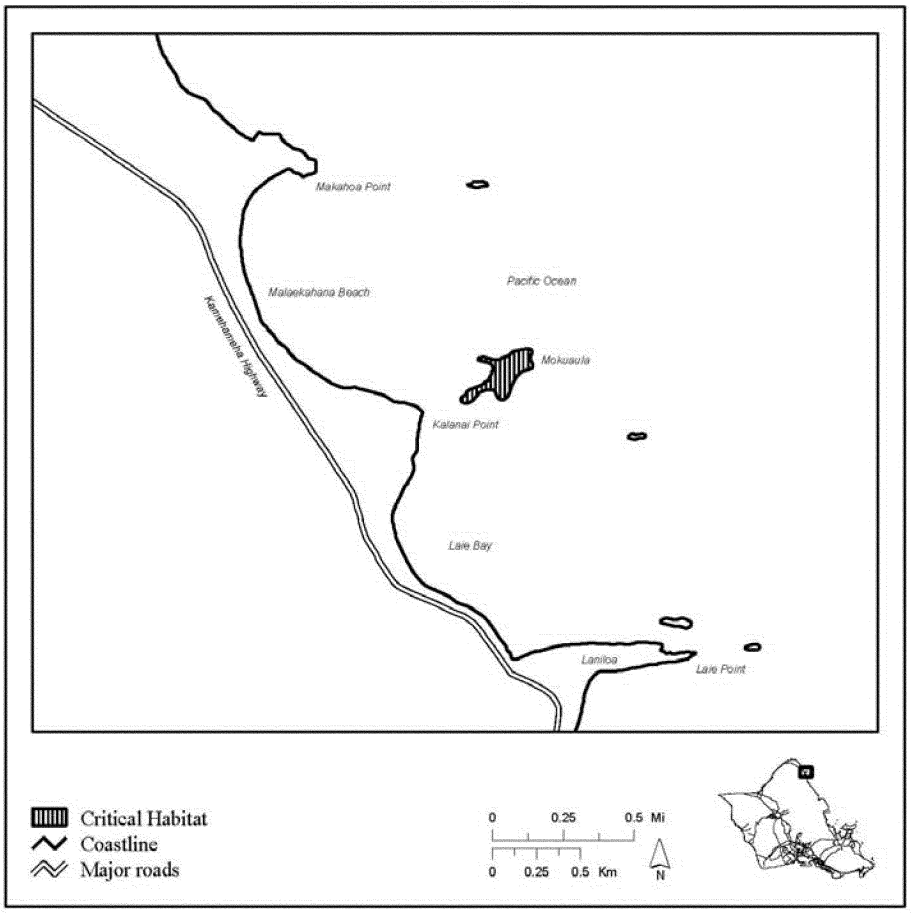


(3) Oahu—Coastal—Unit 2 (12 ac; 5 ha).

(i) This unit is critical habitat for *Schenkia sebaeoides*, *Chamaesyce kuwaleana*, *Sesbania tomentosa*, and *Vigna o-wahuensis*.

(ii) Map of Oahu—Coastal—Unit 2 (Map 3) follows:

Map 3
Oahu–Coastal
Unit 2

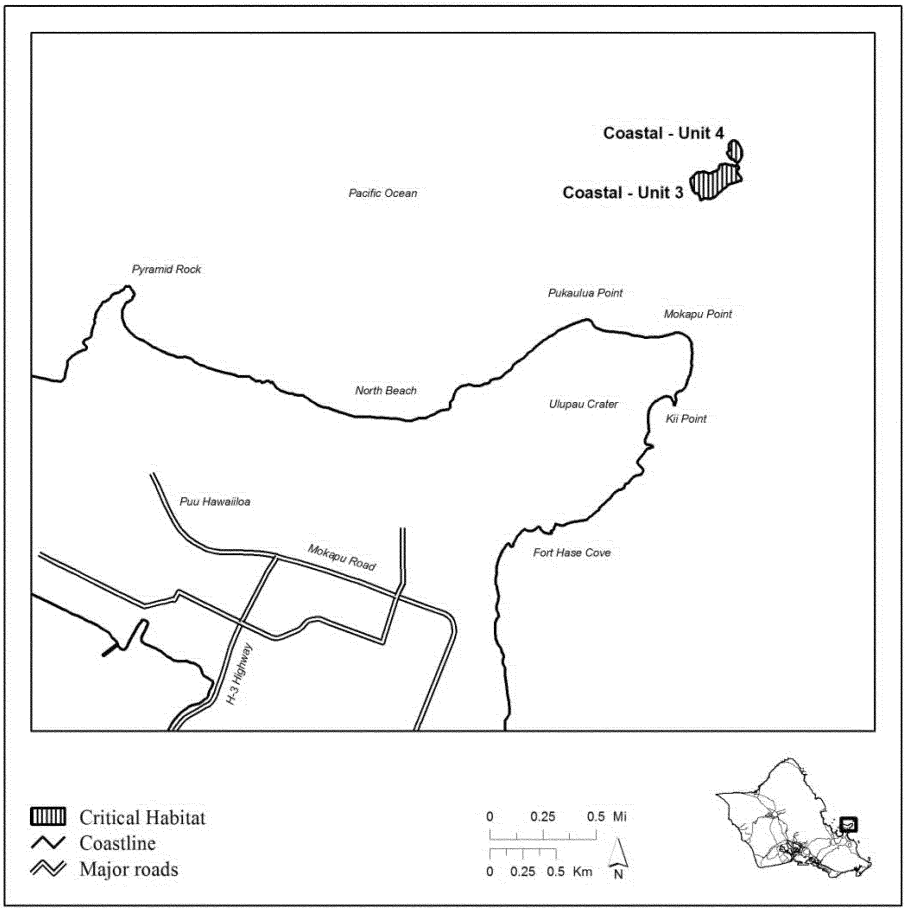


(4) Oahu—Coastal—Unit 3 (15 ac; 6 ha) and Oahu–Coastal–Unit 4 (3 ac; 1 ha).

(i) These units are critical habitat for *Schenkia sebaeoides*, *Chamaesyce kuwaleana*, *Sesbania tomentosa*, and *Vigna o-wahuensis*.

(ii) Map of Oahu—Coastal—Unit 3 and Oahu—Coastal—Unit 4 (Map 4) follows:

Map 4
Oahu–Coastal Ecosystem
Unit 3 and Unit 4

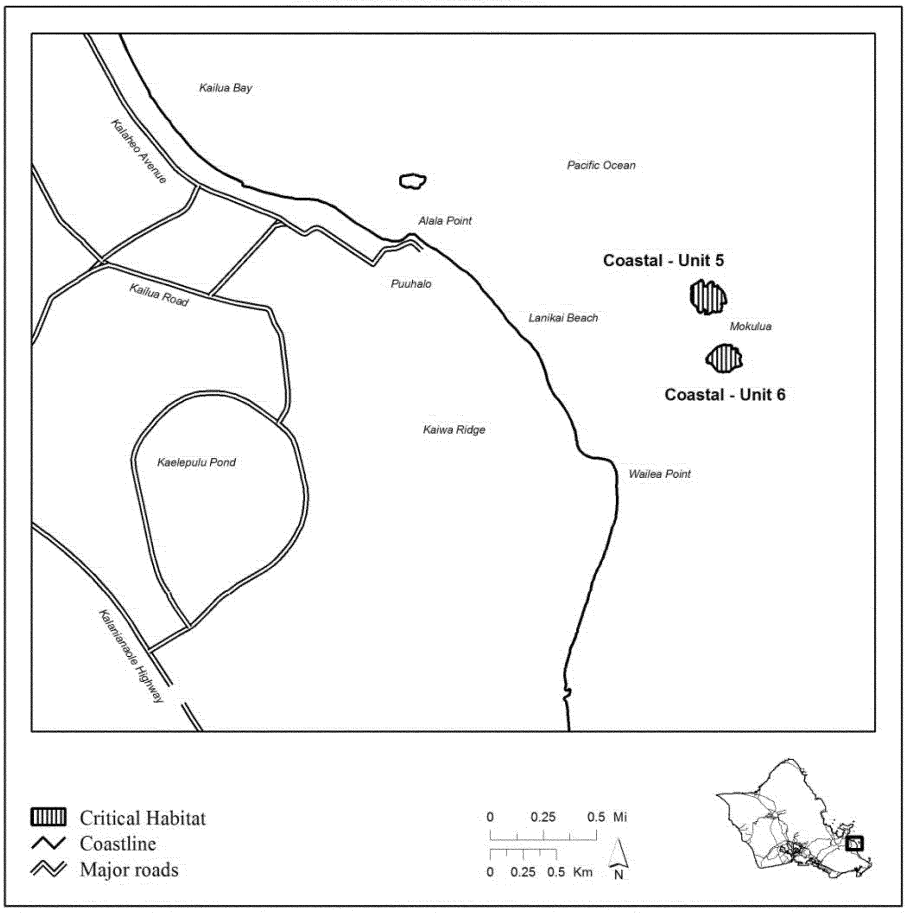


(5) Oahu—Coastal—Unit 5 (12 ac; 5 ha) and Oahu—Coastal—Unit 6 (9 ac; 4 ha).

(i) These units are critical habitat for *Schenkia sebaeoides*, *Chamaesyce kuwaleana*, *Sesbania tomentosa*, and *Vigna o-wahuensis*.

(ii) Map of Oahu—Coastal—Unit 5 and Oahu—Coastal—Unit 6 (Map 5) follows:

Map 5
Oahu–Coastal
Unit 5 and Unit 6

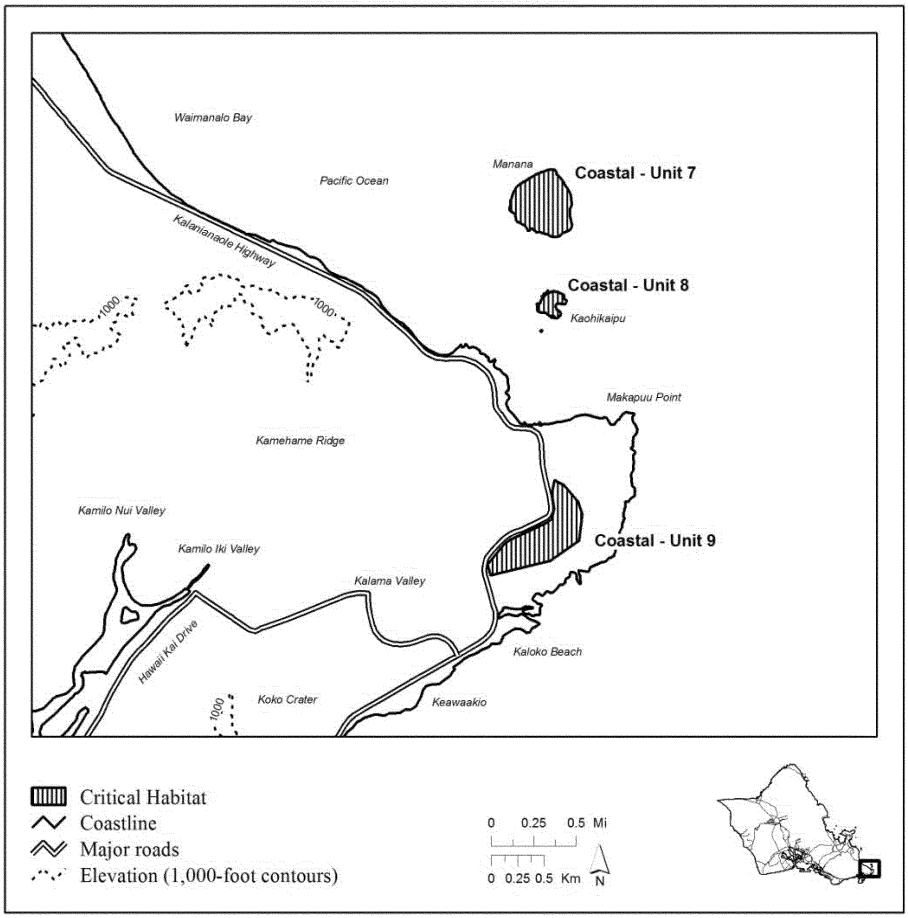


(6) Oahu—Coastal—Unit 7 (67 ac; 27 ha), Oahu—Coastal—Unit 8 (10 ac; 4 ha), and Oahu—Coastal—Unit 9 (80 ac; 33 ha).

(i) These units are critical habitat for, *Schenkia sebaeoides*, *Chamaesyce kuwaleana*, *Sesbania tomentosa*, and *Vigna o-wahuensis*.

(ii) Map of Oahu—Coastal—Unit 7, Oahu—Coastal—Unit 8, and Oahu—Coastal—Unit 9 (Map 6) follows:

Map 6
Oahu–Coastal
Unit 7, Unit 8 and Unit 9



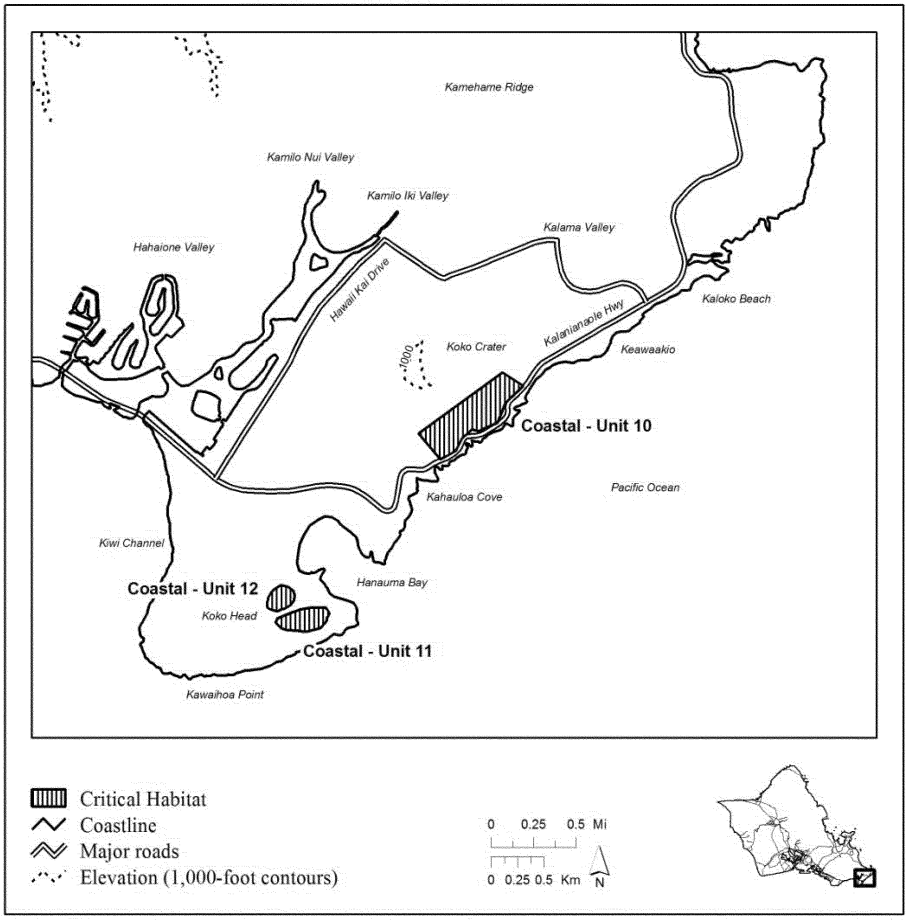
(7) Oahu—Coastal—Unit 10 (74 ac; 30 ha), Oahu—Coastal—Unit 11 (20 ac; 8 ha), and Oahu—Coastal—Unit 12 (11 ac; 5 ha).

(i) Oahu—Coastal—Unit 10 is critical habitat for *Schenkia sebaeoides*, *Chamaesyce kuwaleana*, *Sesbania tomentosa*, and *Vigna o-wahuensis*.

(ii) Oahu—Coastal—Unit 11 and Oahu—Coastal—Unit 12 are critical habitat for *Schenkia sebaeoides*, *Chamaesyce kuwaleana*, *Cyperus trachysanthos*, *Marsilea villosa*, *Sesbania tomentosa*, and *Vigna o-wahuensis*.

(iii) Map of Oahu—Coastal—Unit 10, Oahu—Coastal—Unit 11, and Oahu—Coastal—Unit 12 (Map 7) follows:

Map 7
Oahu–Coastal
Unit 10, Unit 11 and Unit 12

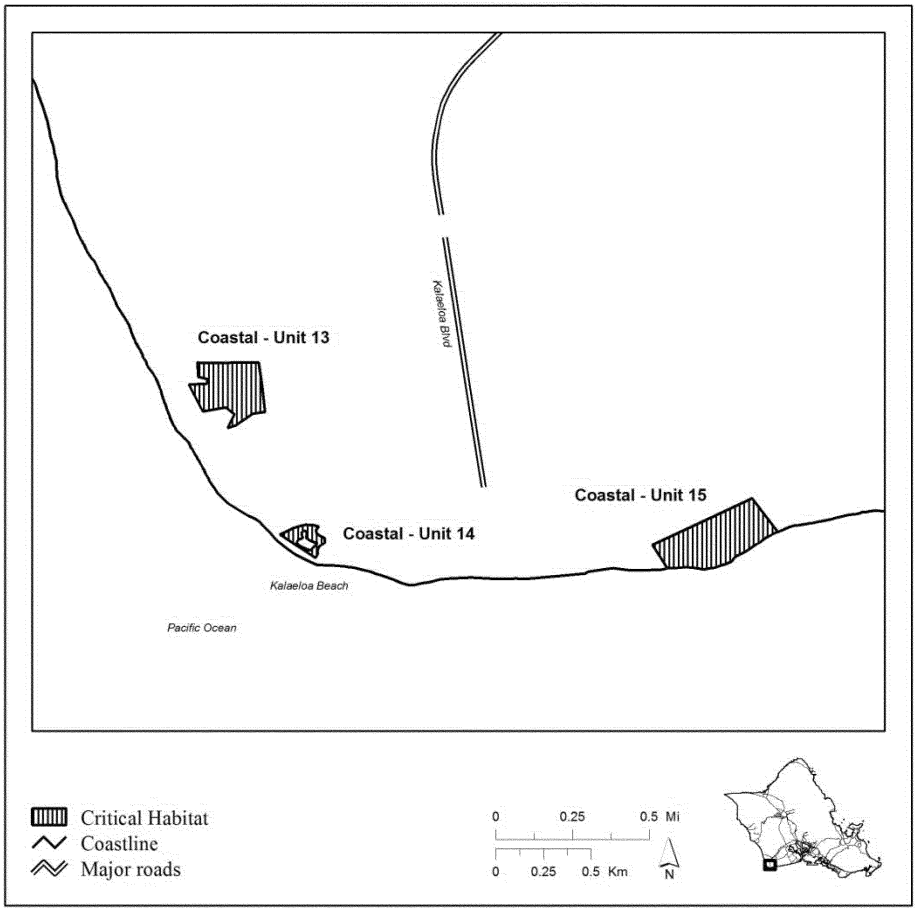


(8) Oahu—Coastal—Unit 13 (23 ac; 10 ha), Oahu—Coastal—Unit 14 (4 ac; 2 ha), and Oahu—Coastal—Unit 15 (33 ac; 13 ha).

(i) These units are critical habitat for *Achyranthes splendens* var. *rotundata*, *Bidens amplectens*, *Schenkia sebaeoides*, *Chamaesyce celastroides* var. *kaenana*, *Schiedea kealiae*, *Sesbania tomentosa*, and *Vigna o-wahuensis*.

(ii) Map of Oahu—Coastal—Unit 13, Oahu—Coastal—Unit 14, and Oahu—Coastal—Unit 15 (Map 8) follows:

Map 8
Oahu–Coastal
Unit 13, Unit 14 and Unit 15

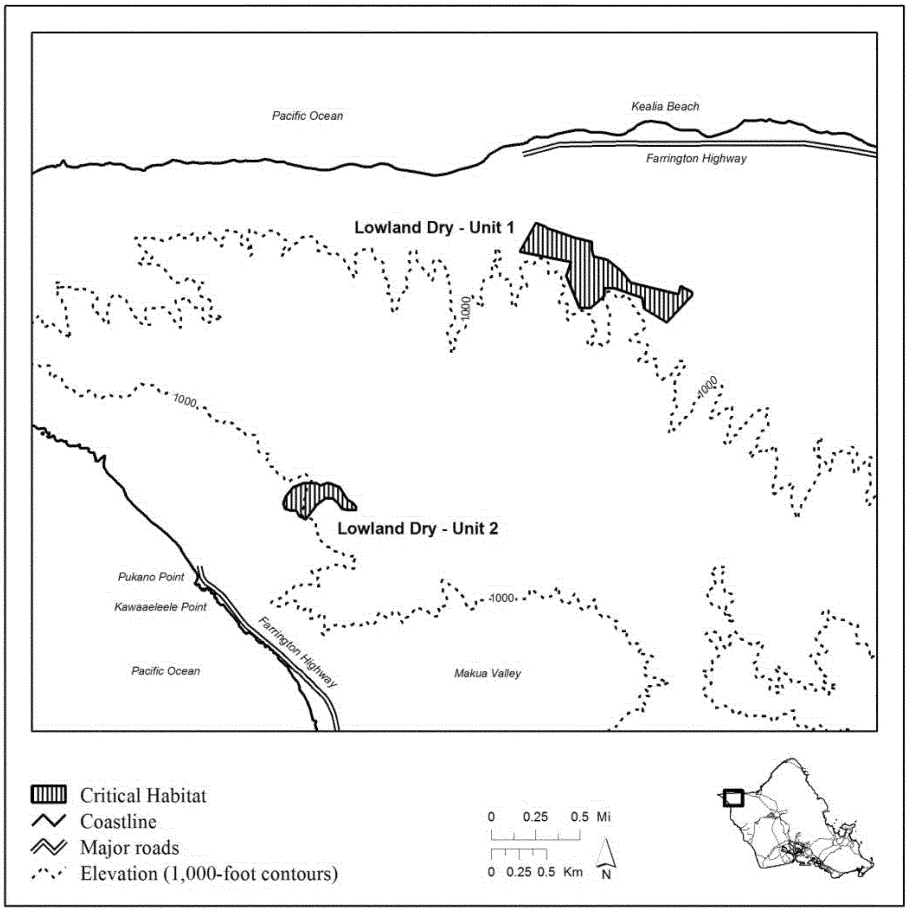


(9) Oahu—Lowland Dry—Unit 1 (102 ac; 41 ha) and Oahu—Lowland Dry—Unit 2 (29 ac; 12).

(i) These units are critical habitat for *Achyranthes splendens* var. *rotundata*, *Bidens amplectens*, *Bonamia menziesii*, *Chamaesyce celastroides* var. *kaenana*, *Dracaena forbesii*, *Euphorbia haeleeleana*, *Gouania meyenii*, *Gouania vitifolia*, *Hibiscus brackenridgei*, *Isodendrion pyrifolium*, *Melanthera tenuifolia*, *Neraudia angulata*, *Nototrichium humile*, , *Schiedea hookeri*, *Schiedea kealiae*, and *Spermolepis hawaiiensis*.

(ii) Map of Oahu—Lowland Dry—Unit 1 and Oahu—Lowland Dry—Unit 2 (Map 9) follows:

Map 9
Oahu–Lowland Dry
Unit 1 and Unit 2



(10) [Reserved]

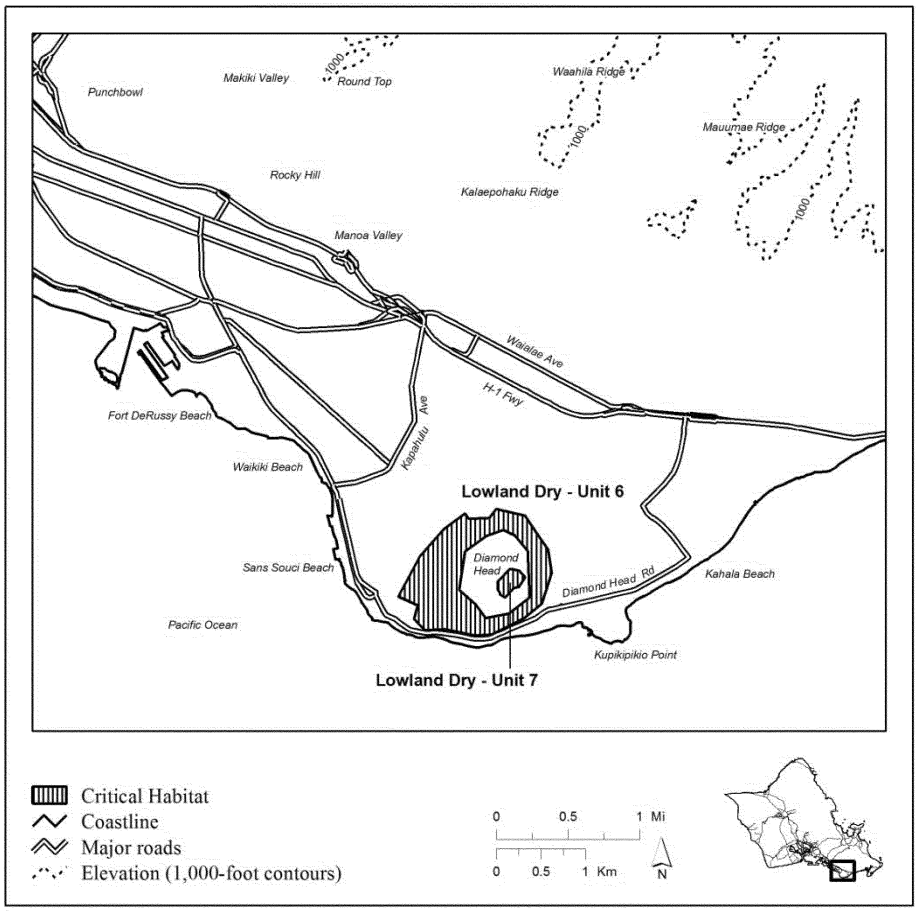
(11) Oahu—Lowland Dry—Unit 6 (287 ac; 116 ha) and Oahu—Lowland Dry—Unit 7 (15 ac; 6 ha).

(i) Oahu—Lowland Dry—Unit 6 is critical habitat for *Doryopteris takeuchii*, *Gouania meyenii*, and *Spermolepis hawaiiensis*.

(ii) Oahu—Lowland Dry—Unit 7 is critical habitat for *Cyperus trachysanthos*, *Doryopteris takeuchii*, *Gouania meyenii*, *Marsilea villosa*, and *Spermolepis hawaiiensis*.

(iii) Map of Oahu—Lowland Dry—Unit 6 and Oahu—Lowland Dry—Unit 7 (Map 10) follows:

Map 10
Oahu–Lowland Dry
Unit 6 and Unit 7

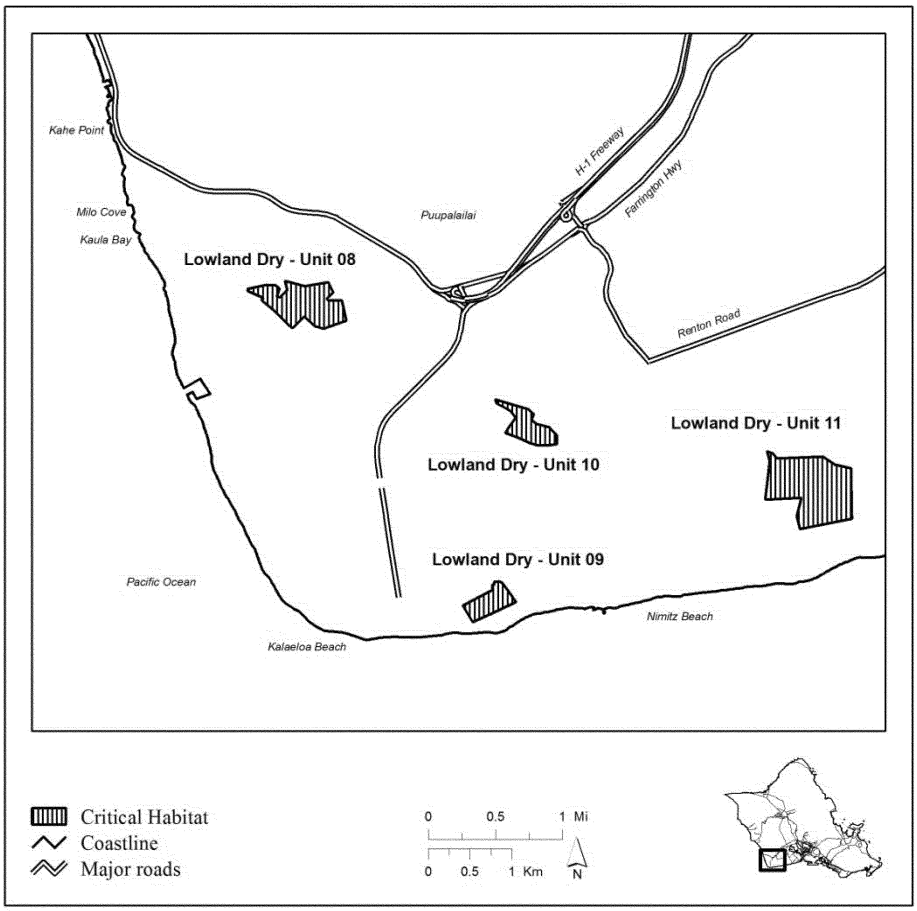


(12) Oahu—Lowland Dry—Unit 8 (99 ac; 40 ha), Oahu—Lowland Dry—Unit 9 (37 ac; 15 ha), Oahu—Lowland Dry—Unit 10 (43 ac; 17 ha), and Oahu—Lowland Dry—Unit 11 (166 ac; 67 ha).

(i) These units are critical habitat for *Achyranthes splendens* var. *rotundata*, *Bidens amplectens*, *Bonamia menziesii*, *Chamaesyce celastroides* var. *kaenana*, *Euphorbia haeleeleana*, *Euphorbia skottsbergii* var. *skottsbergii*, *Gouania meyenii*, *Gouania vitifolia*, *Hibiscus brackenridgei*, *Isodendrion pyrifolium*, *Melanthera tenuifolia*, *Neraudia angulata*, *Nototrichium humile*, *Schiedea hookeri*, *Schiedea kealiae*, and *Spermolepis hawaiiensis*.

(ii) Map of Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, and Oahu—Lowland Dry—Unit 11 (Map 11) follows:

Map 11
Oahu–Lowland Dry
Unit 8, Unit, 9, Unit 10 and Unit 11

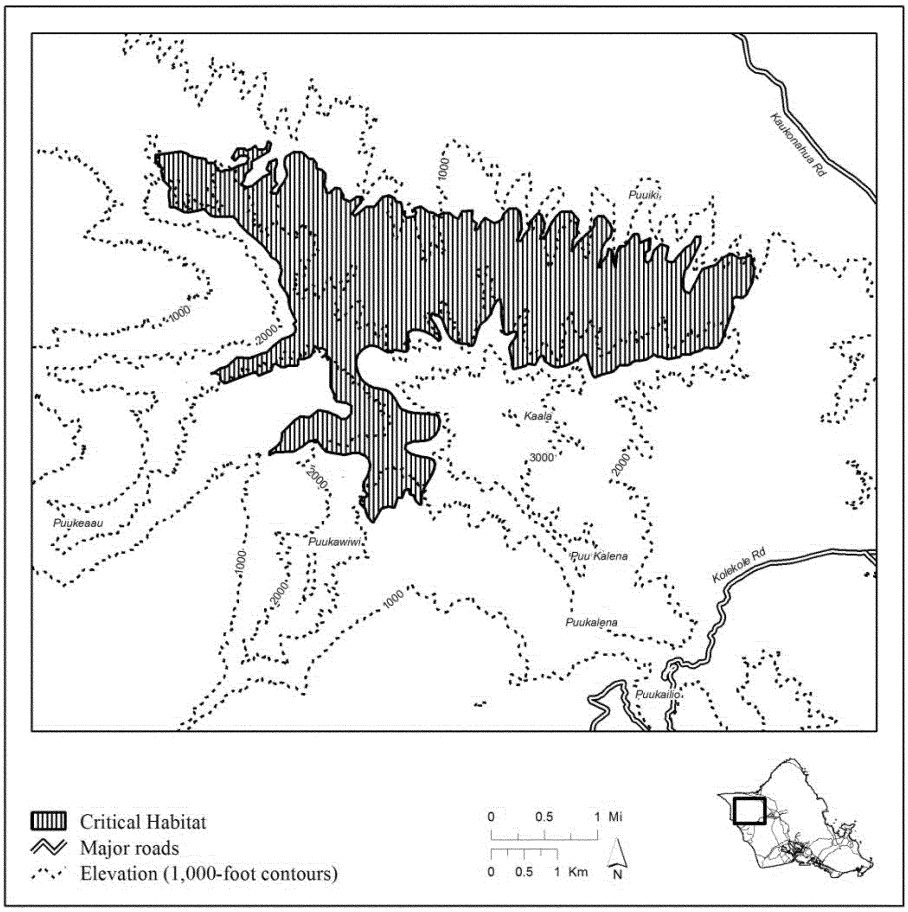


(13) Oahu—Lowland Mesic—Unit 1 (4,448 ac; 1,800 ha).

(i) This unit is critical habitat for *Abutilon sandwicense*, *Alectryon macrococcus*, *Asplenium dielfalcatum*, *Bonamia menziesii*, *Cenchrus agrimonioides*, *Chamaesyce celastroides* var. *kaenana*, *Chamaesyce herbstii*, *Colubrina oppositifolia*, *Ctenitis squamigera*, *Cyanea acuminata*, *Cyanea calycina*, *Cyanea grimesiana* ssp. *grimesiana*, *Cyanea grimesiana* ssp. *obatae*, *Cyanea longiflora*, *Cyanea pinnatifida*, *Cyanea superba*, *Cyperus pennatiformis*, *Cyrtandra dentata*, *Delissea subcordata*, *Diellia unisora*, *Diplazium molokaiense*, *Dracaena forbesii*, *Dubautia herbstobatae*, *Eragrostis fosbergii*, *Eugenia koolauensis*, *Euphorbia haeleeleana*, *Flueggea neowawraea*, *Gardenia mannii*, *Gouania meyenii*, *Gouania vitifolia*, *Hesperomannia arborescens*, *Hesperomannia arbuscula*, *Hibiscus brackenridgei*, *Isodendrion laurifolium*, *Isodendrion longifolium*, *Kadua coriacea*,

Kadua degeneri, *Kadua parvula*, *Labordia cyrtandrae*, *Lobelia niihauensis*, *Melanthera tenuifolia*, *Melicope cornuta* var. *decurrens*, *Melicope makahae*, *Melicope pallida*, *Melicope saint-johnii*, *Neraudia angulata*, *Nototrichium humile*, *Phyllostegia hirsuta*, *Phyllostegia kaalaensis*, *Phyllostegia mollis*, *Phyllostegia parviflora* var. *lydgatei*, *Plantago princeps* var. *princeps*, *Pteralyxia macrocarpa*, *Sanicula mariversa*, *Schiedea hookeri*, *Schiedea kaalae*, *Schiedea nuttallii*, *Schiedea obovata*, *Silene perlmanii*, *Solanum sandwicense*, *Stenogyne kanehoana*, *Tetramolopium lepidotum* ssp. *lepidotum*, *Urera kaalae*, and *Viola chamissoniana* ssp. *chamissoniana*. Map of Oahu—Lowland Mesic—Unit 1 (Map 12) follows:

Map 12
Oahu–Lowland Mesic
Unit 1

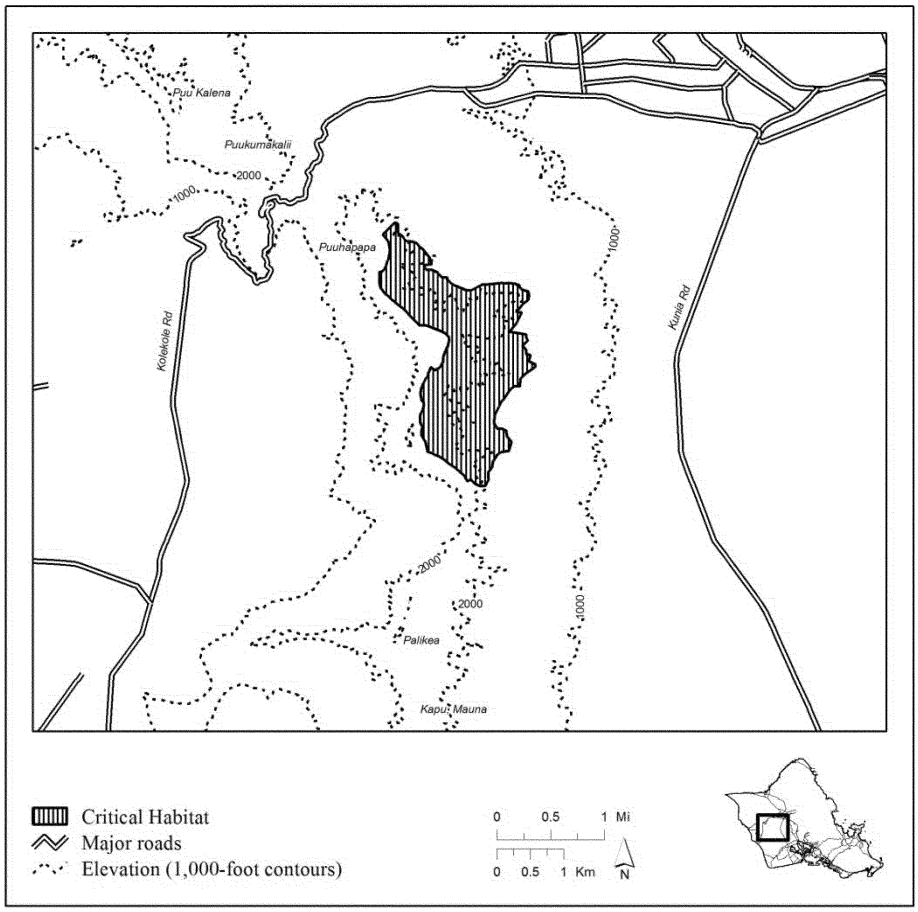


(14) Oahu—Lowland Mesic—Unit 2 (1,063 ac; 430 ha).

(i) This unit is critical habitat for *Abutilon sandwicense*, *Alectryon macrococcus*, *Asplenium dielfalcatum*, *Bonamia menziesii*, *Cenchrus agrimonioides*, *Chamaesyce celastroides* var. *kaenana*, *Chamaesyce herbstii*, *Colubrina oppositifolia*, *Ctenitis squamigera*, *Cyanea acuminata*, *Cyanea calycina*, *Cyanea grimesiana* ssp. *grimesiana*, *Cyanea grimesiana* ssp. *obatae*, *Cyanea longiflora*, *Cyanea pinnatifida*, *Cyanea superba*, *Cyperus pennatiformis*, *Cyrtandra dentata*, *Delissea subcordata*, *Diellia unisora*, *Diplazium molokaiense*, *Dracaena forbesii*, *Dubautia herbstobatae*, *Eragrostis fosbergii*, *Eugenia koolauensis*, *Euphorbia haeleeleana*, *Flueggea neowawraea*, *Gardenia mannii*, *Gouania meyenii*, *Gouania vitifolia*, *Hesperomannia arborescens*, *Hesperomannia arbuscula*, *Hibiscus brackenridgei*, *Isodendrion laurifolium*, *Isodendrion longifolium*, *Kadua coriacea*, *Kadua degeneri*, *Kadua parvula*, *Labordia cyrtandrae*, *Lobelia niihauensis*, *Melanthera tenuifolia*, *Melicope cornuta* var. *decurrens*, *Melicope makahae*, *Melicope pallida*, *Melicope saint-johnii*, *Neraudia angulata*, *Nototrichium humile*, *Phyllostegia hirsuta*, *Phyllostegia kaalaensis*, *Phyllostegia mollis*, *Phyllostegia parviflora* var. *lydgatei*, *Plantago princeps* var. *princeps*, *Pteralyxia macrocarpa*, *Sanicula mariversa*, *Schiedea hookeri*, *Schiedea kaalae*, *Schiedea nuttallii*, *Schiedea obovata*, *Silene perlmanii*, *Solanum sandwicense*, *Stenogyne kanehoana*, *Tetramolopium lepidotum* ssp. *lepidotum*, *Urera kaalae*, *and Viola chamissoniana* ssp. *chamissoniana*.

(ii) Map of Oahu—Lowland Mesic—Unit 2 (Map 13) follows:

Map 13
Oahu–Lowland Mesic
Unit 2



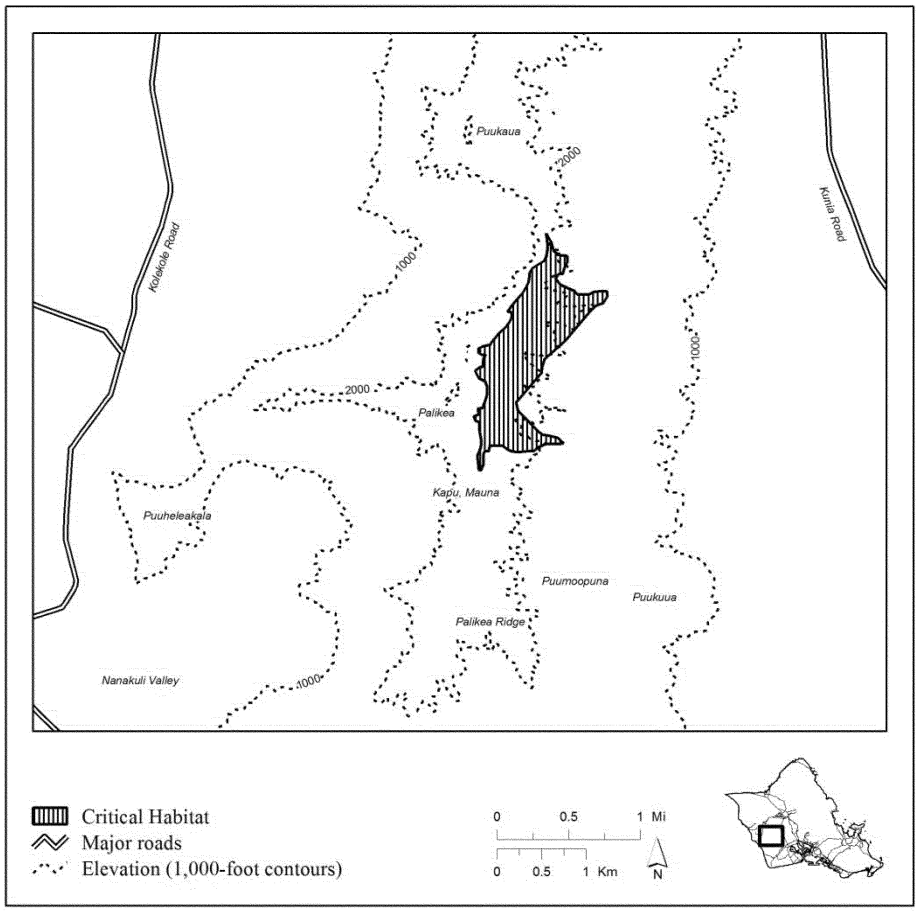
(15) Oahu—Lowland Mesic—Unit 3 (353 ac; 143 ha).

(i) This unit is critical habitat for *Abutilon sandwicense*, *Alectryon macrococcus*, *Asplenium dielfalcatum*, *Bonamia menziesii*, *Cenchrus agrimonioides*, *Chamaesyce celastroides* var. *kaenana*, *Chamaesyce herbstii*, *Colubrina oppositifolia*, *Ctenitis squamigera*, *Cyanea acuminata*, *Cyanea calycina*, *Cyanea grimesiana* ssp. *grimesiana*, *Cyanea grimesiana* ssp. *obatae*, *Cyanea longiflora*, *Cyanea pinnatifida*, *Cyanea superba*, *Cyperus pennatiformis*, *Cyrtandra dentata*, *Delissea subcordata*, *Diellia unisora*, *Diplazium molokaiense*, *Dracaena forbesii*, *Dubautia herbstobatae*, *Eragrostis fosbergii*, *Eugenia koolauensis*, *Euphorbia haeleeleana*, *Flueggea neowawraea*, *Gardenia mannii*, *Gouania meyenii*, *Gouania vitifolia*, *Hesperomannia arborescens*, *Hesperomannia arbuscula*, *Hibiscus brackenridgei*, *Isodendrion longifolium*, *Kadua coriacea*, *Kadua degeneri*, *Kadua*

parvula, *Labordia cyrtandrae*, *Lobelia niihauensis*, *Melanthera tenuifolia*, *Melicope cornuta* var. *decurrens*, *Melicope makahae*, *Melicope pallida*, *Melicope saint-johnii*, *Neraudia angulata*, *Nototrichium humile*, *Phyllostegia hirsuta*, *Phyllostegia kaalaensis*, *Phyllostegia mollis*, *Phyllostegia parviflora* var. *lydgatei*, *Plantago princeps* var. *princeps*, , *Pteralyxia macrocarpa*, *Sanicula mariversa*, *Schiedea hookeri*, *Schiedea kaalae*, *Schiedea nuttallii*, *Schiedea obovata*, *Silene perlmanii*, *Solanum sandwicense*, *Stenogyne kanehoana*, *Tetramolopium lepidotum* ssp. *lepidotum*, *Urera kaalae*, and *Viola chamissoniana* ssp. *chamissoniana*.

(ii) Map of Oahu—Lowland Mesic—Unit 3 (Map 14) follows:

Map 14
Oahu–Lowland Mesic
Unit 3

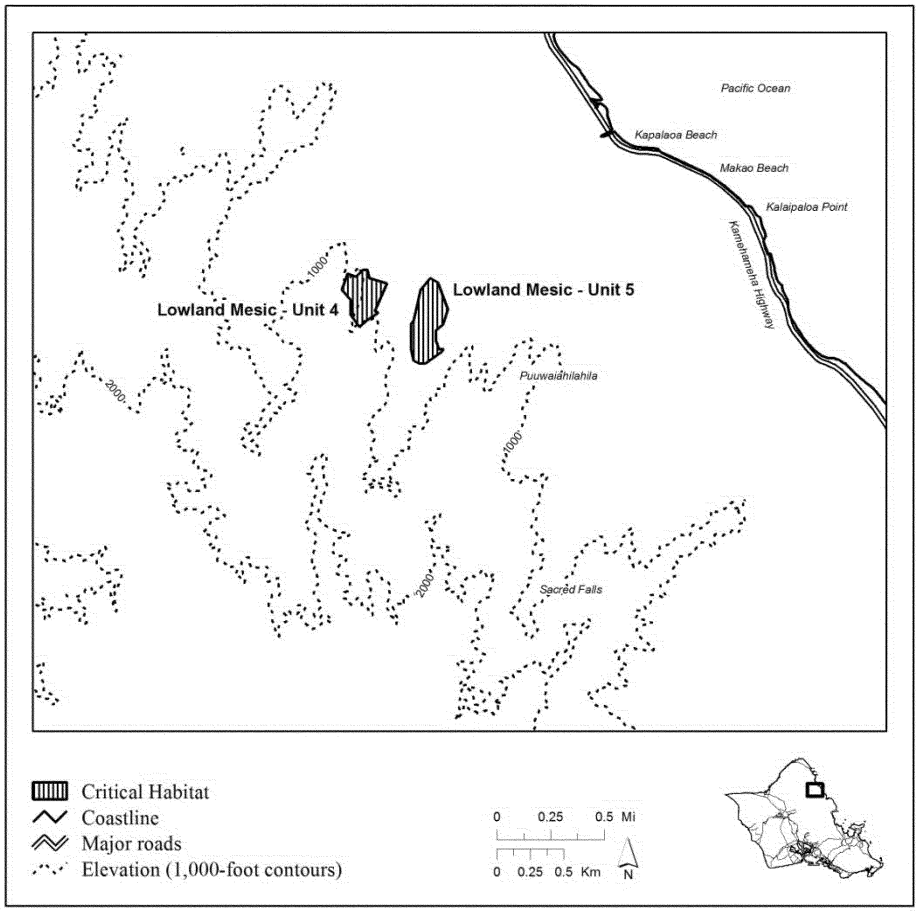


(16) Oahu—Lowland Mesic—Unit 4 (20 ac; 8 ha) and Oahu—Lowland Mesic—Unit 5 (29 ac; 12 ha).

(i) These units are critical habitat for *Alectryon macrococcus*, *Asplenium dielerectum*, *Asplenium dielfalcatum*, *Bonamia menziesii*, *Chamaesyce celastroides* var. *kaenana*, *Ctenitis squamigera*, *Cyanea acuminata*, *Cyanea. calycina*, *Cyanea crispa*, *Cyanea grimesiana* ssp. *grimesiana*, *Cyanea lanceolata*, *Cyanea longiflora*, *Cyanea truncata*, *Cyrtandra dentata*, *Cyrtandra polyantha*, *Delissea subcordata*, *Dracaena forbesii*, *Eugenia koolauensis*, *Gardenia mannii*, *Hesperomannia arborescens*, *Isodendrion laurifolium*, *Isodendrion longifolium*, *Kadua coriacea*, *Labordia cyrtandrae*, *Lobelia monostachya*, *Melicope lydgatei*, *Melicope saint-johnii*, *Phyllostegia hirsuta*, *Phyllostegia mollis*, *Phyllostegia parviflora* var. *parviflora*, *Plantago princeps* var. *princeps*, *Pteralyxia macrocarpa*, *Schiedea kaalae*, *Schiedea nuttallii*, *Solanum sandwicense*, *Tetraplasandra gymnocarpa*, and *Tetraplasandra lydgatei*.

(ii) Map of Oahu—Lowland Mesic—Unit 4 and Oahu—Lowland Mesic—Unit 5 (Map 15) follows:

Map 15
Oahu–Lowland Mesic
Unit 4 and Unit 5

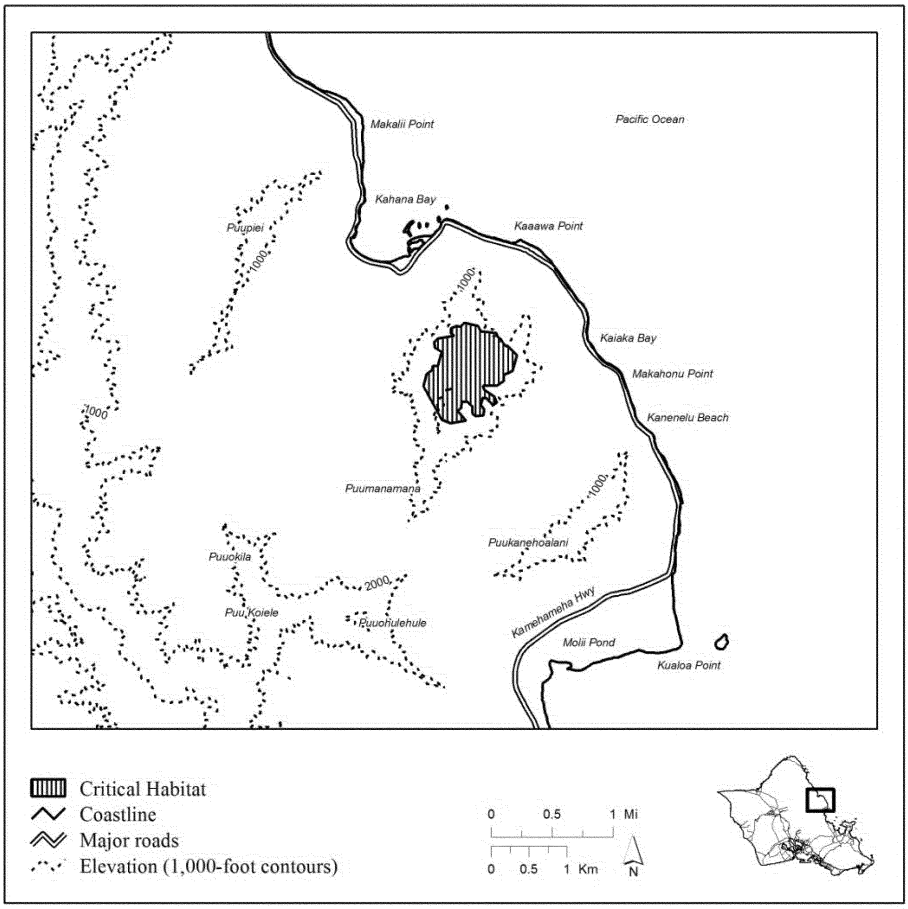


(17) Oahu—Lowland Mesic—Unit 6 (247 ac; 100 ha).

(i) This unit is critical habitat for *Alectryon macrococcus*, *Asplenium dielerectum*, *Asplenium dielfalcatum*, *Bonamia menziesii*, *Chamaesyce celastroides* var. *kaenana*, *Ctenitis squamigera*, *Cyanea acuminata*, *Cyanea calycina*, *Cyanea crispa*, *Cyanea grimesiana* ssp. *grimesiana*, *Cyanea lanceolata*, *Cyanea longiflora*, *Cyanea truncata*, *Cyrtandra dentata*, *Cyrtandra polyantha*, *Delissea subcordata*,*Dracaena forbesii*, *Eugenia koolauensis*, *Gardenia mannii*, *Hesperomannia arborescens*, *Isodendrion laurifolium*, *Isodendrion longifolium*, *Kadua coriacea*, *Labordia cyrtandrae*, *Lobelia monostachya*, *Melicope lydgatei*, *Melicope saint-johnii*, *Phyllostegia hirsuta*, *Phyllostegia mollis*, *Phyllostegia parviflora* var. *parviflora*, *Plantago princeps* var. *princeps*, *Pteralyxia macrocarpa*, *Schiedea kaalae*, *Schiedea nuttallii*, *Solanum sandwicense*, *Tetraplasandra gymnocarpa*, and *Tetraplasandra lydgatei*.

(ii) Map of Oahu—Lowland Mesic—Unit 6 (Map 16) follows:

Map 16
Oahu–Lowland Mesic
Unit 6



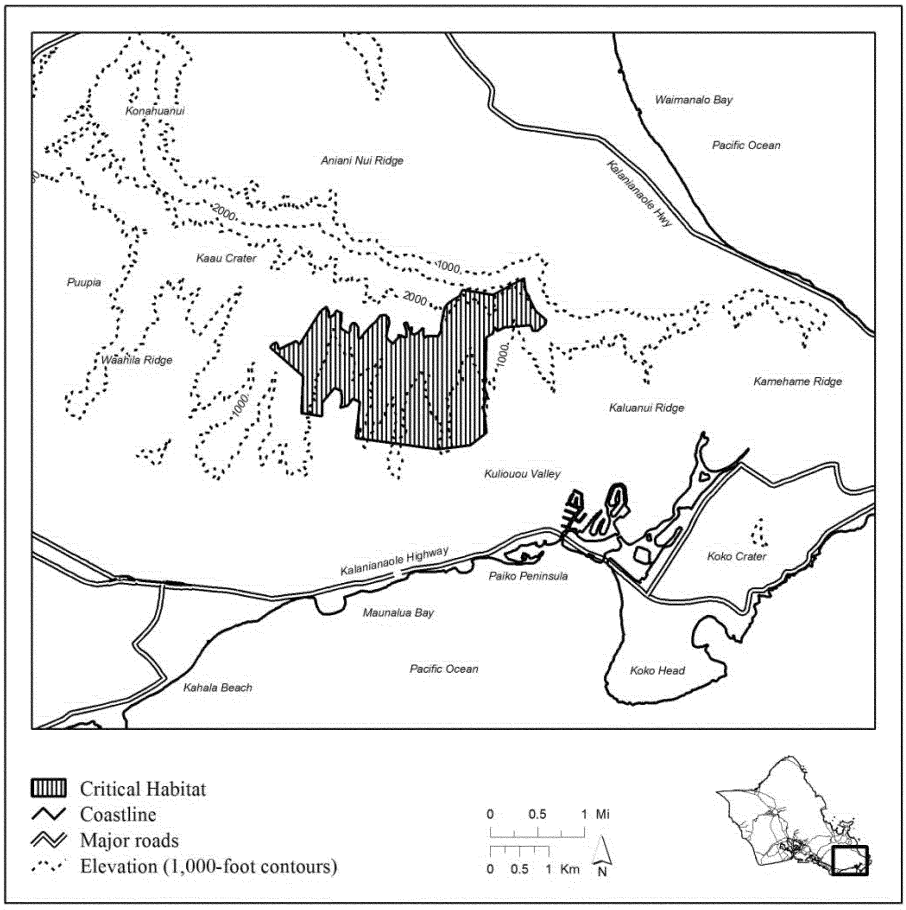
(18) Oahu—Lowland Mesic—Unit 7 (1,669 ac; 676 ha).

(i) This unit is critical habitat for *Alectryon macrococcus*, *Asplenium dielerectum*, *Asplenium dielfalcatum*, *Bonamia menziesii*, *Chamaesyce celastroides* var. *kaenana*, *Ctenitis squamigera*, *Cyanea acuminata*, *Cyanea calycina*, *Cyanea crispa*, *Cyanea grimesiana* ssp. *grimesiana*, *Cyanea lanceolata*, *Cyanea longiflora*, *Cyanea truncata*, *Cyrtandra dentata*, *Cyrtandra polyantha*, *Delissea subcordata*, *Dracaena forbesii*, *Eugenia koolauensis*, *Gardenia mannii*, *Hesperomannia arborescens*, *Isodendrion laurifolium*, *Isodendrion longifolium*, *Kadua coriacea*, *Labordia cyrtandrae*, *Lobelia monostachya*,

Melicope lydgatei, *Melicope saint-johnii*, *Phyllostegia hirsuta*, *Phyllostegia mollis*, *Phyllostegia parviflora* var. *parviflora*, *Plantago princeps* var. *princeps*, *Pteralyxia macrocarpa*, *Schiedea kaalae*, *Schiedea nuttallii*, *Solanum sandwicense*, *Tetraplasandra gymnocarpa*, and *Tetraplasandra lydgatei*.

(ii) Map of Oahu—Lowland Mesic—Unit 7 (Map 17) follows:

Map 17
Oahu–Lowland Mesic
Unit 7



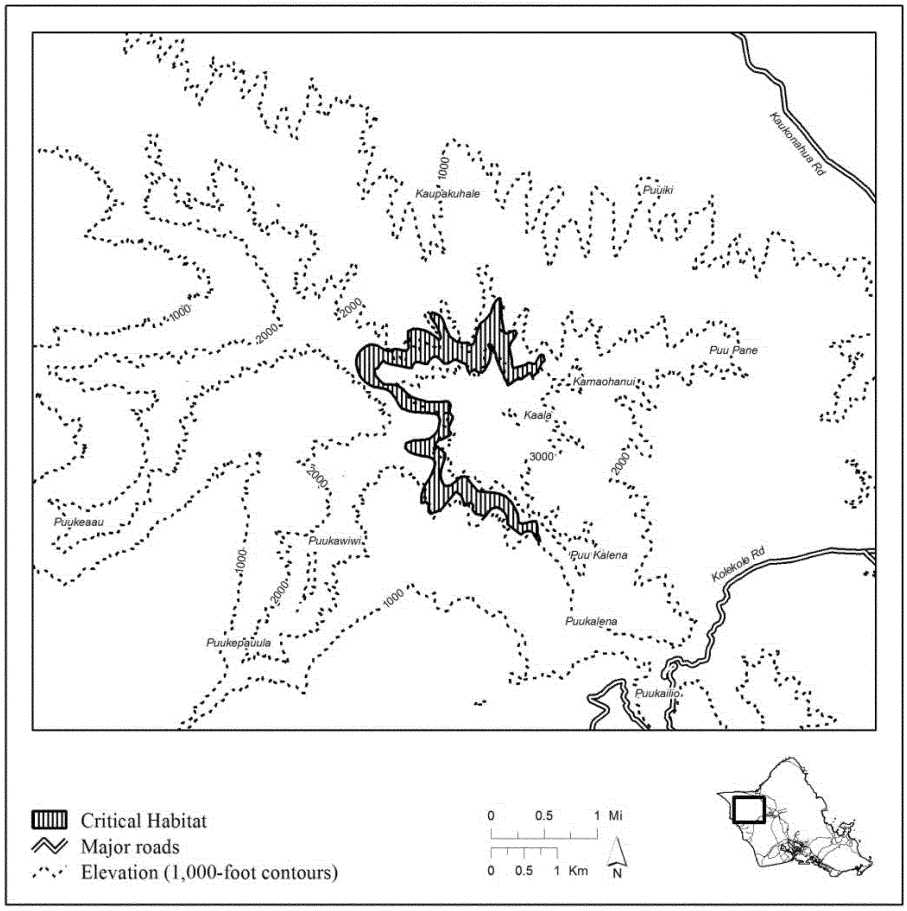
(19) Oahu—Lowland Wet—Unit 1 (541 ac; 219 ha).

(i) This unit is critical habitat for *Cyanea acuminata*, *Cyanea calycina*, *Cyanea grimesiana* ssp. *grimesiana*, *Cyanea grimesiana* ssp. *obatae*, *Cyrtandra dentata*, *Diplazium molokaiense*, *Gardenia mannii*, *Gouania vitifolia*, *Hesperomannia arbuscula*, *Isodendrion longifolium*, *Labordia cyrtandrae*, *Lobelia oahuensis*, *Phyllostegia hirsuta*, *Phyllostegia mollis*,

Plantago princeps var. *princeps*, *Pteralyxia macrocarpa*, *Schiedea hookeri*, *Schiedea kaalae*, and *Urera kaalae*.

(ii) Map of Oahu—Lowland Wet—Unit 1 (Map 18) follows:

Map 18
Oahu–Lowland Wet
Unit 1



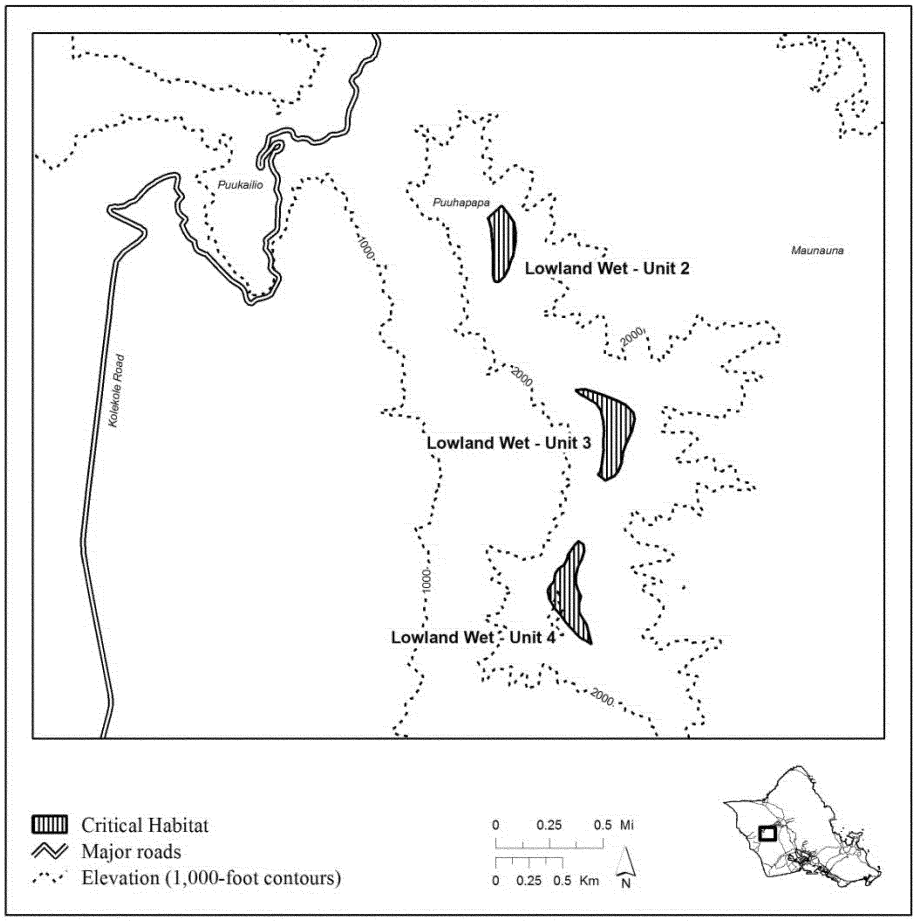
(20) Oahu—Lowland Wet—Unit 2 (20 ac; 8 ha), Oahu—Lowland Wet—Unit 3 (29 ac; 12 ha), and Oahu—Lowland Wet—Unit 4 (27 ac; 11 ha).

(i) These units are critical habitat for *Cyanea acuminata*, *Cyanea calycina*, *Cyanea grimesiana* ssp. *grimesiana*, *Cyanea grimesiana* ssp. *obatae*, *Cyrtandra dentata*, *Diplazium molokaiense*, *Gardenia mannii*, *Gouania vitifolia*, *Hesperomannia arbuscula*, *Isodendrion longifolium*, *Labordia cyrtandrae*, *Lobelia oahuensis*, *Phyllostegia hirsuta*, *Phyllostegia mollis*, *Plantago princeps* var. *princeps*,

Pteralyxia macrocarpa, *Schiedea hookeri*, *Schiedea kaalae*, and *Urera kaalae*.

(ii) Map of Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, and Oahu—Lowland Wet—Unit 4 (Map 19) follows:

Map 19
Oahu–Lowland Wet
Unit 2, Unit 3 and Unit 4



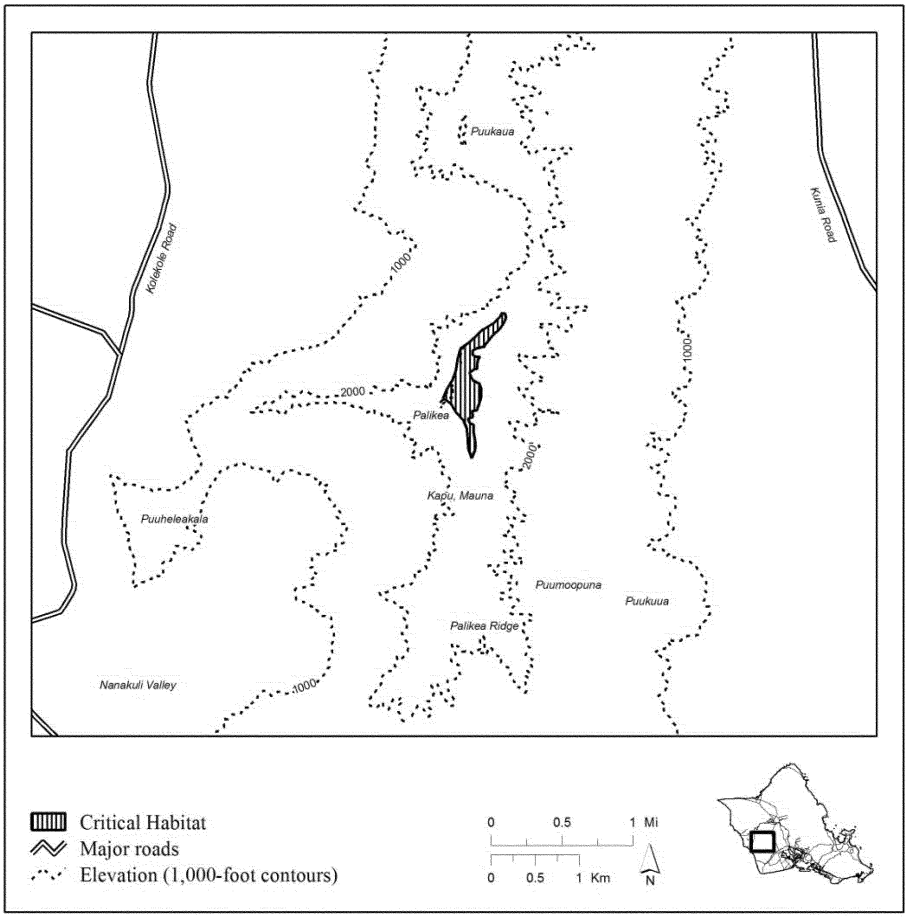
(21) Oahu—Lowland Wet—Unit 5 (74 ac; 30 ha).

(i) This unit is critical habitat for *Cyanea acuminata*, *Cyanea calycina*, *Cyanea grimesiana* ssp. *grimesiana*, *Cyanea grimesiana* ssp. *obatae*, *Cyrtandra dentata*, *Diplazium molokaiense*, *Gardenia mannii*, *Gouania vitifolia*, *Hesperomannia arbuscula*, *Isodendrion longifolium*, *Labordia cyrtandrae*, *Lobelia oahuensis*, *Phyllostegia hirsuta*, *Phyllostegia mollis*, *Plantago princeps* var. *princeps*,

Pteralyxia macrocarpa, *Schiedea hookeri*, *Schiedea kaalae*, and *Urera kaalae*.

(ii) Map of Oahu—Lowland Wet—Unit 5 (Map 20) follows:

Map 20
Oahu–Lowland Wet
Unit 5



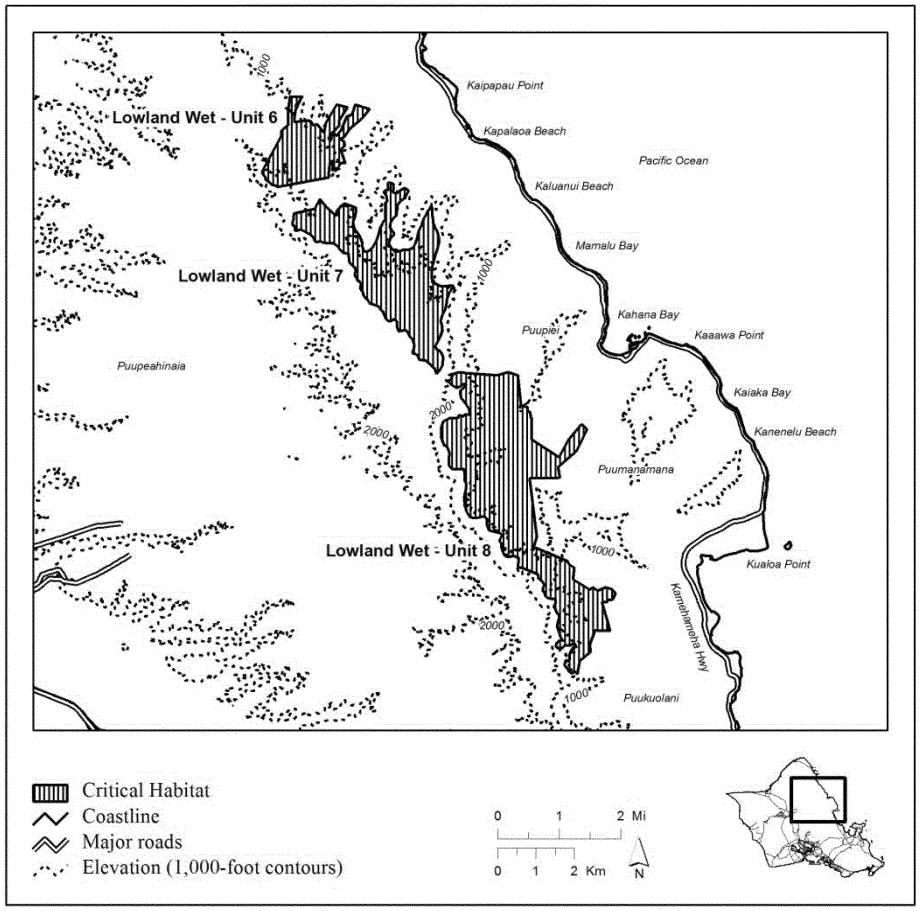
(22) Oahu—Lowland Wet—Unit 6 (790 ac; 320 ha), Oahu—Lowland Wet—Unit 7 (1,787 ac; 723 ha), and Oahu—Lowland Wet—Unit 8 (3,041 ac; 1,231 ha).

(i) These units are critical habitat for *Adenophorus periens*, *Chamaesyce rockii*, *Cyanea acuminata*, *Cyanea calycina*, *Cyanea crispa*, *Cyanea grimesiana* ssp. *grimesiana*, *Cyanea humboldtiana*, *Cyanea koolauensis*, *Cyanea lanceolata*, *Cyanea purpurellifolia*, *Cyanea st.-johnii*, *Cyanea truncata*, *Cyrtandra dentata*, *Cyrtandra gracilis*, *Cyrtandra kaulantha*, *Cyrtandra polyantha*, *Cyrtandra sessilis*, *Cyrtandra subumbellata*, *Cyrtandra viridiflora*, *Cyrtandra waiolani*, *Gardenia mannii*, *Hesperomannia arborescens*, *Isodendrion longifolium*, *Labordia*

cyrtandrae, *Lobelia gaudichaudii* ssp. *koolauensis*, *Lobelia oahuensis*, *Melicope cornuta* var. *cornuta*, *Melicope hiiakae*, *Melicope lydgatei*, *Myrsine juddii*, *Phlegmariurus nutans*, *Phyllostegia hirsuta*, *Phyllostegia parviflora* var. *parviflora*, *Plantago princeps* var. *longibracteata*, *Plantago princeps* var. *princeps*, *Platanthera holochila*, , *Psychotria hexandra* var. *oahuensis*, *Pteralyxia macrocarpa*, *Pteris lidgatei*, *Sanicula purpurea*, *Tetraplasandra gymnocarpa*, *Trematolobelia singularis*, *Viola oahuensis*, and *Zanthoxylum oahuense*.

(ii) Map of Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, and Oahu—Lowland Wet—Unit 8 (Map 21) follows:

Map 21
Oahu–Lowland Wet
Unit 6, Unit 7 and Unit 8

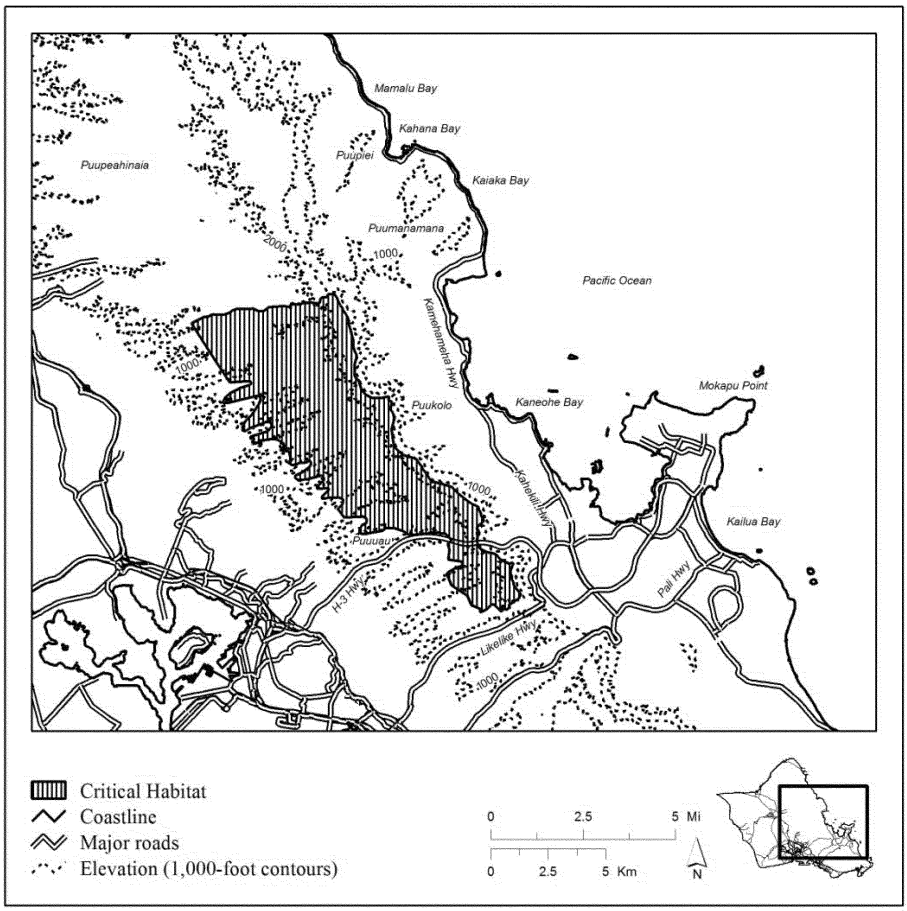


(23) Oahu—Lowland Wet—Unit 9 (15,728 ac; 6,365 ha).

(i) This unit is critical habitat for *Adenophorus periens*, *Chamaesyce rockii*, *Cyanea acuminata*, *Cyanea calycina*, *Cyanea crispa*, *Cyanea grimesiana* ssp. *grimesiana*, *Cyanea humboldtiana*, *Cyanea koolauensis*, *Cyanea lanceolata*, *Cyanea purpurellifolia*, *Cyanea st.-johnii*, *Cyanea truncata*, *Cyrtandra dentata*, *Cyrtandra gracilis*, *Cyrtandra kaulantha*, *Cyrtandra polyantha*, *Cyrtandra sessilis*, *Cyrtandra subumbellata*, *Cyrtandra viridiflora*, *Cyrtandra waiolani*, *Gardenia mannii*, *Hesperomannia arborescens*, *Isodendrion longifolium*, *Labordia cyrtandrae*, *Lobelia gaudichaudii* ssp. *koolauensis*, *Lobelia oahuensis*, *Melicope cornuta* var. *cornuta*, *Melicope hiiakae*, *Melicope lydgatei*, *Myrsine juddii*, *Phlegmariurus nutans*, *Phyllostegia hirsuta*, *Phyllostegia parviflora* var. *parviflora*, *Plantago princeps* var. *longibracteata*, *Plantago princeps* var. *princeps*, *Platanthera holochila*, *Psychotria hexandra* var. *oahuensis*, *Pteralyxia macrocarpa*, *Pteris lidgatei*, *Sanicula purpurea*, *Tetraplasandra gymnocarpa*, *Trematolobelia singularis*, *Viola oahuensis*, and *Zanthoxylum oahuense*.

(ii) Map of Oahu—Lowland Wet—Unit 9 (Map 22) follows:

Map 22
Oahu–Lowland Wet
Unit 9



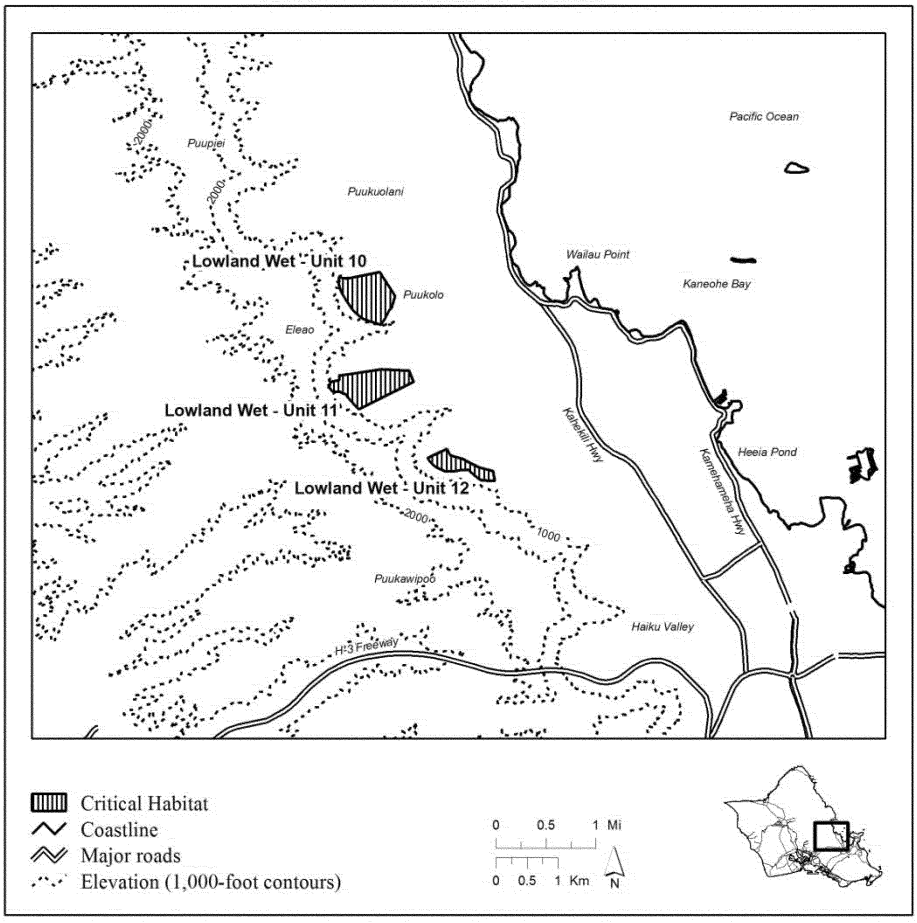
(24) Oahu—Lowland Wet—Unit 10 (124 ac; 50 ha), Oahu—Lowland Wet—Unit 11 (124 ac; 50 ha), and Oahu—Lowland Wet—Unit 12 (53 ac; 21 ha).

(i) These units are critical habitat for *Adenophorus periens*, *Chamaesyce rockii*, *Cyanea acuminata*, *Cyanea calycina*, *Cyanea crispa*, *Cyanea grimesiana* ssp. *grimesiana*, *Cyanea humboldtiana*, *Cyanea koolauensis*, *Cyanea lanceolata*, *Cyanea purpurellifolia*, *Cyanea st.-johnii*, *Cyanea truncata*, *Cyrtandra dentata*, *Cyrtandra gracilis*, *Cyrtandra kaulantha*, *Cyrtandra polyantha*, *Cyrtandra sessilis*, *Cyrtandra subumbellata*, *Cyrtandra viridiflora*, *Cyrtandra waiolani*, *Gardenia mannii*, *Hesperomannia arborescens*, *Isodendrion longifolium*, *Labordia cyrtandrae*, *Lobelia gaudichaudii* ssp. *koolauensis*, *Lobelia oahuensis*, *Melicope cornuta* var. *cornuta*, *Melicope hiiakae*, *Melicope lydgatei*, *Myrsine juddii*, *Phlegmariurus nutans*, *Phyllostegia hirsuta*, *Phyllostegia parviflora* var. *parviflora*, *Plantago princeps* var. *longibracteata*, *Plantago princeps* var.

princeps, *Platanthera holochila*, *Psychotria hexandra* var. *oahuensis*, *Pteralyxia macrocarpa*, *Pteris lidgatei*, *Sanicula purpurea*, *Tetraplasandra gymnocarpa*, *Trematolobelia singularis*, *Viola oahuensis*, and *Zanthoxylum oahuense*.

(ii) Map of Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, and Oahu—Lowland Wet—Unit 12 (Map 23) follows:

Map 23
Oahu–Lowland Wet
Unit 10, Unit 11 and Unit 12



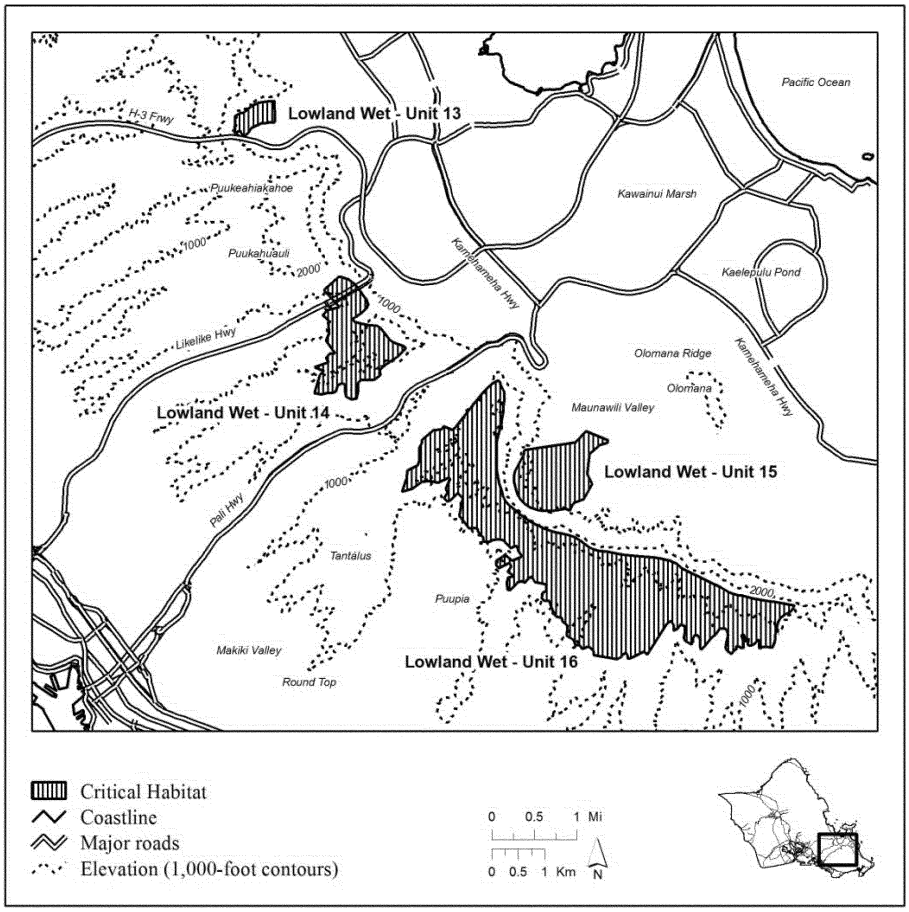
(25) Oahu—Lowland Wet—Unit 13 (75 ac; 30 ha), Oahu—Lowland Wet—Unit 14 (478 ac; 193 ha), Oahu—Lowland Wet—Unit 15 (407 ac; 165 ha), and Oahu—Lowland Wet—Unit 16 (2,507 ac; 1,014 ha).

(i) These units are critical habitat for *Adenophorus periens*, *Chamaesyce rockii*, *Cyanea acuminata*, *Cyanea calycina*, *Cyanea crispa*, *Cyanea grimesiana* ssp. *grimesiana*, *Cyanea humboldtiana*,

Cyanea koolauensis, *Cyanea lanceolata*, *Cyanea purpurellifolia*, *Cyanea st.-johnii*, *Cyanea truncata*, *Cyrtandra dentata*, *Cyrtandra gracilis*, *Cyrtandra kaulantha*, *Cyrtandra polyantha*, *Cyrtandra sessilis*, *Cyrtandra subumbellata*, *Cyrtandra viridiflora*, *Cyrtandra waiolani*, *Gardenia mannii*, *Hesperomannia arborescens*, *Isodendrion longifolium*, *Labordia cyrtandrae*, *Lobelia gaudichaudii* ssp. *koolauensis*, *Lobelia oahuensis*, *Melicope cornuta* var. *cornuta*, *Melicope hiiakae*, *Melicope lydgatei*, *Myrsine juddii*, *Phlegmariurus nutans*, *Phyllostegia hirsuta*, *Phyllostegia parviflora* var. *parviflora*, *Plantago princeps* var. *longibracteata*, *Plantago princeps* var. *princeps*, *Platanthera holochila*, *Psychotria hexandra* var. *oahuensis*, *Pteralyxia macrocarpa*, *Pteris lidgatei*, *Sanicula purpurea*, *Tetraplasandra gymnocarpa*, *Trematolobelia singularis*, *Viola oahuensis*, and *Zanthoxylum oahuense*.

(ii) Map of Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16 (Map 24) follows:

Map 24
Oahu–Lowland Wet
Unit 13, Unit 14, Unit 15 and Unit 16

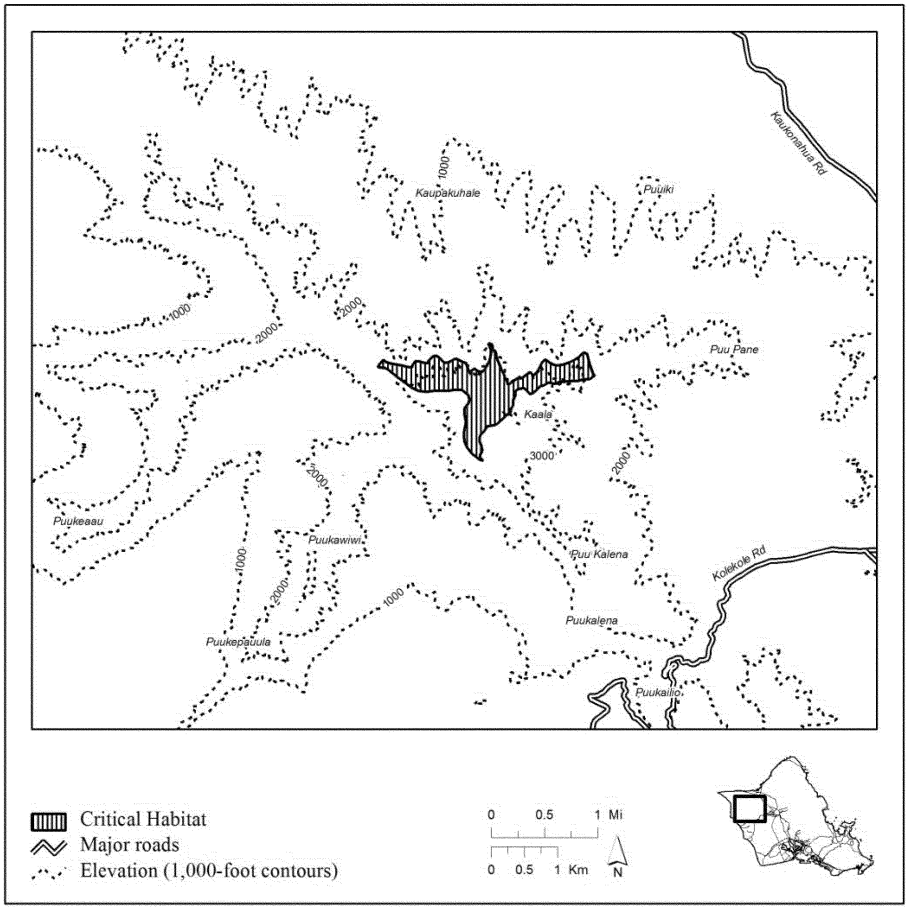


(26) Oahu—Montane Wet—Unit 1 (370 ac; 150 ha).

(i) This unit is critical habitat for *Alectryon macrococcus*, *Cyanea acuminata*, *Cyanea calycina*, *Labordia cyrtandrae*, *Lobelia oahuensis*, *Melicope christophersenii*, *Phyllostegia hirsuta*, and *Schiedea trinervis*.

(ii) Map of Oahu—Montane Wet—Unit 1 (Map 25) follows:

Map 25
Oahu–Montane Wet
Unit 1



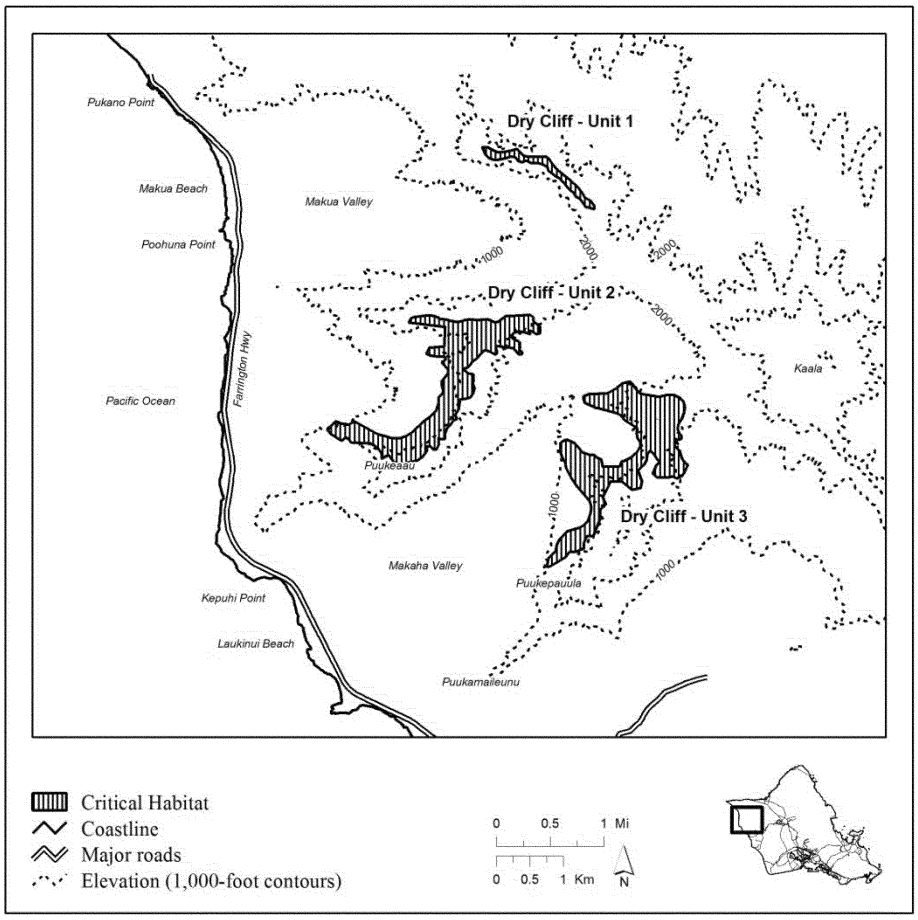
(27) Oahu—Dry Cliff—Unit 1 (49 ac; 20 ha), Oahu—Dry Cliff—Unit 2 (412 ac; 167 ha), and Oahu—Dry Cliff—Unit 3 (450 ac; 182 ha).

(i) These units are critical habitat for *Abutilon sandwicense*, *Achyranthes splendens* var. *rotundata*, *Alectryon macrococcus*, *Asplenium dielfalcatum*, *Bonamia menziesii*, *Cenchrus agrimonioides*, *Chamaesyce herbstii*, *Chamaesyce kuwaleana*, *Cyanea grimesiana* ssp. *obatae*, *Cyrtandra dentata*, *Diellia unisora*, *Dracaena forbesii*, *Dubautia herbstobatae*, *Eragrostis fosbergii*, *Flueggea neowawraea*, *Gouania meyenii*, *Gouania vitifolia*, *Isodendrion laurifolium*, *Isodendrion pyrifolium*, *Kadua degeneri*, *Kadua parvula*, *Korthalsella degeneri*, *Lepidium arbuscula*, *Lipochaeta lobata* var. *leptophylla*, *Lobelia niihauensis*, *Melanthera tenuifolia*, *Melicope cornuta* var. *decurrens*, *Melicope makahae*, *Melicope saint-johnii*, *Neraudia angulata*, *Nototrichium humile*, *Peucedanum sandwicense*, *Phyllostegia kaalaensis*,

Plantago princeps var. *princeps*, *Pteralyxia macrocarpa*, *Sanicula mariversa*, *Schiedea hookeri*, *Schiedea obovata*, *Schiedea trinervis*, *Silene lanceolata*, *Silene perlmanii*, *Spermolepis hawaiiensis*, *Tetramolopium filiforme*, *Tetramolopium lepidotum* ssp. *lepidotum*, and *Viola chamissoniana* ssp. *chamissoniana*.

(ii) Map of Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, and Oahu—Dry Cliff—Unit 3 (Map 26) follows:

Map 26
Oahu–Dry Cliff
Unit 1, Unit 2 and Unit 3



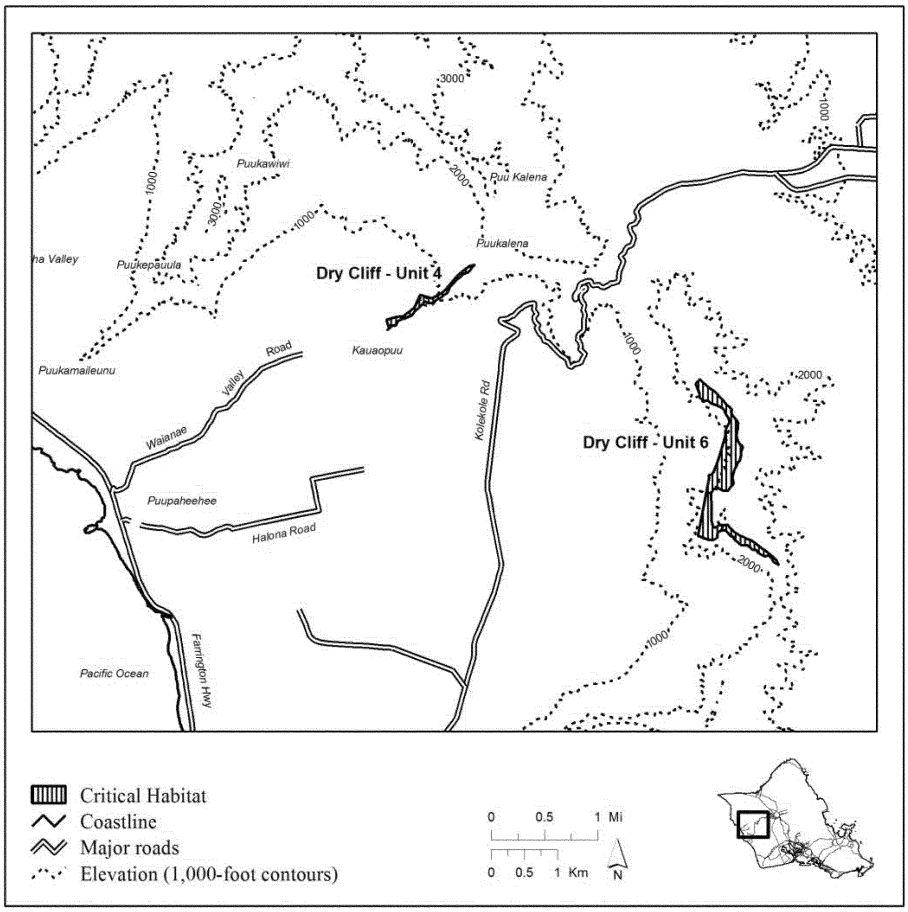
(28) Oahu—Dry Cliff—Unit 4 (24 ac; 10 ha) and Oahu—Dry Cliff—Unit 6 (149 ac; 60 ha).

(i) These units are critical habitat for *Abutilon sandwicense*, *Achyranthes splendens* var. *rotundata*, *Alectryon macrococcus*, *Asplenium dielfalcatum*, *Bonamia menziesii*, *Cenchrus agrimonioides*, *Chamaesyce herbstii*, *Chamaesyce kuwaleana*, *Cyanea*

grimesiana ssp. *obatae*, *Cyrtandra dentata*, *Diellia unisora*, *Dracaena forbesii*, *Dubautia herbstobatae*, *Eragrostis fosbergii*, *Flueggea neowawraea*, *Gouania meyenii*, *Gouania vitifolia*, *Isodendrion laurifolium*, *Isodendrion pyrifolium*, *Kadua degeneri*, *Kadua parvula*, *Korthalsella degeneri*, *Lepidium arbuscula*, *Lipochaeta lobata* var. *leptophylla*, *Lobelia niihauensis*, *Melanthera tenuifolia*, *Melicope cornuta* var. *decurrens*, *Melicope makahae*, *Melicope saint-johnii*, *Neraudia angulata*, *Nototrichium humile*, *Peucedanum sandwicense*, *Phyllostegia kaalaensis*, *Plantago princeps* var. *princeps*, *Pteralyxia macrocarpa*, *Sanicula mariversa*, *Schiedea hookeri*, *Schiedea obovata*, *Schiedea trinervis*, *Silene lanceolata*, *Silene perlmanii*, *Spermolepis hawaiiensis*, *Tetramolopium filiforme*, *Tetramolopium lepidotum* ssp. *lepidotum*, and *Viola chamissoniana* ssp. *chamissoniana*.

(ii) Map of Oahu—Dry Cliff—Unit 4 and Oahu—Dry Cliff—Unit 6 (Map 27) follows:

Map 27
Oahu–Dry Cliff
Unit 4 and Unit 6



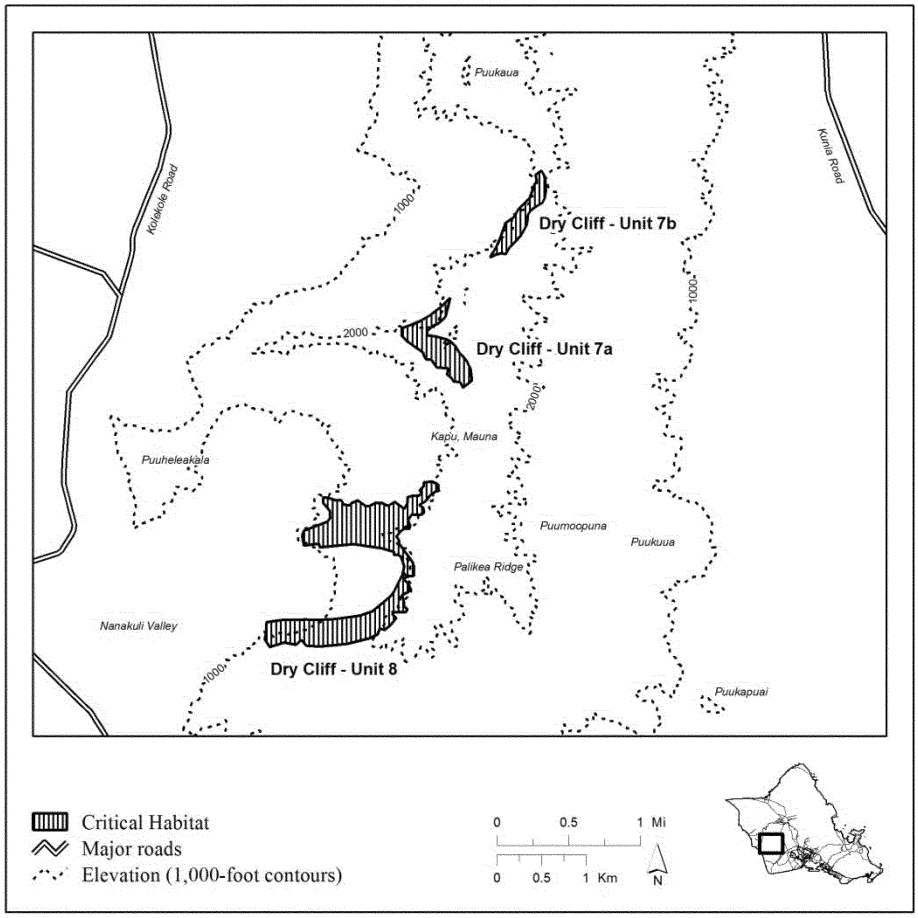
(29) Oahu—Dry Cliff—Unit 7a (68 ac; 27 ha), Oahu—Dry Cliff—Unit 7b (38 ac; 16 ha), and Oahu—Dry Cliff—Unit 8 (259 ac; 105 ha).

(i) These units are critical habitat for *Abutilon sandwicense*, *Achyranthes splendens* var. *rotundata*, *Alectryon macrococcus*, *Asplenium dielfalcatum*, *Bonamia menziesii*, *Cenchrus agrimonioides*, *Chamaesyce herbstii*, *Chamaesyce kuwaleana*, *Cyanea grimesiana* ssp. *obatae*, *Cyrtandra dentata*, *Diellia unisora*, *Dracaena forbesii*, *Dubautia herbstobatae*, *Eragrostis fosbergii*, *Flueggea neowawraea*, *Gouania meyenii*, *Gouania vitifolia*, *Isodendrion laurifolium*, *Isodendrion pyrifolium*, *Kadua degeneri*, *Kadua parvula*, *Korthalsella degeneri*, *Lepidium arbuscula*, *Lipochaeta lobata* var. *leptophylla*, *Lobelia niihauensis*, *Melanthera tenuifolia*, *Melicope cornuta* var. *decurrens*, *Melicope makahae*, *Melicope saint-johnii*, *Neraudia angulata*, *Nototrichium humile*, *Peucedanum sandwicense*, *Phyllostegia kaalaensis*,

Plantago princeps var. *princeps*, *Pteralyxia macrocarpa*, *Sanicula mariversa*, *Schiedea hookeri*, *Schiedea obovata*, *Schiedea trinervis*, *Silene lanceolata*, *Silene perlmanii*, *Spermolepis hawaiiensis*, *Tetramolopium filiforme*, *Tetramolopium lepidotum* ssp. *lepidotum*, and *Viola chamissoniana* ssp. *chamissoniana*.

(ii) Map of Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8 (Map 28) follows:

Map 28
Oahu–Dry Cliff
Unit 7a, Unit 7b and Unit 8

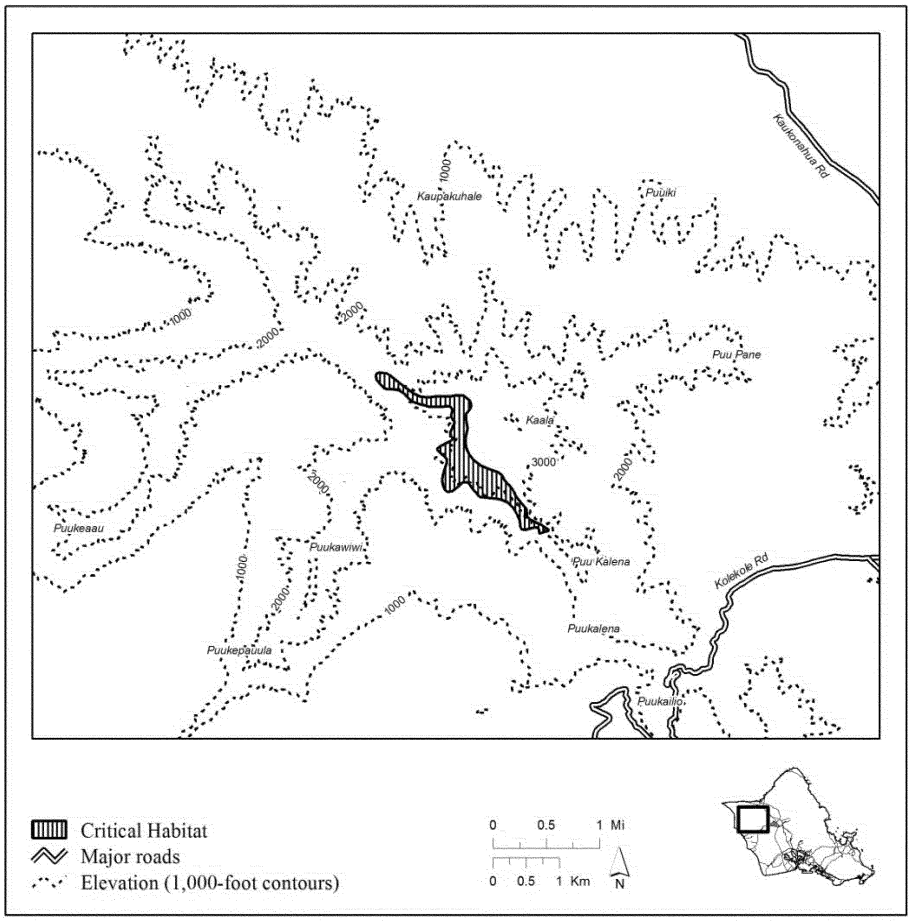


(30) Oahu—Wet Cliff—Unit 1 (235 ac; 95 ha).

(i) This unit is critical habitat for *Cyanea acuminata*, *Cyanea calycina*, *Labordia cyrtandrae*, *Lobelia oahuensis*, *Melicope christophersenii*, *Phyllostegia hirsuta*, *Pteralyxia macrocarpa*, *Schiedea hookeri*, *Schiedea kaalae*, and *Schiedea trinervis*.

(ii) Map of Oahu—Wet Cliff—Unit 1 (Map 29) follows:

Map 29
Oahu–Wet Cliff
Unit 1

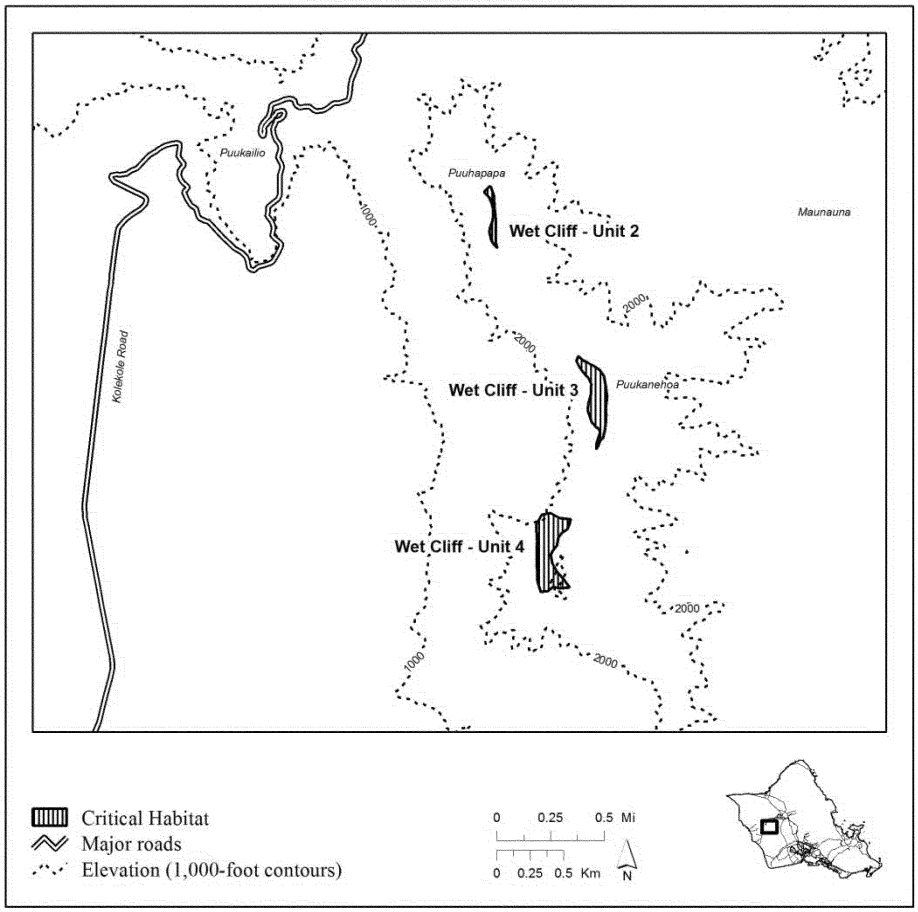


(31) Oahu—Wet Cliff—Unit 2 (3 ac; 1 ha), Oahu—Wet Cliff—Unit 3 (16 ac; 6 ha), and Oahu—Wet Cliff—Unit 4 (23 ac; 9 ha).

(i) These units are critical habitat for *Cyanea acuminata*, *Cyanea calycina*, *Labordia cyrtandrae*, *Lobelia oahuensis*, *Melicope christophersenii*, *Phyllostegia hirsuta*, *Pteralyxia macrocarpa*, *Schiedea hookeri*, *Schiedea kaalae*, and *Schiedea trinervis*.

(ii) Map of Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 3, and Oahu—Wet Cliff—Unit 4 (Map 30) follows:

Map 30
Oahu–Wet Cliff
Unit 2, Unit 3 and Unit 4

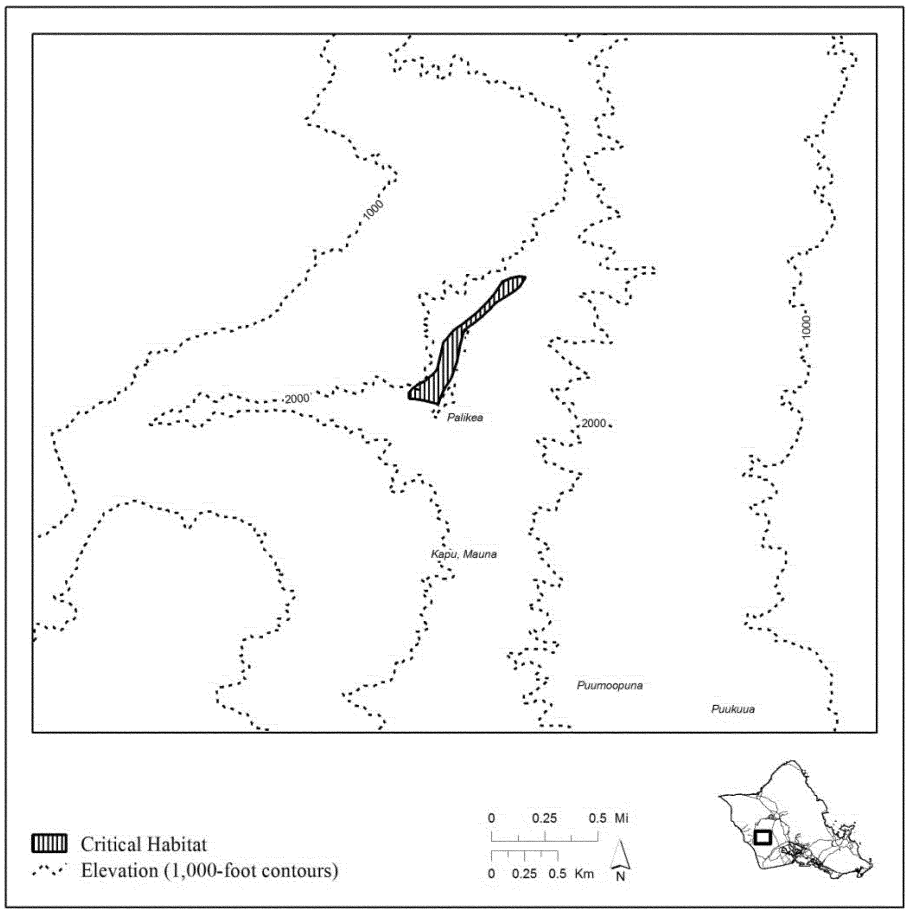


(32) Oahu—Wet Cliff—Unit 5 (31 ac; 13 ha).

(i) This unit is critical habitat for *Cyanea acuminata*, *Cyanea calycina*, *Labordia cyrtandrae*, *Lobelia oahuensis*, *Melicope christophersenii*, *Phyllostegia hirsuta*, *Pteralyxia macrocarpa*, *Schiedea hookeri*, *Schiedea kaalae*, and *Schiedea trinervis*.

(ii) Map of Oahu—Wet Cliff—Unit 5 (Map 31) follows:

Map 31
Oahu–Wet Cliff
Unit 5

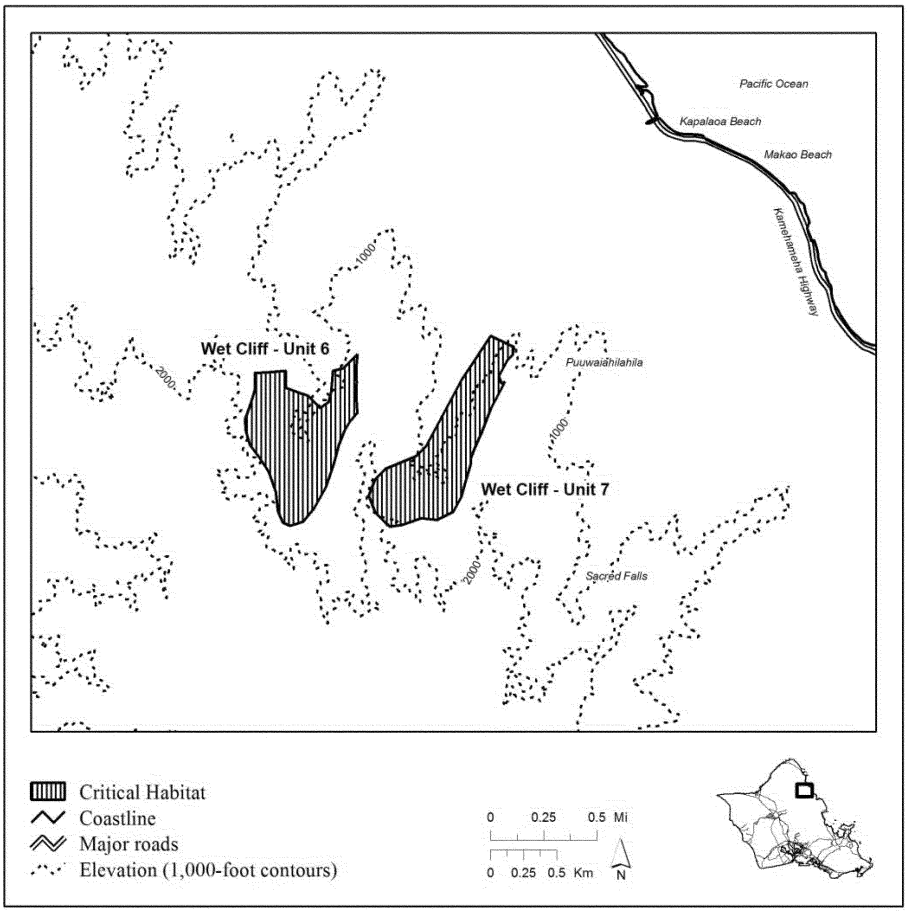


(33) Oahu—Wet Cliff—Unit 6 (151 ac; 61 ha) and Oahu—Wet Cliff—Unit 7 (144 ac; 58 ha).

(i) These units are critical habitat for *Adenophorus periens*, *Chamaesyce deppeana*, *Chamaesyce rockii*, *Cyanea acuminata*, *Cyanea calycina*, *Cyanea crispa*, *Cyanea humboldtiana*, *Cyanea purpurellifolia*, *Cyanea st.-johnii*, *Cyanea truncata*, *Cyrtandra kaulantha*, *Cyrtandra sessilis*, *Cyrtandra subumbellata*, *Cyrtandra viridiflora*, *Labordia cyrtandrae*, *Lobelia oahuensis*, *Lysimachia filifolia*, *Phlegmariurus nutans*, *Phyllostegia hirsuta*, *Phyllostegia parviflora* var. *parviflora*, *Plantago princeps* var. *princeps*, *Psychotria hexandra* var. *oahuensis*, *Pteralyxia macrocarpa*, *Sanicula purpurea*, *Schiedea kaalae*, *Tetraplasandra gymnocarpa*, *Trematolobelia singularis*, and *Viola oahuensis*.

(ii) Map of Oahu—Wet Cliff—Unit 6 and Oahu—Wet Cliff—Unit 7 (Map 32) follows:

Map 32
Oahu–Wet Cliff
Unit 6 and Unit 7

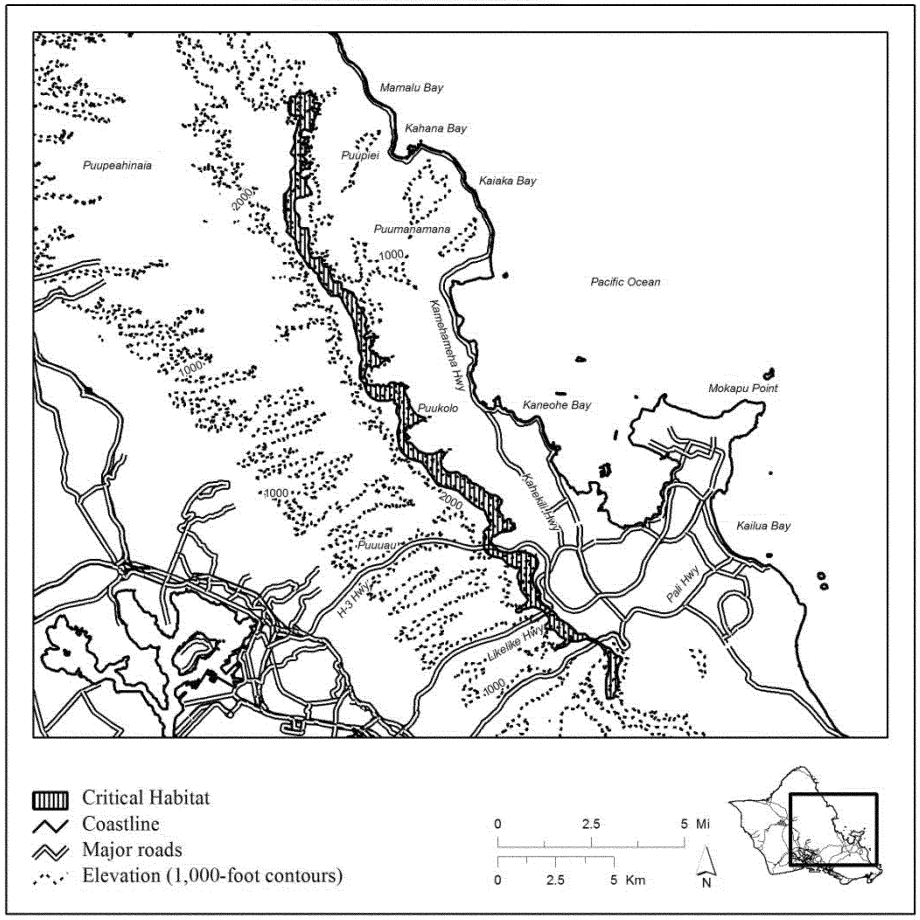


(34) Oahu—Wet Cliff—Unit 8 (4,649 ac; 1,881 ha).

(i) This unit is critical habitat for *Adenophorus periens*, *Chamaesyce deppeana*, *Chamaesyce rockii*, *Cyanea acuminata*, *Cyanea calycina*, *Cyanea crispa*, *Cyanea humboldtiana*, *Cyanea purpurellifolia*, *Cyanea st.-johnii*, *Cyanea truncata*, *Cyrtandra kaulantha*, *Cyrtandra sessilis*, *Cyrtandra subumbellata*, *Cyrtandra viridiflora*, *Labordia cyrtandrae*, *Lobelia oahuensis*, *Lysimachia filifolia*, *Phlegmariurus nutans*, *Phyllostegia hirsuta*, *Phyllostegia parviflora* var. *parviflora*, *Plantago princeps* var. *princeps*, *Psychotria hexandra* var. *oahuensis*, *Pteralyxia macrocarpa*, *Sanicula purpurea*, *Schiedea kaalae*, *Tetraplasandra gymnocarpa*, *Trematolobelia singularis*, and *Viola oahuensis*.

(ii) Map of Oahu—Wet Cliff—Unit 8 (Map 33) follows:

Map 33
Oahu–Wet Cliff
Unit 8



(35) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR OAHU

Unit name	Species occupied	Species unoccupied
Oahu—Coastal—Unit 1		
	Achyranthes splendens var. *rotundata* ...	*Achyranthes splendens* var. *rotundata*
		Bidens amplectens
		Schenkia sebaeoides
	Chamaesyce celastroides var. *kaenana*	*Chamaesyce celastroides* var. *kaenana*
		Schiedea kealiae
	Sesbania tomentosa	*Sesbania tomentosa*
		Vigna o-wahuensis
Oahu—Coastal—Unit 2		
		Schenkia sebaeoides
		Chamaesyce kuwaleana
		Sesbania tomentosa
		Vigna o-wahuensis
Oahu—Coastal—Unit 3		

(35) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR OAHU—Continued

Unit name	Species occupied	Species unoccupied
		Schenkia sebaeoides *Chamaesyce kuwaleana* *Sesbania tomentosa* *Vigna o-wahuensis*
Oahu—Coastal—Unit 4		*Schenkia sebaeoides* *Chamaesyce kuwaleana* *Sesbania tomentosa* *Vigna o-wahuensis*
Oahu—Coastal—Unit 5		*Schenkia sebaeoides* *Chamaesyce kuwaleana* *Sesbania tomentosa* *Vigna o-wahuensis*
Oahu—Coastal—Unit 6		*Schenkia sebaeoides* *Chamaesyce kuwaleana* *Sesbania tomentosa* *Vigna o-wahuensis*
Oahu—Coastal—Unit 7		*Schenkia sebaeoides* *Chamaesyce kuwaleana* *Sesbania tomentosa* *Vigna o-wahuensis*
Oahu—Coastal—Unit 8		*Schenkia sebaeoides* *Chamaesyce kuwaleana*
	Sesbania tomentosa	*Sesbania tomentosa* *Vigna o-wahuensis*
Oahu—Coastal—Unit 9		*Schenkia sebaeoides* *Chamaesyce kuwaleana*
	Cyperus trachysanthos *Marsilea villosa*	*Cyperus trachysanthos* *Marsilea villosa* *Sesbania tomentosa* *Vigna o-wahuensis*
Oahu—Coastal—Unit 10		
	Schenkia sebaeoides	*Schenkia sebaeoides* *Chamaesyce kuwaleana* *Sesbania tomentosa* *Vigna o-wahuensis*
Oahu—Coastal—Unit 11		*Schenkia sebaeoides* *Chamaesyce kuwaleana* *Cyperus trachysanthos*
	Marsilea villosa	*Marsilea villosa* *Sesbania tomentosa* *Vigna o-wahuensis*
Oahu—Coastal—Unit 12		*Schenkia sebaeoides* *Chamaesyce kuwaleana* *Cyperus trachysanthos*
	Marsilea villosa	*Marsilea villosa* *Sesbania tomentosa* *Vigna o-wahuensis*
Oahu—Coastal—Unit 13		
	Achyranthes splendens var. *rotundata*	*Achyranthes splendens* var. *rotundata* *Bidens amplectens* *Schenkia sebaeoides* *Chamaesyce celastroides* var. *kaenana* *Schiedea kealiae* *Sesbania tomentosa* *Vigna o-wahuensis*
Oahu—Coastal—Unit 14		
	Achyranthes splendens var. *rotundata*	*Achyranthes splendens* var. *rotundata* *Bidens amplectens* *Schenkia sebaeoides* *Chamaesyce celastroides* var. *kaenana* *Schiedea kealiae* *Sesbania tomentosa* *Vigna o-wahuensis*
Oahu—Coastal—Unit 15		

(35) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR OAHU—Continued

Unit name	Species occupied	Species unoccupied
	Achyranthes splendens var. *rotundata* ...	*Achyranthes splendens* var. *rotundata* *Bidens amplectens* *Schenkia sebaeoides* *Chamaesyce celastroides* var. *kaenana* *Schiedea kealiae* *Sesbania tomentosa* *Vigna o-wahuensis*
Oahu—Lowland Dry—Unit 1	.....	*Achyranthes splendens* var. *rotundata*.
	Bidens amplectens	*Bidens amplectens*. *Bonamia menziesii*. *Chamaesyce celastroides* var. *kaenana*. *Dracaena forbesii*. *Euphorbia haeleeleana*. *Gouania meyenii*. *Gouania vitifolia*.
	Hibiscus brackenridgei	*Hibiscus brackenridgei*. *Isodendrion pyrifolium*. *Melanthera tenuifolia*. *Neraudia angulata*.
	Nototrichium humile	*Nototrichium humile*. *Schiedea hookeri*.
	Schiedea kealiae	*Schiedea kealiae*. *Spermolepis hawaiiensis*.
Oahu—Lowland Dry—Unit 2		*Achyranthes splendens* var. *rotundata*. *Bidens amplectens*.
	Bonamia menziesii	*Bonamia menziesii*. *Chamaesyce celastroides* var. *kaenana*.
	Dracaena forbesii	*Dracaena forbesii*. *Euphorbia haeleeleana*. *Gouania meyenii*. *Gouania vitifolia*. *Hibiscus brackenridgei*. *Isodendrion pyrifolium*.
	Melanthera tenuifolia	*Melanthera tenuifolia*. *Neraudia angulata*.
	Nototrichium humile	*Nototrichium humile*. *Schiedea hookeri*. *Schiedea kealiae*. *Spermolepis hawaiiensis*.
Oahu—Lowland Dry—Unit 6		
	Doryopteris takeuchii	*Doryopteris takeuchii* *Gouania meyenii*
	Spermolepis hawaiiensis	*Spermolepis hawaiiensis*
Oahu—Lowland Dry—Unit 7		
	Cyperus trachysanthos	*Cyperus trachysanthos* *Doryopteris takeuchii* *Gouania meyenii* *Marsilea villosa* *Spermolepis hawaiiensis*
Oahu—Lowland Dry—Unit 8	.....	*Achyranthes splendens* var. *rotundata*. *Bidens amplectens*. *Bonamia menziesii*. *Chamaesyce celastroides* var. *kaenana*. *Euphorbia haeleeleana*. *Euphorbia skottsbergii* var. *skottsbergii*. *Gouania meyenii*. *Gouania vitifolia*. *Hibiscus brackenridgei*. *Isodendrion pyrifolium*. *Melanthera tenuifolia*. *Neraudia angulata*. *Nototrichium humile*. *Schiedea hookeri*. *Schiedea kealiae*. *Spermolepis hawaiiensis*.
Oahu—Lowland Dry—Unit 9	*Achyranthes splendens* var. *rotundata* ...	*Achyranthes splendens* var. *rotundata*. *Bidens amplectens*. *Bonamia menziesii*. *Chamaesyce celastroides* var. *kaenana*. *Euphorbia haeleeleana*. *Euphorbia skottsbergii* var. *skottsbergii*. *Gouania meyenii*.

(35) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR OAHU—Continued

Unit name	Species occupied	Species unoccupied
		Gouania vitifolia.
		Hibiscus brackenridgei.
		Isodendrion pyrifolium.
		Melanthera tenuifolia.
		Neraudia angulata.
		Nototrichium humile.
		Schiedea hookeri.
		Schiedea kealiae.
		Spermolepis hawaiiensis.
Oahu—Lowland Dry—Unit 10	.....	*Achyranthes splendens* var. *rotundata.*
		Bidens amplectens.
		Bonamia menziesii.
		Chamaesyce celastroides var. *kaenana.*
		Euphorbia haeleeleana.
	Euphorbia skottsbergii var. *skottsbergii* ..	*Euphorbia skottsbergii* var. *skottsbergii.*
		Gouania meyenii.
		Gouania vitifolia.
		Hibiscus brackenridgei.
		Isodendrion pyrifolium.
		Melanthera tenuifolia.
		Neraudia angulata.
		Nototrichium humile.
		Schiedea hookeri.
		Schiedea kealiae.
		Spermolepis hawaiiensis.
Oahu—Lowland Dry—Unit 11	.....	*Achyranthes splendens* var. *rotundata.*
		Bidens amplectens.
		Bonamia menziesii.
		Chamaesyce celastroides var. *kaenana.*
		Euphorbia haeleeleana.
	Euphorbia skottsbergii var. *skottsbergii* ..	*Euphorbia skottsbergii* var. *skottsbergii.*
		Gouania meyenii.
		Gouania vitifolia.
		Hibiscus brackenridgei.
		Isodendrion pyrifolium.
		Melanthera tenuifolia.
		Neraudia angulata.
		Nototrichium humile.
		Schiedea hookeri.
		Schiedea kealiae.
		Spermolepis hawaiiensis.
Oahu—Lowland Mesic—Unit 1	*Abutilon sandwicense*	*Abutilon sandwicense.*
	Alectryon macrococcus	*Alectryon macrococcus.*
	Asplenium dielfalcatum	*Asplenium dielfalcatum.*
	Bonamia menziesii	*Bonamia menziesii.*
	Cenchrus agrimonioides	*Cenchrus agrimonioides.*
		Chamaesyce celastroides var. *kaenana.*
	Chamaesyce herbstii	*Chamaesyce herbstii.*
	Colubrina oppositifolia	*Colubrina oppositifolia.*
	Ctenitis squamigera	*Ctenitis squamigera.*
	Cyanea acuminata	*Cyanea acuminata.*
	Cyanea calycina	*Cyanea calycina.*
	Cyanea grimesiana ssp. *grimesiana*	*Cyanea grimesiana* ssp. *grimesiana.*
	Cyanea grimesiana ssp. *obatae*	*Cyanea grimesiana* ssp. *obatae.*
	Cyanea longiflora	*Cyanea longiflora.*
		Cyanea pinnatifida.
	Cyanea superba	*Cyanea superba.*
		Cyperus pennatiformis.
	Cyrtandra dentata	*Cyrtandra dentata.*
	Delissea subcordata	*Delissea subcordata.*
		Diellia unisora.
		Diplazium molokaiense.
	Dracaena forbesii	*Dracaena forbesii.*
	Dubautia herbstobatae	*Dubautia herbstobatae.*
	Eragrostis fosbergii	*Eragrostis fosbergii.*
		Eugenia koolauensis.
	Euphorbia haeleeleana	*Euphorbia haeleeleana.*
	Flueggea neowawraea	*Flueggea neowawraea.*
		Gardenia mannii.
		Gouania meyenii.
		Gouania vitifolia.
	Hesperomannia arborescens	*Hesperomannia arborescens.*

(35) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR OAHU—Continued

Unit name	Species occupied	Species unoccupied
	Hesperomannia arbuscula	*Hesperomannia arbuscula.*
	Hibiscus brackenridgei	*Hibiscus brackenridgei.*
	Isodendrion laurifolium	*Isodendrion laurifolium.*
	Isodendrion longifolium	*Isodendrion longifolium.*
		Kadua coriacea.
	Kadua degeneri	*Kadua degeneri.*
		Kadua parvula.
		Labordia cyrtandrae.
	Lobelia niihauensis	*Lobelia niihauensis.*
	Melanthera tenuifolia	*Melanthera tenuifolia.*
	Melicope cornuta var. *decurrens*	*Melicope cornuta* var. *decurrens.*
	Melicope makahae	*Melicope makahae.*
	Melicope pallida	*Melicope pallida.*
		Melicope saint-johnii.
	Neraudia angulata	*Neraudia angulata.*
	Nototrichium humile	*Nototrichium humile.*
		Phyllostegia hirsuta.
	Phyllostegia kaalaensis	*Phyllostegia kaalaensis.*
		Phyllostegia mollis.
		Phyllostegia parviflora.
		Plantago princeps.
	Pteralyxia macrocarpa	*Pteralyxia macrocarpa.*
		Sanicula mariversa.
	Schiedea hookeri	*Schiedea hookeri.*
	Schiedea kaalae	*Schiedea kaalae.*
	Schiedea nuttallii	*Schiedea nuttallii.*
	Schiedea obovata	*Schiedea obovata.*
		Silene perlmanii.
		Solanum sandwicense.
		Stenogyne kanehoana.
		Tetramolopium lepidotum ssp. *lepidotum.*
		Urera kaalae.
	Viola chamissoniana ssp. *chamissoniana*	*Viola chamissoniana* ssp. *chamissoniana.*
Oahu—Lowland Mesic—Unit 2	*Abutilon sandwicense*	*Abutilon sandwicense.*
	Alectryon macrococcus	*Alectryon macrococcus.*
	Asplenium dielfalcatum	*Asplenium dielfalcatum.*
		Bonamia menziesii.
	Cenchrus agrimonioides	*Cenchrus agrimonioides.*
		Chamaesyce celastroides var. *kaenana.*
	Chamaesyce herbstii	*Chamaesyce herbstii.*
		Colubrina oppositifolia.
		Ctenitis squamigera.
		Cyanea acuminata.
	Cyanea calycina	*Cyanea calycina.*
		Cyanea grimesiana ssp. *grimesiana.*
	Cyanea grimesiana ssp. *obatae*	*Cyanea grimesiana* ssp. *obatae.*
		Cyanea longiflora.
		Cyanea pinnatifida.
		Cyanea superba.
		Cyperus pennatiformis.
		Cyrtandra dentata.
	Delissea subcordata	*Delissea subcordata.*
		Diellia unisora.
		Diplazium molokaiense.
	Dracaena forbesii	*Dracaena forbesii.*
		Dubautia herbstobatae.
		Eragrostis fosbergii.
		Eugenia koolauensis.
		Euphorbia haeleeleana.
		Flueggea neowawraea.
	Gardenia mannii	*Gardenia mannii.*
		Gouania meyenii.
		Gouania vitifolia.
		Hesperomannia arborescens.
		Hesperomannia arbuscula.
		Hibiscus brackenridgei.
		Isodendrion laurifolium.
		Isodendrion longifolium.
		Kadua coriacea.
		Kadua degeneri.

(35) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR OAHU—Continued

Unit name	Species occupied	Species unoccupied
		Kadua parvula.
		Labordia cyrtandrae.
		Lobelia niihauensis.
		Melanthera tenuifolia.
	Melicope cornuta var. *decurrens*	*Melicope cornuta* var. *decurrens.*
		Melicope makahae.
		Melicope pallida.
		Melicope saint-johnii.
		Neraudia angulata.
		Nototrichium humile.
	Phyllostegia hirsuta	*Phyllostegia hirsuta.*
	Phyllostegia kaalaensis	*Phyllostegia kaalaensis.*
	Phyllostegia mollis	*Phyllostegia mollis.*
		Phyllostegia parviflora.
		Plantago princeps.
	Pteralyxia macrocarpa	*Pteralyxia macrocarpa.*
		Sanicula mariversa.
	Schiedea hookeri	*Schiedea hookeri.*
	Schiedea kaalae	*Schiedea kaalae.*
		Schiedea nuttallii.
		Schiedea obovata.
		Silene perlmanii.
	Solanum sandwicense	*Solanum sandwicense.*
	Stenogyne kanehoana	*Stenogyne kanehoana.*
		Tetramolopium lepidotum ssp. *lepidotum.*
	Urera kaalae	*Urera kaalae.*
		Viola chamissoniana ssp. *chamissoniana.*
Oahu—Lowland Mesic—Unit 3		*Abutilon sandwicense.*
	Alectryon macrococcus	*Alectryon macrococcus.*
	Asplenium dielfalcatum	*Asplenium dielfalcatum.*
		Bonamia menziesii.
	Cenchrus agrimonioides	*Cenchrus agrimonioides.*
		Chamaesyce celastroides var. *kaenana.*
		Chamaesyce herbstii.
		Colubrina oppositifolia.
		Ctenitis squamigera.
		Cyanea acuminata.
		Cyanea calycina.
		Cyanea grimesiana ssp. *grimesiana.*
		Cyanea grimesiana ssp. *obatae.*
		Cyanea longiflora.
		Cyanea pinnatifida.
		Cyanea superba.
		Cyperus pennatiformis.
		Cyrtandra dentata.
	Delissea subcordata	*Delissea subcordata.*
	Diellia unisora	*Diellia unisora.*
		Diplazium molokaiense.
	Dracaena forbesii	*Dracaena forbesii.*
		Dubautia herbstobatae.
		Eragrostis fosbergii.
		Eugenia koolauensis.
		Euphorbia haeleeleana.
		Flueggea neowawraea.
		Gardenia mannii.
		Gouania meyenii.
		Gouania vitifolia.
		Hesperomannia arborescens.
	Hesperomannia arbuscula	*Hesperomannia arbuscula.*
		Hibiscus brackenridgei.
		Isodendrion laurifolium.
		Isodendrion longifolium.
		Kadua coriacea.
		Kadua degeneri.
		Kadua parvula.
		Labordia cyrtandrae.
		Lobelia niihauensis.
		Melanthera tenuifolia.
		Melicope cornuta var. *decurrens.*
		Melicope makahae.

(35) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR OAHU—Continued

Unit name	Species occupied	Species unoccupied
		Melicope pallida.
	Melicope saint-johnii	*Melicope saint-johnii.*
		Neraudia angulata.
		Nototrichium humile.
		Phyllostegia hirsuta.
		Phyllostegia kaalaensis.
	Phyllostegia mollis	*Phyllostegia mollis.*
	Phyllostegia parviflora	*Phyllostegia parviflora.*
	Plantago princeps	*Plantago princeps.*
	Pteralyxia macrocarpa	*Pteralyxia macrocarpa.*
		Sanicula mariversa.
		Schiedea hookeri.
	Schiedea kaalae	*Schiedea kaalae.*
		Schiedea nuttallii.
		Schiedea obovata.
	Silene perlmanii	*Silene perlmanii.*
		Solanum sandwicense.
		Stenogyne kanehoana.
		Tetramolopium lepidotum ssp. *lepidotum.*
	Urera kaalae	*Urera kaalae.*
		Viola chamissoniana ssp. *chamissoniana.*
Oahu—Lowland Mesic—Unit 4		*Alectryon macrococcus.*
		Asplenium dielerectum.
		Asplenium dielfalcatum.
		Bonamia menziesii.
		Chamaesyce celastroides var. *kaenana.*
		Ctenitis squamigera.
		Cyanea acuminata.
		Cyanea calycina.
		Cyanea crispa.
		Cyanea grimesiana ssp. *grimesiana.*
		Cyanea lanceolata.
		Cyanea longiflora.
		Cyanea truncata.
		Cyrtandra dentata.
		Cyrtandra polyantha.
		Delissea subcordata.
		Dracaena forbesii.
		Eugenia koolauensis.
		Gardenia mannii.
		Hesperomannia arborescens.
		Isodendrion laurifolium.
		Isodendrion longifolium.
		Kadua coriacea.
		Labordia cyrtandrae.
		Lobelia monostachya.
		Melicope lydgatei.
		Melicope saint-johnii.
		Phyllostegia hirsuta.
		Phyllostegia mollis.
		Phyllostegia parviflora.
		Plantago princeps.
		Pteralyxia macrocarpa.
		Schiedea kaalae.
		Schiedea nuttallii.
		Solanum sandwicense.
		Tetraplasandra gymnocarpa.
		Tetraplasandra lydgatei.
Oahu—Lowland Mesic—Unit 5		*Alectryon macrococcus.*
		Asplenium dielerectum.
		Asplenium dielfalcatum.
		Bonamia menziesii.
		Chamaesyce celastroides var. *kaenana.*
		Ctenitis squamigera.
		Cyanea acuminata.
		Cyanea calycina.
		Cyanea crispa.
		Cyanea grimesiana ssp. *grimesiana.*
		Cyanea lanceolata.
		Cyanea longiflora.

(35) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR OAHU—Continued

Unit name	Species occupied	Species unoccupied
		Cyanea truncata.
		Cyrtandra dentata.
		Cyrtandra polyantha.
		Delissea subcordata.
		Dracaena forbesii.
		Eugenia koolauensis.
		Gardenia mannii.
		Hesperomannia arborescens.
		Isodendrion laurifolium.
		Isodendrion longifolium.
		Kadua coriacea.
		Labordia cyrtandrae.
		Lobelia monostachya.
		Melicope lydgatei.
		Melicope saint-johnii.
		Phyllostegia hirsuta.
		Phyllostegia mollis.
		Phyllostegia parviflora.
		Plantago princeps.
		Pteralyxia macrocarpa.
		Schiedea kaalae.
		Schiedea nuttallii.
		Solanum sandwicense.
		Tetraplasandra gymnocarpa.
		Tetraplasandra lydgatei.
Oahu—Lowland Mesic—Unit 6	.....	*Alectryon macrococcus.*
		Asplenium dielerectum.
		Asplenium dielfalcatum.
		Bonamia menziesii.
		Chamaesyce celastroides var. *kaenana.*
		Ctenitis squamigera.
	Cyanea acuminata	*Cyanea acuminata.*
		Cyanea calycina.
	Cyanea crispa	*Cyanea crispa.*
		Cyanea grimesiana ssp. *grimesiana.*
		Cyanea lanceolata.
		Cyanea longiflora.
	Cyanea truncata	*Cyanea truncata.*
		Cyrtandra dentata.
		Cyrtandra polyantha.
		Delissea subcordata.
		Dracaena forbesii.
		Eugenia koolauensis.
	Gardenia mannii	*Gardenia mannii.*
		Hesperomannia arborescens.
		Isodendrion laurifolium.
		Isodendrion longifolium.
		Kadua coriacea.
		Labordia cyrtandrae.
		Lobelia monostachya.
		Melicope lydgatei.
		Melicope saint-johnii.
		Phyllostegia hirsuta.
		Phyllostegia mollis.
		Phyllostegia parviflora.
		Plantago princeps.
	Pteralyxia macrocarpa	*Pteralyxia macrocarpa.*
	Schiedea kaalae	*Schiedea kaalae.*
		Schiedea nuttallii.
		Solanum sandwicense.
		Tetraplasandra gymnocarpa.
		Tetraplasandra lydgatei.
Oahu—Lowland Mesic—Unit 7	.....	*Alectryon macrococcus.*
	Asplenium dielerectum	*Asplenium dielerectum.*
		Asplenium dielfalcatum.
	Bonamia menziesii	*Bonamia menziesii.*
		Chamaesyce celastroides var. *kaenana.*
		Ctenitis squamigera.
	Cyanea acuminata	*Cyanea acuminata.*
		Cyanea calycina.
		Cyanea crispa.
	Cyanea grimesiana ssp. *grimesiana*	*Cyanea grimesiana* ssp. *grimesiana.*

(35) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR OAHU—Continued

Unit name	Species occupied	Species unoccupied
	Cyanea lanceolata	*Cyanea lanceolata.*
		Cyanea longiflora.
		Cyanea truncata.
		Cyrtandra dentata.
	Cyrtandra polyantha	*Cyrtandra polyantha.*
		Delissea subcordata.
	Dracaena forbesii	*Dracaena forbesii.*
		Eugenia koolauensis.
		Gardenia mannii.
		Hesperomannia arborescens.
		Isodendrion laurifolium.
		Isodendrion longifolium.
		Kadua coriacea.
		Labordia cyrtandrae.
	Lobelia monostachya	*Lobelia monostachya.*
		Melicope lydgatei.
		Melicope saint-johnii.
		Phyllostegia hirsuta.
		Phyllostegia mollis.
		Phyllostegia parviflora.
		Plantago princeps.
	Pteralyxia macrocarpa	*Pteralyxia macrocarpa.*
		Schiedea kaalae.
		Schiedea nuttallii.
		Solanum sandwicense.
		Tetraplasandra gymnocarpa.
	Tetraplasandra lydgatei	*Tetraplasandra lydgatei.*
Oahu—Lowland Wet—Unit 1		
		Cyanea acuminata
		Cyanea calycina
		Cyanea grimesiana ssp. *grimesiana*
		Cyanea grimesiana ssp. *obatae*
		Cyrtandra dentata
		Diplazium molokaiense
		Gardenia mannii
	Gouania vitifolia	*Gouania vitifolia*
		Hesperomannia arbuscula
		Isodendrion longifolium
		Labordia cyrtandrae
		Lobelia oahuensis
		Phyllostegia hirsuta
		Phyllostegia mollis
		Plantago princeps
		Pteralyxia macrocarpa
	Schiedea hookeri	*Schiedea hookeri*
		Schiedea kaalae
	Urera kaalae	*Urera kaalae*
Oahu—Lowland Wet—Unit 2		
		Cyanea acuminata
		Cyanea calycina
		Cyanea grimesiana ssp. *grimesiana*
		Cyanea grimesiana ssp. *obatae*
		Cyrtandra dentata
		Diplazium molokaiense
		Gardenia mannii
		Gouania vitifolia
		Hesperomannia arbuscula
		Isodendrion longifolium
		Labordia cyrtandrae
		Lobelia oahuensis
	Phyllostegia hirsute	*Phyllostegia hirsuta*
	Phyllostegia mollis	*Phyllostegia mollis*
		Plantago princeps
		Pteralyxia macrocarpa
		Schiedea hookeri
		Schiedea kaalae
	Urera kaalae	*Urera kaalae*
Oahu—Lowland Wet—Unit 3		
		Cyanea acuminata
		Cyanea calycina
		Cyanea grimesiana ssp. *grimesiana*
		Cyanea grimesiana ssp. *obatae*

(35) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR OAHU—Continued

Unit name	Species occupied	Species unoccupied
		Cyrtandra dentata
		Diplazium molokaiense
		Gardenia mannii
		Gouania vitifolia
		Hesperomannia arbuscula
		Isodendrion longifolium
		Labordia cyrtandrae
		Lobelia oahuensis
	Phyllostegia hirsute	*Phyllostegia hirsuta*
	Phyllostegia mollis	*Phyllostegia mollis*
		Plantago princeps
		Pteralyxia macrocarpa
	Schiedea hookeri	*Schiedea hookeri*
		Schiedea kaalae
		Urera kaalae
Oahu—Lowland Wet—Unit 4		
		Cyanea acuminata
		Cyanea calycina
		Cyanea grimesiana ssp. *grimesiana*
		Cyanea grimesiana ssp. *obatae*
		Cyrtandra dentata
		Diplazium molokaiense
		Gardenia mannii
		Gouania vitifolia
		Hesperomannia arbuscula
		Isodendrion longifolium
		Labordia cyrtandrae
		Lobelia oahuensis
		Phyllostegia hirsuta
	Phyllostegia mollis	*Phyllostegia mollis*
		Plantago princeps
		Pteralyxia macrocarpa
		Schiedea hookeri
		Schiedea kaalae
		Urera kaalae
Oahu—Lowland Wet—Unit 5		
		Cyanea acuminata
	Cyanea calycina	*Cyanea calycina*
		Cyanea grimesiana ssp. *grimesiana*
	Cyanea grimesiana ssp. *Obatae*	*Cyanea grimesiana* ssp. *obatae*
		Cyrtandra dentata
		Diplazium molokaiense
		Gardenia mannii
		Gouania vitifolia
	Hesperomannia arbuscula	*Hesperomannia arbuscula*
		Isodendrion longifolium
		Labordia cyrtandrae
		Lobelia oahuensis
		Phyllostegia hirsuta
		Phyllostegia mollis
		Plantago princeps
		Pteralyxia macrocarpa
		Schiedea hookeri
	Schiedea kaalae	*Schiedea kaalae*
		Urera kaalae
Oahu—Lowland Wet—Unit 6		*Adenophorus periens.*
		Chamaesyce rockii.
		Cyanea acuminata.
		Cyanea calycina.
		Cyanea crispa.
		Cyanea grimesiana ssp. *grimesiana.*
		Cyanea humboldtiana.
		Cyanea koolauensis.
		Cyanea lanceolata.
		Cyanea purpurellifolia.
		Cyanea st.-johnii.
		Cyanea truncata.
		Cyrtandra dentata.
		Cyrtandra gracilis.
		Cyrtandra kaulantha.
		Cyrtandra polyantha.
		Cyrtandra sessilis.

(35) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR OAHU—Continued

Unit name	Species occupied	Species unoccupied
		Cyrtandra subumbellata.
		Cyrtandra viridiflora.
		Cyrtandra waiolani.
		Gardenia mannii.
	Hesperomannia arborescens	*Hesperomannia arborescens.*
		Isodendrion longifolium.
		Labordia cyrtandrae.
		Lobelia gaudichaudii ssp. *koolauensis.*
		Lobelia oahuensis.
		Melicope cornuta var. *cornuta.*
		Melicope hiiakae.
		Melicope lydgatei.
		Myrsine juddii.
		Phlegmariurus nutans.
		Phyllostegia hirsuta.
		Phyllostegia parviflora.
		Plantago princeps.
		Platanthera holochila.
		Psychotria hexandra var. *oahuensis.*
		Pteralyxia macrocarpa.
		Pteris lidgatei.
		Sanicula purpurea.
		Tetraplasandra gymnocarpa.
		Trematolobelia singularis.
		Viola oahuensis.
		Zanthoxylum oahuense.
Oahu—Lowland Wet—Unit 7	.....	*Adenophorus periens.*
	Chamaesyce rockii	*Chamaesyce rockii.*
	Cyanea acuminata	*Cyanea acuminata.*
	Cyanea calycina	*Cyanea calycina.*
		Cyanea crispa.
		Cyanea grimesiana ssp. *grimesiana.*
	Cyanea humboldtiana	*Cyanea humboldtiana.*
		Cyanea koolauensis.
		Cyanea lanceolata.
	Cyanea purpurellifolia	*Cyanea purpurellifolia.*
		Cyanea st.-johnii.
	Cyanea truncata	*Cyanea truncata.*
		Cyrtandra dentata.
		Cyrtandra gracilis.
		Cyrtandra kaulantha.
		Cyrtandra polyantha.
		Cyrtandra sessilis.
		Cyrtandra subumbellata.
	Cyrtandra viridiflora	*Cyrtandra viridiflora.*
		Cyrtandra waiolani.
	Gardenia mannii	*Gardenia mannii.*
	Hesperomannia arborescens	*Hesperomannia arborescens.*
		Isodendrion longifolium.
		Labordia cyrtandrae.
		Lobelia gaudichaudii ssp. *koolauensis*
		Lobelia oahuensis.
	Melicope cornuta var. *cornuta*	*Melicope cornuta* var. *cornuta.*
		Melicope hiiakae.
		Melicope lydgatei.
	Myrsine juddii	*Myrsine juddii.*
	Phlegmariurus nutans	*Phlegmariurus nutans.*
	Phyllostegia hirsuta	*Phyllostegia hirsuta.*
		Phyllostegia parviflora.
		Plantago princeps.
		Platanthera holochila.
		Psychotria hexandra var. *oahuensis.*
	Pteralyxia macrocarpa	*Pteralyxia macrocarpa.*
	Pteris lidgatei	*Pteris lidgatei.*
		Sanicula purpurea.
	Tetraplasandra gymnocarpa	*Tetraplasandra gymnocarpa.*
		Trematolobelia singularis.
	Viola oahuensis	*Viola oahuensis.*
	Zanthoxylum oahuense	*Zanthoxylum oahuense.*
Oahu—Lowland Wet—Unit 8	.....	*Adenophorus periens.*
		Chamaesyce rockii.
		Cyanea acuminata.

(35) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR OAHU—Continued

Unit name	Species occupied	Species unoccupied
		Cyanea calycina.
		Cyanea crispa.
		Cyanea grimesiana ssp. *grimesiana.*
		Cyanea humboldtiana.
		Cyanea koolauensis.
		Cyanea lanceolata.
		Cyanea purpurellifolia.
		Cyanea st.-johnii.
		Cyanea truncata.
		Cyrtandra dentata.
		Cyrtandra gracilis.
	Cyrtandra kaulantha	*Cyrtandra kaulantha.*
		Cyrtandra polyantha.
		Cyrtandra sessilis.
		Cyrtandra subumbellata.
		Cyrtandra viridiflora.
		Cyrtandra waiolani.
		Gardenia mannii.
		Hesperomannia arborescens.
		Isodendrion longifolium.
		Labordia cyrtandrae.
		Lobelia gaudichaudii ssp. *koolauensis.*
		Lobelia oahuensis.
		Melicope cornuta var. *cornuta.*
		Melicope hiiakae.
		Melicope lydgatei.
		Myrsine juddii.
		Phlegmariurus nutans.
		Phyllostegia hirsuta.
		Phyllostegia parviflora.
		Plantago princeps.
		Platanthera holochila.
		Psychotria hexandra var. *oahuensis.*
		Pteralyxia macrocarpa.
		Pteris lidgatei.
		Sanicula purpurea.
		Tetraplasandra gymnocarpa.
		Trematolobelia singularis.
		Viola oahuensis.
		Zanthoxylum oahuense.
Oahu—Lowland Wet—Unit 9		*Adenophorus periens.*
	Chamaesyce rockii	*Chamaesyce rockii.*
		Cyanea acuminata.
	Cyanea calycina	*Cyanea calycina.*
		Cyanea crispa.
		Cyanea grimesiana ssp. *grimesiana.*
	Cyanea humboldtiana	*Cyanea humboldtiana.*
	Cyanea koolauensis	*Cyanea koolauensis.*
		Cyanea lanceolata.
		Cyanea purpurellifolia.
	Cyanea st.-johnii	*Cyanea st.-johnii.*
		Cyanea truncata.
		Cyrtandra dentata.
		Cyrtandra gracilis.
		Cyrtandra kaulantha.
		Cyrtandra polyantha.
		Cyrtandra sessilis.
		Cyrtandra subumbellata.
	Cyrtandra viridiflora	*Cyrtandra viridiflora.*
		Cyrtandra waiolani.
	Gardenia mannii	*Gardenia mannii.*
	Hesperomannia arborescens	*Hesperomannia arborescens.*
		Isodendrion longifolium.
	Labordia cyrtandrae	*Labordia cyrtandrae.*
		Lobelia gaudichaudii ssp. *koolauensis.*
	Lobelia oahuensis	*Lobelia oahuensis.*
	Melicope cornuta var. *cornuta*	*Melicope cornuta* var. *cornuta.*
	Melicope hiiakae	*Melicope hiiakae.*
	Melicope lydgatei	*Melicope lydgatei.*
		Myrsine juddii.
		Phlegmariurus nutans.
	Phyllostegia hirsuta	*Phyllostegia hirsuta.*

(35) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR OAHU—Continued

Unit name	Species occupied	Species unoccupied
	Phyllostegia parviflora	*Phyllostegia parviflora.*
	Plantago princeps	*Plantago princeps.*
		Platanthera holochila.
		Psychotria hexandra var. *oahuensis.*
		Pteralyxia macrocarpa.
	Pteris lidgatei	*Pteris lidgatei.*
		Sanicula purpurea.
	Tetraplasandra gymnocarpa	*Tetraplasandra gymnocarpa.*
		Trematolobelia singularis.
	Viola oahuensis	*Viola oahuensis.*
	Zanthoxylum oahuense	*Zanthoxylum oahuense.*
Oahu—Lowland Wet—Unit 10		*Adenophorus periens.*
		Chamaesyce rockii.
		Cyanea acuminata.
		Cyanea calycina.
		Cyanea crispa.
		Cyanea grimesiana ssp. *grimesiana.*
		Cyanea humboldtiana.
		Cyanea koolauensis.
		Cyanea lanceolata.
		Cyanea purpurellifolia.
		Cyanea st.-johnii.
		Cyanea truncata.
		Cyrtandra dentata.
		Cyrtandra gracilis.
		Cyrtandra kaulantha.
		Cyrtandra polyantha.
		Cyrtandra sessilis.
		Cyrtandra subumbellata.
		Cyrtandra viridiflora.
		Cyrtandra waiolani.
		Gardenia mannii.
		Hesperomannia arborescens.
		Isodendrion longifolium.
		Labordia cyrtandrae.
		Lobelia gaudichaudii ssp. *koolauensis.*
		Lobelia oahuensis.
		Melicope cornuta var. *cornuta.*
		Melicope hiiakae.
		Melicope lydgatei.
		Myrsine juddii.
		Phlegmariurus nutans.
		Phyllostegia hirsuta.
		Phyllostegia parviflora.
		Plantago princeps.
		Platanthera holochila.
		Psychotria hexandra var. *oahuensis.*
		Pteralyxia macrocarpa.
		Pteris lidgatei.
		Sanicula purpurea.
		Tetraplasandra gymnocarpa.
		Trematolobelia singularis.
		Viola oahuensis.
		Zanthoxylum oahuense.
Oahu—Lowland Wet—Unit 11		*Adenophorus periens.*
		Chamaesyce rockii.
		Cyanea acuminata.
		Cyanea calycina.
		Cyanea crispa.
		Cyanea grimesiana ssp. *grimesiana.*
		Cyanea humboldtiana.
		Cyanea koolauensis.
		Cyanea lanceolata.
		Cyanea purpurellifolia.
		Cyanea st.-johnii.
		Cyanea truncata.
		Cyrtandra dentata.
		Cyrtandra gracilis.
		Cyrtandra kaulantha.
		Cyrtandra polyantha.
		Cyrtandra sessilis.
		Cyrtandra subumbellata.

(35) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR OAHU—Continued

Unit name	Species occupied	Species unoccupied
		Cyrtandra viridiflora. *Cyrtandra waiolani.* *Gardenia mannii.* *Hesperomannia arborescens.* *Isodendrion longifolium.* *Labordia cyrtandrae.* *Lobelia gaudichaudii* ssp. *koolauensis.* *Lobelia oahuensis.* *Melicope cornuta* var. *cornuta.* *Melicope hiiakae.* *Melicope lydgatei.* *Myrsine juddii.* *Phlegmariurus nutans.* *Phyllostegia hirsuta.* *Phyllostegia parviflora.* *Plantago princeps.* *Platanthera holochila.* *Psychotria hexandra* var. *oahuensis.* *Pteralyxia macrocarpa.* *Pteris lidgatei.* *Sanicula purpurea.* *Tetraplasandra gymnocarpa.* *Trematolobelia singularis.* *Viola oahuensis.* *Zanthoxylum oahuense.*
Oahu—Lowland Wet—Unit 12	.....	*Adenophorus periens.* *Chamaesyce rockii.* *Cyanea acuminata.* *Cyanea calycina.* *Cyanea crispa.* *Cyanea grimesiana* ssp. *grimesiana.* *Cyanea humboldtiana.* *Cyanea koolauensis.* *Cyanea lanceolata.* *Cyanea purpurellifolia.* *Cyanea st.-johnii.* *Cyanea truncata.* *Cyrtandra dentata.* *Cyrtandra gracilis.* *Cyrtandra kaulantha.* *Cyrtandra polyantha.* *Cyrtandra sessilis.* *Cyrtandra subumbellata.* *Cyrtandra viridiflora.* *Cyrtandra waiolani.* *Gardenia mannii.* *Hesperomannia arborescens.* *Isodendrion longifolium.* *Labordia cyrtandrae.* *Lobelia gaudichaudii* ssp. *koolauensis.* *Lobelia oahuensis.* *Melicope cornuta* var. *cornuta.* *Melicope hiiakae.* *Melicope lydgatei.* *Myrsine juddii.* *Phlegmariurus nutans.* *Phyllostegia hirsuta.* *Phyllostegia parviflora.* *Plantago princeps.* *Platanthera holochila.* *Psychotria hexandra* var. *oahuensis.* *Pteralyxia macrocarpa.* *Pteris lidgatei.* *Sanicula purpurea.* *Tetraplasandra gymnocarpa.* *Trematolobelia singularis.* *Viola oahuensis.* *Zanthoxylum oahuense.*
Oahu—Lowland Wet—Unit 13	.....	*Adenophorus periens.* *Chamaesyce rockii.* *Cyanea acuminata.* *Cyanea calycina.*

(35) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR OAHU—Continued

Unit name	Species occupied	Species unoccupied
		Cyanea crispa.
		Cyanea grimesiana ssp. *grimesiana.*
		Cyanea humboldtiana.
		Cyanea koolauensis.
		Cyanea lanceolata.
		Cyanea purpurellifolia.
		Cyanea st.-johnii.
		Cyanea truncata.
		Cyrtandra dentata.
		Cyrtandra gracilis.
		Cyrtandra kaulantha.
		Cyrtandra polyantha.
		Cyrtandra sessilis.
		Cyrtandra subumbellata.
		Cyrtandra viridiflora.
		Cyrtandra waiolani.
		Gardenia mannii.
		Hesperomannia arborescens.
		Isodendrion longifolium.
		Labordia cyrtandrae.
		Lobelia gaudichaudii ssp. *koolauensis.*
		Lobelia oahuensis.
		Melicope cornuta var. *cornuta.*
		Melicope hiiakae.
		Melicope lydgatei.
		Myrsine juddii.
		Phlegmariurus nutans.
		Phyllostegia hirsuta.
		Phyllostegia parviflora.
		Plantago princeps.
		Platanthera holochila.
		Psychotria hexandra var. *oahuensis.*
		Pteralyxia macrocarpa.
		Pteris lidgatei.
		Sanicula purpurea.
		Tetraplasandra gymnocarpa.
		Trematolobelia singularis.
		Viola oahuensis.
		Zanthoxylum oahuense.
Oahu—Lowland Wet—Unit 14	.....	*Adenophorus periens.*
		Chamaesyce rockii.
		Cyanea acuminata.
		Cyanea calycina.
		Cyanea crispa.
		Cyanea grimesiana ssp. *grimesiana.*
		Cyanea humboldtiana.
	Cyanea koolauensis	*Cyanea koolauensis.*
		Cyanea lanceolata.
		Cyanea purpurellifolia.
		Cyanea st.-johnii.
		Cyanea truncata.
		Cyrtandra dentata.
		Cyrtandra gracilis.
		Cyrtandra kaulantha.
		Cyrtandra polyantha.
		Cyrtandra sessilis.
		Cyrtandra subumbellata.
		Cyrtandra viridiflora.
		Cyrtandra waiolani.
		Gardenia mannii.
		Hesperomannia arborescens.
		Isodendrion longifolium.
		Labordia cyrtandrae.
		Lobelia gaudichaudii ssp. *koolauensis.*
		Lobelia oahuensis.
		Melicope cornuta var. *cornuta.*
		Melicope hiiakae.
		Melicope lydgatei.
		Myrsine juddii.
		Phlegmariurus nutans.
		Phyllostegia hirsuta.
		Phyllostegia parviflora.

(35) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR OAHU—Continued

Unit name	Species occupied	Species unoccupied
		Plantago princeps.
		Platanthera holochila.
		Psychotria hexandra var. *oahuensis.*
		Pteralyxia macrocarpa.
		Pteris lidgatei.
		Sanicula purpurea.
		Tetraplasandra gymnocarpa.
		Trematolobelia singularis.
		Viola oahuensis.
		Zanthoxylum oahuense.
Oahu—Lowland Wet—Unit 15	.....	*Adenophorus periens.*
		Chamaesyce rockii.
		Cyanea acuminata.
		Cyanea calycina.
	Cyanea crispa	*Cyanea crispa.*
		Cyanea grimesiana ssp. *grimesiana.*
		Cyanea humboldtiana.
		Cyanea koolauensis.
		Cyanea lanceolata.
		Cyanea purpurellifolia.
		Cyanea st.-johnii.
		Cyanea truncata.
		Cyrtandra dentata.
		Cyrtandra gracilis.
		Cyrtandra kaulantha.
		Cyrtandra polyantha.
		Cyrtandra sessilis.
		Cyrtandra subumbellata.
		Cyrtandra viridiflora.
		Cyrtandra waiolani.
		Gardenia mannii.
		Hesperomannia arborescens.
		Isodendrion longifolium.
		Labordia cyrtandrae.
		Lobelia gaudichaudii ssp. *koolauensis.*
		Lobelia oahuensis.
		Melicope cornuta var. *cornuta.*
		Melicope hiiakae.
		Melicope lydgatei.
		Myrsine juddii.
		Phlegmariurus nutans.
		Phyllostegia hirsuta.
		Phyllostegia parviflora.
		Plantago princeps.
		Platanthera holochila.
		Psychotria hexandra var. *oahuensis.*
		Pteralyxia macrocarpa.
		Pteris lidgatei.
		Sanicula purpurea.
		Tetraplasandra gymnocarpa.
		Trematolobelia singularis.
		Viola oahuensis.
		Zanthoxylum oahuense.
Oahu—Lowland Wet—Unit 16	.....	*Adenophorus periens.*
		Chamaesyce rockii.
	Cyanea acuminata	*Cyanea acuminata.*
	Cyanea calycina	*Cyanea calycina.*
	Cyanea crispa	*Cyanea crispa.*
		Cyanea grimesiana ssp. *grimesiana.*
	Cyanea humboldtiana	*Cyanea humboldtiana.*
	Cyanea koolauensis	*Cyanea koolauensis.*
	Cyanea lanceolata	*Cyanea lanceolata.*
		Cyanea purpurellifolia.
	Cyanea st.-johnii	*Cyanea st.-johnii.*
		Cyanea truncata.
		Cyrtandra dentata.
	Cyrtandra gracilis	*Cyrtandra gracilis.*
		Cyrtandra kaulantha.
	Cyrtandra polyantha	*Cyrtandra polyantha.*
	Cyrtandra sessilis	*Cyrtandra sessilis.*
		Cyrtandra subumbellata.
		Cyrtandra viridiflora.

(35) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR OAHU—Continued

Unit name	Species occupied	Species unoccupied
		Cyrtandra waiolani.
	Gardenia mannii	*Gardenia mannii.*
	Hesperomannia arborescens	*Hesperomannia arborescens.*
		Isodendrion longifolium.
		Labordia cyrtandrae.
		Lobelia gaudichaudii ssp. *koolauensis.*
		Lobelia oahuensis.
	Melicope cornuta var. *cornuta*	*Melicope cornuta* var. *cornuta.*
		Melicope hiiakae.
		Melicope lydgatei.
		Myrsine juddii.
		Phlegmariurus nutans.
		Phyllostegia hirsuta.
		Phyllostegia parviflora.
		Plantago princeps.
		Platanthera holochila.
		Psychotria hexandra var. *oahuensis.*
		Pteralyxia macrocarpa.
		Pteris lidgatei.
	Sanicula purpurea	*Sanicula purpurea.*
	Tetraplasandra gymnocarpa	*Tetraplasandra gymnocarpa.*
		Trematolobelia singularis.
		Viola oahuensis.
		Zanthoxylum oahuense.
Oahu—Montane Wet—Unit 1		
		Alectryon macrococcus var. *macrococcus*
	Cyanea acuminate	*Cyanea acuminata*
	Cyanea calycina	*Cyanea calycina*
	Labordia cyrtandrae	*Labordia cyrtandrae*
		Lobelia oahuensis
	Melicope christophersenii	*Melicope christophersenii*
		Phyllostegia hirsuta
	Schiedea trinervis	*Schiedea trinervis*
Oahu—Dry Cliff—Unit 1		*Abutilon sandwicense.*
		Achyranthes splendens var. *rotundata.*
	Alectryon macrococcus	*Alectryon macrococcus.*
		Asplenium dielfalcatum.
		Bonamia menziesii.
	Cenchrus agrimonioides	*Cenchrus agrimonioides.*
	Chamaesyce herbstii	*Chamaesyce herbstii.*
		Chamaesyce kuwaleana.
	Cyanea grimesiana ssp. *obatae*	*Cyanea grimesiana* ssp. *obatae.*
	Cyrtandra dentata	*Cyrtandra dentata.*
		Diellia unisora.
		Dracaena forbesii.
		Dubautia herbstobatae.
		Eragrostis fosbergii.
		Flueggea neowawraea.
		Gouania meyenii.
		Gouania vitifolia.
		Isodendrion laurifolium.
		Isodendrion pyrifolium.
	Kadua degeneri	*Kadua degeneri.*
		Kadua parvula.
		Korthalsella degeneri.
		Lepidium arbuscula.
		Lipochaeta lobata var. *leptophylla.*
		Lobelia niihauensis.
		Melanthera tenuifolia.
		Melicope cornuta var. *decurrens.*
		Melicope makahae.
		Melicope saint-johnii.
		Neraudia angulata.
		Nototrichium humile.
		Peucedanum sandwicense.
		Phyllostegia kaalaensis.
	Plantago princeps	*Plantago princeps.*
		Pteralyxia macrocarpa.
		Sanicula mariversa.
		Schiedea hookeri.
	Schiedea obovata	*Schiedea obovata.*

(35) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR OAHU—Continued

Unit name	Species occupied	Species unoccupied
		Schiedea trinervis.
		Silene lanceolata.
		Silene perlmanii.
		Spermolepis hawaiiensis.
		Tetramolopium filiforme.
		Tetramolopium lepidotum ssp. *lepidotum.*
	Viola chamissoniana ssp. *chamissoniana..*	
Oahu—Dry Cliff—Unit 2	*Abutilon sandwicense*	*Abutilon sandwicense.*
		Achyranthes splendens var. *rotundata.*
	Alectryon macrococcus	*Alectryon macrococcus.*
		Asplenium dielfalcatum.
		Bonamia menziesii.
		Cenchrus agrimonioides.
		Chamaesyce herbstii.
		Chamaesyce kuwaleana.
		Cyanea grimesiana ssp. *obatae.*
		Cyrtandra dentata.
		Diellia unisora.
	Dracaena forbesii	*Dracaena forbesii.*
	Dubautia herbstobatae	*Dubautia herbstobatae.*
		Eragrostis fosbergii.
		Flueggea neowawraea.
		Gouania meyenii.
	Gouania vitifolia	*Gouania vitifolia.*
		Isodendrion laurifolium.
		Isodendrion pyrifolium.
		Kadua degeneri.
	Kadua parvula	*Kadua parvula.*
		Korthalsella degeneri.
	Lepidium arbuscula	*Lepidium arbuscula.*
		Lipochaeta lobata var. *leptophylla.*
	Lobelia niihauensis	*Lobelia niihauensis.*
	Melanthera tenuifolia	*Melanthera tenuifolia.*
	Melicope cornuta var. *decurrens*	*Melicope cornuta* var. *decurrens.*
	Melicope makahae	*Melicope makahae.*
		Melicope saint-johnii.
		Neraudia angulata.
	Nototrichium humile	*Nototrichium humile.*
	Peucedanum sandwicense	*Peucedanum sandwicense.*
		Phyllostegia kaalaensis.
		Plantago princeps.
		Pteralyxia macrocarpa.
	Sanicula mariversa	*Sanicula mariversa.*
	Schiedea hookeri	*Schiedea hookeri.*
		Schiedea obovata.
		Schiedea trinervis.
		Silene lanceolata.
		Silene perlmanii.
		Spermolepis hawaiiensis.
	Tetramolopium filiforme	*Tetramolopium filiforme.*
		Tetramolopium lepidotum ssp. *lepidotum.*
	Viola chamissoniana ssp. *chamissoniana*	*Viola chamissoniana* ssp. *chamissoniana.*
Oahu—Dry Cliff—Unit 3	*Abutilon sandwicense*	*Abutilon sandwicense.*
		Achyranthes splendens var. *rotundata.*
	Alectryon macrococcus	*Alectryon macrococcus.*
	Asplenium dielfalcatum	*Asplenium dielfalcatum.*
	Bonamia menziesii	*Bonamia menziesii.*
		Cenchrus agrimonioides.
		Chamaesyce herbstii.
		Chamaesyce kuwaleana.
		Cyanea grimesiana ssp. *obatae.*
		Cyrtandra dentata.
		Diellia unisora.
	Dracaena forbesii	*Dracaena forbesii.*
	Dubautia herbstobatae	*Dubautia herbstobatae.*
	Eragrostis fosbergii	*Eragrostis fosbergii.*
	Flueggea neowawraea	*Flueggea neowawraea.*
	Gouania meyenii	*Gouania meyenii.*

(35) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR OAHU—Continued

Unit name	Species occupied	Species unoccupied
		Gouania vitifolia.
	Isodendrion laurifolium	*Isodendrion laurifolium.*
		Isodendrion pyrifolium.
		Kadua degeneri.
		Kadua parvula.
	Korthalsella degeneri	*Korthalsella degeneri.*
	Lepidium arbuscula	*Lepidium arbuscula.*
	Lipochaeta lobata var. *leptophylla*	*Lipochaeta lobata* var. *leptophylla.*
	Lobelia niihauensis	*Lobelia niihauensis.*
	Melanthera tenuifolia	*Melanthera tenuifolia.*
		Melicope cornuta var. *decurrens.*
	Melicope makahae	*Melicope makahae.*
		Melicope saint-johnii.
	Neraudia angulata	*Neraudia angulata.*
	Nototrichium humile	*Nototrichium humile.*
	Peucedanum sandwicense	*Peucedanum sandwicense.*
	Phyllostegia kaalaensis	*Phyllostegia kaalaensis.*
		Plantago princeps.
	Pteralyxia macrocarpa	*Pteralyxia macrocarpa.*
		Sanicula mariversa.
	Schiedea hookeri	*Schiedea hookeri.*
		Schiedea obovata.
		Schiedea trinervis.
	Silene lanceolata	*Silene lanceolata.*
		Silene perlmanii.
		Spermolepis hawaiiensis.
	Tetramolopium filiforme	*Tetramolopium filiforme.*
		Tetramolopium lepidotum ssp. *lepidotum.*
	Viola chamissoniana ssp. *chamissoniana*	*Viola chamissoniana* ssp. *chamissoniana.*
Oahu—Dry Cliff—Unit 4		*Abutilon sandwicense.*
		Achyranthes splendens var. *rotundata.*
	Alectryon macrococcus	*Alectryon macrococcus.*
		Asplenium dielfalcatum.
		Bonamia menziesii.
		Cenchrus agrimonioides.
		Chamaesyce herbstii.
	Chamaesyce kuwaleana	*Chamaesyce kuwaleana.*
		Cyanea grimesiana ssp. *obatae.*
		Cyrtandra dentata.
		Diellia unisora.
		Dracaena forbesii.
		Dubautia herbstobatae.
		Eragrostis fosbergii.
		Flueggea neowawraea.
		Gouania meyenii.
		Gouania vitifolia.
		Isodendrion laurifolium.
		Isodendrion pyrifolium.
		Kadua degeneri.
		Kadua parvula.
		Korthalsella degeneri.
		Lepidium arbuscula.
		Lipochaeta lobata var. *leptophylla.*
		Lobelia niihauensis.
		Melanthera tenuifolia.
		Melicope cornuta var. *decurrens.*
		Melicope makahae.
		Melicope saint-johnii.
		Neraudia angulata.
		Nototrichium humile.
		Peucedanum sandwicense.
		Phyllostegia kaalaensis.
		Plantago princeps.
		Pteralyxia macrocarpa.
		Sanicula mariversa.
		Schiedea hookeri.
		Schiedea obovata.
		Schiedea trinervis.
		Silene lanceolata.
		Silene perlmanii.

(35) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR OAHU—Continued

Unit name	Species occupied	Species unoccupied
	Spermolepis hawaiiensis	*Spermolepis hawaiiensis.*
		Tetramolopium filiforme.
		Tetramolopium lepidotum ssp. *lepidotum.*
		Viola chamissoniana ssp. *chamissoniana.*
Oahu—Dry Cliff—Unit 6		*Abutilon sandwicense.*
		Achyranthes splendens var. *rotundata.*
		Alectryon macrococcus.
		Asplenium dielfalcatum.
		Bonamia menziesii.
	Cenchrus agrimonioides	*Cenchrus agrimonioides.*
		Chamaesyce herbstii.
		Chamaesyce kuwaleana.
		Cyanea grimesiana ssp. *obatae.*
		Cyrtandra dentata.
	Diellia unisora	*Diellia unisora.*
	Dracaena forbesii	*Dracaena forbesii.*
		Dubautia herbstobatae.
		Eragrostis fosbergii.
	Flueggea neowawraea	*Flueggea neowawraea.*
		Gouania meyenii.
		Gouania vitifolia.
		Isodendrion laurifolium.
		Isodendrion pyrifolium.
		Kadua degeneri.
		Kadua parvula.
		Korthalsella degeneri.
	Lepidium arbuscula	*Lepidium arbuscula.*
		Lipochaeta lobata var. *leptophylla.*
	Lobelia niihauensis	*Lobelia niihauensis.*
		Melanthera tenuifolia.
		Melicope cornuta var. *decurrens.*
		Melicope makahae.
	Melicope saint-johnii	*Melicope saint-johnii.*
	Neraudia angulata	*Neraudia angulata.*
		Nototrichium humile.
		Peucedanum sandwicense.
		Phyllostegia kaalaensis.
	Plantago princeps	*Plantago princeps.*
		Pteralyxia macrocarpa.
		Sanicula mariversa.
		Schiedea hookeri.
		Schiedea obovata.
		Schiedea trinervis.
		Silene lanceolata.
	Silene perlmanii	*Silene perlmanii.*
		Spermolepis hawaiiensis.
		Tetramolopium filiforme.
	Tetramolopium lepidotum ssp. *lepidotum*	*Tetramolopium lepidotum* ssp. *lepidotum.*
		Viola chamissoniana ssp. *chamissoniana.*
Oahu—Dry Cliff—Unit 7a		*Abutilon sandwicense.*
		Achyranthes splendens var. *rotundata.*
		Alectryon macrococcus.
		Asplenium dielfalcatum.
		Bonamia menziesii.
		Cenchrus agrimonioides.
		Chamaesyce herbstii.
		Chamaesyce kuwaleana.
		Cyanea grimesiana ssp. *obatae.*
		Cyrtandra dentata.
		Diellia unisora.
	Dracaena forbesii	*Dracaena forbesii.*
		Dubautia herbstobatae.
		Eragrostis fosbergii.
	Flueggea neowawraea	*Flueggea neowawraea.*
		Gouania meyenii.
		Gouania vitifolia.
		Isodendrion laurifolium.
		Isodendrion pyrifolium.

(35) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR OAHU—Continued

Unit name	Species occupied	Species unoccupied
		Kadua degeneri.
	Kadua parvula	*Kadua parvula.*
		Korthalsella degeneri.
		Lepidium arbuscula.
		Lipochaeta lobata var. *leptophylla.*
		Lobelia niihauensis.
		Melanthera tenuifolia.
	Melicope cornuta var. *decurrens*	*Melicope cornuta* var. *decurrens.*
		Melicope makahae.
	Melicope saint-johnii	*Melicope saint-johnii.*
		Neraudia angulata.
		Nototrichium humile.
		Peucedanum sandwicense.
		Phyllostegia kaalaensis.
	Plantago princeps	*Plantago princeps.*
		Pteralyxia macrocarpa.
		Sanicula mariversa.
		Schiedea hookeri.
		Schiedea obovata.
		Schiedea trinervis.
		Silene lanceolata.
	Silene perlmanii	*Silene perlmanii.*
		Spermolepis hawaiiensis.
		Tetramolopium filiforme.
		Tetramolopium lepidotum ssp. *lepidotum.*
	Viola chamissoniana ssp. *chamissoniana*	*Viola chamissoniana* ssp. *chamissoniana.*
Oahu—Dry Cliff—Unit 7b		*Abutilon sandwicense.*
		Achyranthes splendens var. *rotundata.*
		Alectryon macrococcus.
		Asplenium dielfalcatum.
		Bonamia menziesii.
		Cenchrus agrimonioides.
		Chamaesyce herbstii.
		Chamaesyce kuwaleana.
		Cyanea grimesiana ssp. *obatae.*
		Cyrtandra dentata.
		Diellia unisora.
		Dracaena forbesii.
		Dubautia herbstobatae.
		Eragrostis fosbergii.
		Flueggea neowawraea.
		Gouania meyenii.
		Gouania vitifolia.
		Isodendrion laurifolium.
		Isodendrion pyrifolium.
		Kadua degeneri.
		Kadua parvula.
		Korthalsella degeneri.
		Lepidium arbuscula.
		Lipochaeta lobata var. *leptophylla.*
		Lobelia niihauensis.
		Melanthera tenuifolia.
		Melicope cornuta var. *decurrens.*
		Melicope makahae.
		Melicope saint-johnii.
		Neraudia angulata.
		Nototrichium humile.
		Peucedanum sandwicense.
		Phyllostegia kaalaensis.
		Plantago princeps.
		Pteralyxia macrocarpa.
		Sanicula mariversa.
		Schiedea hookeri.
		Schiedea obovata.
		Schiedea trinervis.
		Silene lanceolata.
		Silene perlmanii.
		Spermolepis hawaiiensis.
		Tetramolopium filiforme.
		Tetramolopium lepidotum ssp. *lepidotum.*

(35) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR OAHU—Continued

Unit name	Species occupied	Species unoccupied
		Viola chamissoniana ssp. *chamissoniana*.
Oahu—Dry Cliff—Unit 8	*Abutilon sandwicense*	*Abutilon sandwicense*.
		Achyranthes splendens var. *rotundata*.
		Alectryon macrococcus.
		Asplenium dielfalcatum.
	Bonamia menziesii	*Bonamia menziesii*.
		Cenchrus agrimonioides.
		Chamaesyce herbstii.
		Chamaesyce kuwaleana.
		Cyanea grimesiana ssp. *obatae*.
		Cyrtandra dentata.
		Diellia unisora.
	Dracaena forbesii	*Dracaena forbesii*.
		Dubautia herbstobatae.
		Eragrostis fosbergii.
	Flueggea neowawraea	*Flueggea neowawraea*.
		Gouania meyenii.
		Gouania vitifolia.
		Isodendrion laurifolium.
		Isodendrion pyrifolium.
		Kadua degeneri.
		Kadua parvula.
		Korthalsella degeneri.
		Lepidium arbuscula.
		Lipochaeta lobata var. *leptophylla*
	Lobelia niihauensis	*Lobelia niihauensis*.
		Melanthera tenuifolia.
		Melicope cornuta var. *decurrens*.
		Melicope makahae.
		Melicope saint-johnii.
	Neraudia angulata	*Neraudia angulata*.
	Nototrichium humile	*Nototrichium humile*.
		Peucedanum sandwicense.
		Phyllostegia kaalaensis.
		Plantago princeps.
		Pteralyxia macrocarpa.
		Sanicula mariversa.
		Schiedea hookeri.
		Schiedea obovata.
		Schiedea trinervis.
		Silene lanceolata.
		Silene perlmanii.
		Spermolepis hawaiiensis.
		Tetramolopium filiforme.
		Tetramolopium lepidotum ssp. *lepidotum*.
		Viola chamissoniana ssp. *chamissoniana*.
Oahu—Wet Cliff—Unit 1		
		Cyanea acuminata
	Cyanea calycina	*Cyanea calycina*
		Labordia cyrtandrae
		Lobelia oahuensis
	Melicope christophersenii	*Melicope christophersenii*
		Phyllostegia hirsuta
		Pteralyxia macrocarpa
		Schiedea hookeri
		Schiedea kaalae
	Schiedea trinervis	*Schiedea trinervis*
Oahu—Wet Cliff—Unit 2		
		Cyanea acuminata
	Cyanea calycina	*Cyanea calycina*
		Labordia cyrtandrae
		Lobelia oahuensis
	Melicope christophersenii	*Melicope christophersenii*
		Phyllostegia hirsuta
		Pteralyxia macrocarpa
		Schiedea hookeri
		Schiedea kaalae
		Schiedea trinervis
Oahu—Wet Cliff—Unit 3		

(35) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR OAHU—Continued

Unit name	Species occupied	Species unoccupied
		Cyanea acuminata
		Cyanea calycina
		Labordia cyrtandrae
		Lobelia oahuensis
		Melicope christophersenii
		Phyllostegia hirsuta
		Pteralyxia macrocarpa
		Schiedea hookeri
		Schiedea kaalae
		Schiedea trinervis
Oahu—Wet Cliff—Unit 4		
		Cyanea acuminata
		Cyanea calycina
		Labordia cyrtandrae
		Lobelia oahuensis
		Melicope christophersenii
	Phyllostegia hirsute	*Phyllostegia hirsuta*
		Pteralyxia macrocarpa
	Schiedea hookeri	*Schiedea hookeri*
		Schiedea kaalae
		Schiedea trinervis
Oahu—Wet Cliff—Unit 5		
		Cyanea acuminata
		Cyanea calycina
		Labordia cyrtandrae
		Lobelia oahuensis
		Melicope christophersenii
		Phyllostegia hirsuta
		Pteralyxia macrocarpa
		Schiedea hookeri
		Schiedea kaalae
		Schiedea trinervis
Oahu—Wet Cliff—Unit 6		*Adenophorus periens.*
		Chamaesyce deppeana.
		Chamaesyce rockii.
		Cyanea acuminata.
		Cyanea calycina.
	Cyanea crispa	*Cyanea crispa.*
		Cyanea humboldtiana.
		Cyanea purpurellifolia.
		Cyanea st.-johnii.
		Cyanea truncata.
		Cyrtandra kaulantha.
		Cyrtandra sessilis.
		Cyrtandra subumbellata.
		Cyrtandra viridiflora.
		Labordia cyrtandrae.
		Lobelia oahuensis.
		Lysimachia filifolia.
	Phlegmariurus nutans	*Phlegmariurus nutans.*
		Phyllostegia hirsuta.
		Phyllostegia parviflora.
		Plantago princeps.
		Psychotria hexandra var. *oahuensis.*
	Pteralyxia macrocarpa	*Pteralyxia macrocarpa.*
		Sanicula purpurea.
	Schiedea kaalae	*Schiedea kaalae.*
		Tetraplasandra gymnocarpa.
		Trematolobelia singularis.
		Viola oahuensis.
Oahu—Wet Cliff—Unit 7		*Adenophorus periens.*
		Chamaesyce deppeana.
		Chamaesyce rockii.
		Cyanea acuminata.
		Cyanea calycina.
	Cyanea crispa	*Cyanea crispa.*
		Cyanea humboldtiana.
		Cyanea purpurellifolia.
		Cyanea st.-johnii.
		Cyanea truncata.
		Cyrtandra kaulantha.
		Cyrtandra sessilis.

(35) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR OAHU—Continued

Unit name	Species occupied	Species unoccupied
Oahu—Wet Cliff—Unit 8		*Cyrtandra subumbellata.*
		Cyrtandra viridiflora.
		Labordia cyrtandrae.
		Lobelia oahuensis.
		Lysimachia filifolia.
		Phlegmariurus nutans.
		Phyllostegia hirsuta.
		Phyllostegia parviflora.
		Plantago princeps.
	Psychotria hexandra var. *oahuensis*	*Psychotria hexandra* var. *oahuensis.*
		Pteralyxia macrocarpa.
		Sanicula purpurea.
	Schiedea kaalae	*Schiedea kaalae.*
		Tetraplasandra gymnocarpa.
		Trematolobelia singularis.
		Viola oahuensis.
		Adenophorus periens.
		Chamaesyce deppeana.
		Chamaesyce rockii.
	Cyanea acuminata	*Cyanea acuminata.*
	Cyanea calycina	*Cyanea calycina.*
		Cyanea crispa.
	Cyanea humboldtiana	*Cyanea humboldtiana.*
	Cyanea purpurellifolia	*Cyanea purpurellifolia.*
	Cyanea st.-johnii	*Cyanea st.-johnii.*
		Cyanea truncata.
	Cyrtandra kaulantha	*Cyrtandra kaulantha.*
	Cyrtandra sessilis	*Cyrtandra sessilis.*
	Cyrtandra subumbellata	*Cyrtandra subumbellata.*
	Cyrtandra viridiflora	*Cyrtandra viridiflora.*
	Labordia cyrtandrae	*Labordia cyrtandrae.*
	Lobelia oahuensis	*Lobelia oahuensis.*
	Lysimachia filifolia	*Lysimachia filifolia.*
	Phlegmariurus nutans	*Phlegmariurus nutans.*
	Phyllostegia hirsuta	*Phyllostegia hirsuta.*
	Phyllostegia parviflora	*Phyllostegia parviflora.*
	Plantago princeps	*Plantago princeps.*
		Psychotria hexandra var. *oahuensis.*
	Pteralyxia macrocarpa	*Pteralyxia macrocarpa.*
	Sanicula purpurea	*Sanicula purpurea.*
		Schiedea kaalae.
	Tetraplasandra gymnocarpa	*Tetraplasandra gymnocarpa.*
	Trematolobelia singularis	*Trematolobelia singularis.*
	Viola oahuensis	*Viola oahuensis.*

(j) *Plants on Oahu; Constituent elements*—(1) *Flowering plants.*

FAMILY AMARANTHACEAE

Achyranthes splendens var. *rotundata* (round-leaved chaff flower)

Oahu—Coastal—Unit 1, Oahu—Coastal—Unit 13, Oahu—Coastal—Unit 14, Oahu—Coastal—Unit 15, Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, Oahu—Lowland Dry—Unit 11, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Achyranthes splendens* var. *rotundata* on Oahu.

(i) In units Oahu—Coastal—Unit 1, Oahu—Coastal—Unit 13, Oahu—Coastal—Unit 14, and Oahu—Coastal—Unit 15, 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; 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 Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, and Oahu—Lowland Dry—Unit 11, 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*, *Sapindus*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Plumbago*, *Sicyos*, *Sida*, *Waltheria*.

(iii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, 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*.

Nototrichium humile (KULUI)

Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, Oahu—Lowland Dry—Unit 11, Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Nototrichium humile* on Oahu.

(i) In units Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, and Oahu—Lowland Dry—Unit 11, 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*, *Sapindus*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Plumbago*, *Sicyos*, *Sida*, *Waltheria*.

(ii) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—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 Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, 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 APIACEAE

Peucedanum sandwicense (MAKOU)

Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Peucedanum sandwicense* on Oahu. Within these units, the physical and biological features of critical habitat are:

(i) Elevation: Unrestricted.

(ii) Annual precipitation: Less than 75 in (190 cm).

(iii) Substrate: Greater than 65 degree slope, rocky talus.

(iv) Canopy: None.

(v) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(vi) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

Sanicula mariversa (NCN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Sanicula mariversa* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—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*.

(ii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, 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*.

Sanicula purpurea (NCN)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Sanicula purpurea* on Oahu.

(i) In units Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, 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 Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—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, bogs.

(D) Canopy: None.

(E) Subcanopy: *Broussaisia*, *Cheirodendron*, *Leptecophylla*, *Metrosideros*.

(F) Understory: Ferns, Bryophytes, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

Spermolepis hawaiiensis (NCN)

Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 6, Oahu—Lowland Dry—Unit 7, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, Oahu—Lowland Dry—Unit 11, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Spermolepis hawaiiensis* on Oahu.

(i) In units Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 6, Oahu—Lowland Dry—Unit 7, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, and Oahu—Lowland Dry—Unit 11, the physical or 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*, *Sapindus*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Plumbago*, *Sicyos*, *Sida*, *Waltheria*.

(ii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, 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 APOCYNACEAE

Pteralyxia macrocarpa (KAULU)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—6, Oahu—Lowland Mesic—Unit 7, Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, Oahu—Dry Cliff—Unit 8, Oahu—Wet Cliff—Unit 1, Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 3, Oahu—Wet Cliff—Unit 4, Oahu—Wet Cliff—Unit 5, Oahu—Wet

Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Pteralyxia macrocarpa* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—6, and Oahu—Lowland Mesic—Unit 7, 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 Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, 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 Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, 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 Oahu—Wet Cliff—Unit 1, Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 3, Oahu—Wet Cliff—Unit 4, Oahu—Wet Cliff—Unit 5, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—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: Ferns, Bryophytes, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

FAMILY ARALIACEAE

Tetraplasandra gymnocarpa (OHE OHE)

Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Tetraplasandra gymnocarpa* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and

Oahu—Lowland Mesic—Unit 7, 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 Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, 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 Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—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: Ferns, Bryophytes, *Coprosma*, *Dubautia*, *Kadua*, *Peperomia*.

Tetraplasandra lydgatei (NCN)

Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Tetraplasandra lydgatei* on Oahu. Within these units, 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 ASPARAGACEAE

Dracaena forbesii (HALA PEPE)

Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Dracaena forbesii* on Oahu.

(i) In units Oahu—Lowland Dry—Unit 1 and Oahu—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*, *Sapindus*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Plumbago*, *Sicyos*, *Sida*, *Waltheria*.

(ii) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, 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 Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, 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 ASTERACEAE

Bidens amplectens (KOOKOOLAU)

Oahu—Coastal—Unit 1, Oahu—Coastal—Unit 13, Oahu—Coastal—Unit 14, Oahu—Coastal—Unit 15, Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, and Oahu—Lowland Dry—Unit 11, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Bidens amplectens* on Oahu.

(i) In units Oahu—Coastal—Unit 1, Oahu—Coastal—Unit 13, Oahu—Coastal—Unit 14, and Oahu—Coastal—Unit 15, 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; 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 Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, and Oahu—Lowland Dry—Unit 11, 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*, *Sapindus*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Plumbago*, *Sicyos*, *Sida*, *Waltheria*.

Dubautia herbstobatae (NAENAE)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Dubautia herbstobatae* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—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*.

(ii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, 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*.

Hesperomannia arborescens (NCN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Hesperomannia arborescens* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, 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 Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, 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*.

Hesperomannia arbuscula (NCN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, and Oahu—Lowland Wet—Unit 5, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Hesperomannia arbuscula* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—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*.

(ii) In units Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, and Oahu—Lowland Wet—Unit 5, 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*.

Lipochaeta lobata var. *leptophylla* (NEHE)

Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Lipochaeta lobata* var. *leptophylla* on Oahu. Within these units, the physical and biological features of critical habitat are:

(i) Elevation: Unrestricted.

(ii) Annual precipitation: Less than 75 in (190 cm).

(iii) Substrate: Greater than 65 degree slope, rocky talus.

(iv) Canopy: None.

(v) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(vi) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

Melanthera tenuifolia (NEHE)

Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, Oahu—Lowland Dry—Unit 11, Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Melanthera tenuifolia* on Oahu.

(i) In units Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, and Oahu—Lowland Dry—Unit 11, 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*, *Sapindus*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Plumbago*, *Sicyos*, *Sida*, *Waltheria*.

(ii) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—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 Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, 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*.

Tetramolopium filiforme (NCN)

Oahu–Dry Cliff–Unit 1, Oahu–Dry Cliff–Unit 2, Oahu–Dry Cliff–Unit 3, Oahu–Dry Cliff–Unit 4, Oahu–Dry Cliff–Unit 6, Oahu–Dry Cliff–Unit 7a, Oahu–Dry Cliff–Unit 7b, and Oahu–Dry Cliff–Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Tetramolopium filiforme* on Oahu. Within these units, the physical and biological features of critical habitat are:

(i) Elevation: Unrestricted.

(ii) Annual precipitation: Less than 75 in (190 cm).

(iii) Substrate: Greater than 65 degree slope, rocky talus.

(iv) Canopy: None.

(v) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(vi) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

Tetramolopium lepidotum ssp. *lepidotum* (NCN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Tetramolopium lepidotum* ssp. *lepidotum* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—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*.

(ii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, 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 BRASSICACEAE

Lepidium arbuscula (ANAUNAU)

Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for Lepidium arbuscula on Oahu. Within these units, the physical and biological features of critical habitat are:

(i) Elevation: Unrestricted.

(ii) Annual precipitation: Less than 75 in (190 cm).

(iii) Substrate: Greater than 65 degree slope, rocky talus.

(iv) Canopy: None.

(v) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(vi) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

FAMILY CAMPANULACEAE

Cyanea acuminata (HAHA)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Montane Wet—Unit 1, Oahu—Wet Cliff—Unit 1, Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 3, Oahu—Wet Cliff—Unit 4, Oahu—Wet Cliff—Unit 5, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyanea acuminata* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, 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 Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, 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 Oahu—Montane Wet—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,600 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 Oahu—Wet Cliff—Unit 1, Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 3, Oahu—Wet Cliff—Unit 4, Oahu—Wet Cliff—Unit 5, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—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: Ferns, Bryophytes, *Coprosma, Dubautia, Kadua, Peperomia.*

Cyanea calycina (HAHA)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Montane Wet—Unit 1, Oahu—Wet Cliff—Unit 1, Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 3, Oahu—Wet Cliff—Unit 4, Oahu—Wet Cliff—Unit 5, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyanea calycina* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, 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 Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, 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 Oahu—Montane Wet—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,600 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 Oahu—Wet Cliff—Unit 1, Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 3, Oahu—Wet Cliff—Unit 4, Oahu—Wet Cliff—Unit 5, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—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 crispa (NCN)

Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyanea crispa* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, 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 Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, 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 Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—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 grimesiana ssp. *grimesiana* (HAHA)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyanea grimesiana* ssp. *grimesiana* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—

Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, 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 Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, 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 grimesiana ssp. *obatae* (HAHA)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyanea grimesiana* ssp. *obatae* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—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*.

(ii) In units Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, and Oahu—Lowland Wet—Unit 5, 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 Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, 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*.

Cyanea humboldtiana (HAHA)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyanea humboldtiana* on Oahu.

(i) In units Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, 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 Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—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 koolauensis (HAHA)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyanea koolauensis* on Oahu. Within these units, 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*.

Cyanea lanceolata (HAHA)

Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyanea lanceolata* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, 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 Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, 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 longiflora (HAHA)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyanea longiflora* on Oahu. Within these units, 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*.

Cyanea pinnatifida (HAHA)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyanea pinnatifida* on Oahu. Within these units, 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*.

Cyanea purpurellifolia (HAHA)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyanea purpurellifolia* on Oahu.

(i) In units Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, 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 Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, the physical or 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 st.-johnii (HAHA)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyanea st.-johnii* on Oahu.

(i) In units Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, 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 Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—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 superba (NCN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyanea superba* on Oahu. Within these units, 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*.

Cyanea truncata (HAHA)

Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8,

Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyanea truncata* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, 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 Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, 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 Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—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*.

Delissea subcordata (OHA)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for Delissea subcordata on Oahu. Within these units, 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*.

Lobelia gaudichaudii ssp. *koolauensis* (NCN)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Lobelia gaudichaudii* ssp. *koolauensis* on Oahu. Within these units, 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*.

Lobelia monostachya (NCN)

Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Lobelia monostachya* on Oahu. Within these units, 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*.

Lobelia niihauensis (NCN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Lobelia niihauensis* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—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*, *Psydrax*, *Pleomele*.

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

(ii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, 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*.

Lobelia oahuensis (NCN)

Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Montane Wet—Unit 1, Oahu—Wet Cliff—Unit 1, Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 3, Oahu—Wet Cliff—Unit 4, Oahu—Wet Cliff—Unit 5, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Lobelia oahuensis* on Oahu.

(i) In units Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2,

Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, 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 Oahu—Montane Wet—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,600 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 Oahu—Wet Cliff—Unit 1, Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 3, Oahu—Wet Cliff—Unit 4, Oahu—Wet Cliff—Unit 5, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—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*.

Trematolobelia singularis (NCN)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Trematolobelia singularis* on Oahu.

(i) In units Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, 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 Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, the physical or 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 CARYOPHYLLACEAE

Schiedea hookeri (NCN)

Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, Oahu—Lowland Dry—Unit 11, Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, Oahu—Dry Cliff—Unit 8, Oahu—Wet Cliff—Unit 1, Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 3, Oahu—Wet Cliff—Unit 4, and Oahu—Wet Cliff—Unit 5, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Schiedea hookeri* on Oahu.

(i) In units Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, and Oahu—Lowland Dry—Unit 11, 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*, *Sapindus*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

(ii) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—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 Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, and Oahu—Lowland Wet—Unit 5, 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 Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, 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*.

(v) In units Oahu—Wet Cliff—Unit 1, Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 3, Oahu—Wet Cliff—Unit 4, and Oahu—Wet Cliff—Unit 5, 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*.

Schiedea kaalae (NCN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Wet Cliff—Unit 1, Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 3, Oahu—Wet Cliff—Unit 4, Oahu—Wet Cliff—Unit 5, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Schiedea kaalae* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, 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 Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, and Oahu—Lowland Wet—Unit 5, 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 Oahu—Wet Cliff—Unit 1, Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 3, Oahu—Wet Cliff—Unit 4, Oahu—Wet Cliff—Unit 5, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—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*.

Schiedea kealiae (MAOLIOLI)

Oahu—Coastal—Unit 1, Oahu—Coastal—Unit 13, Oahu—Coastal—Unit 14, Oahu—Coastal—Unit 15, Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, and Oahu—Lowland Dry—Unit 11, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for Schiedea kealiae on Oahu.

(i) In unit Oahu—Coastal—Unit 1, Oahu—Coastal—Unit 13, Oahu—Coastal—Unit 14, and Oahu—Coastal—Unit 15, 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; 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 Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, and Oahu—Lowland Dry—Unit 11, 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*, *Sapindus*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Plumbago*, *Sicyos*, *Sida*, *Waltheria*.

Schiedea nuttallii (NCN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for Schiedea nuttallii on Oahu. Within these units, 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 obovata (NCN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Schiedea obovata* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—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*.

(ii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, 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 trinervis (NCN)

Oahu—Montane Wet—Unit 1, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, Oahu—Dry Cliff—Unit 8, Oahu—Wet Cliff—Unit 1, Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 3, Oahu—Wet Cliff—Unit 4, and Oahu—Wet Cliff—Unit 5, identified in the legal descriptions in paragraph

(i) of this section, constitute critical habitat for *Schiedea trinervis* on Oahu.

(i) In unit Oahu—Montane Wet—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,600 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 Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, 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 Oahu—Wet Cliff—Unit 1, Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 3, Oahu—Wet Cliff—Unit 4, and Oahu—Wet Cliff—Unit 5, 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*.

Silene lanceolata (NCN)

Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for Silene lanceolata on Oahu. Within these units, the physical and biological features of critical habitat are:

(i) Elevation: Unrestricted.

(ii) Annual precipitation: Less than 75 in (190 cm).

(iii) Substrate: Greater than 65 degree slope, rocky talus.

(iv) Canopy: None.

(v) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.

(vi) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.

Silene perlmanii (NCN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Silene perlmanii* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, the physical or 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 Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, 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 CONVOLVULACEAE

Bonamia menziesii (NCN)

Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, Oahu—Lowland Dry—Unit 11, Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Bonamia menziesii* on Oahu.

(i) In units Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, and Oahu—Lowland Dry—Unit 11, 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*, *Sapindus*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Plumbago*, *Sicyos*, *Sida*, *Waltheria*.

(ii) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, 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 Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, 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 CYPERACEAE

Cyperus pennatiformis (NCN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyperus pennatiformis* on Oahu. Within these units, 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*.

Cyperus trachysanthos (PUUKAA)

Oahu—Coastal—Unit 9, Oahu—Coastal—Unit 11, Oahu—Coastal—Unit 12, and Oahu—Lowland Dry—Unit 7, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyperus trachysanthos* on Oahu.

(i) In units Oahu—Coastal—Unit 9, Oahu—Coastal—Unit 11, and Oahu—Coastal—Unit 12, 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; weathered clay soils; seasonal wetlands; mudflats.

(D) Canopy: *Hibiscus*, *Myoporum*, *Santalum*, *Scaevola*.

(E) Subcanopy: *Gossypium*, *Sida*, *Vitex*.

(F) Understory: *Eragrostis*, *Jacquemontia*, *Lyceum*, *Nama*, *Sesuvium*, *Sporobolus*, *Vigna*.

(ii) In unit Oahu—Lowland Dry—Unit 7, 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, seasonal wetlands.

(D) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*, *Sapindus*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Plumbago*, *Sicyos*, *Sida*, *Waltheria*.

FAMILY EUPHORBIACEAE

Chamaesyce celastroides var. *kaenana* (AKOKO)

Oahu—Coastal—Unit 1, Oahu—Coastal—Unit 13, Oahu—Coastal—Unit 14, Oahu—Coastal—Unit 15, Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, Oahu—Lowland Dry—Unit 11, Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Chamaesyce celastroides* var. *kaenana* on Oahu.

(i) In units Oahu—Coastal—Unit 1, Oahu—Coastal—Unit 13, Oahu—Coastal—Unit 14, and Oahu—Coastal—Unit 15, 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; 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 Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, and Oahu—Lowland Dry—Unit 11, 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*, *Sapindus*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Plumbago*, *Sicyos*, *Sida*, *Waltheria*.

(iii) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2,

Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, 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*.

Chamaesyce deppeana (AKOKO)

Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Chamaesyce deppeana* on Oahu. Within these units, 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*.

Chamaesyce herbstii (AKOKO)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Chamaesyce herbstii* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—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*.

(ii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, 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*.

Chamaesyce kuwaleana (AKOKO)

Oahu—Coastal—Unit 2, Oahu—Coastal—Unit 3, Oahu—Coastal—Unit 4, Oahu—Coastal—Unit 5, Oahu—Coastal—Unit 6, Oahu—Coastal—Unit 7, Oahu—Coastal—Unit 8, Oahu—Coastal—Unit 9, Oahu—Coastal—Unit 10, Oahu—Coastal—Unit 11, Oahu—Coastal—Unit 12, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Chamaesyce kuwaleana* on Oahu.

(i) In units Oahu—Coastal—Unit 2, Oahu—Coastal—Unit 3, Oahu—Coastal—Unit 4, Oahu—Coastal—Unit 5, Oahu—Coastal—Unit 6, Oahu—Coastal—Unit 7, Oahu—Coastal—Unit 8,

Oahu—Coastal—Unit 9, Oahu—Coastal—Unit 10, Oahu—Coastal—Unit 11, and Oahu—Coastal—Unit 12, 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; 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 Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, 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*.

Chamaesyce rockii (AKOKO)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Chamaesyce rockii* on Oahu.

(i) In units Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, 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 Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—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*.

Euphorbia haeleeleana (AKOKO)

Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, Oahu—Lowland Dry—Unit 11, Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Euphorbia haeleeleana* on Oahu.

(i) In units Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, and Oahu—Lowland Dry—Unit 11, 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*, *Sapindus*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Plumbago*, *Sicyos*, *Sida*, *Waltheria*.

(ii) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—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*.

Euphorbia skottsbergii var. *skottsbergii* (AKOKO)

Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, and Oahu—Lowland Dry—Unit 11, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Euphorbia skottsbergii* var. *skottsbergii* on Oahu. Within these units, 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*, *Sapindus*.

(v) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(vi) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Plumbago*, *Sicyos*, *Sida*, *Waltheria*.

(vii) Coral outcrop substrate.

Flueggea neowawraea (MEHAMEHAME)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Flueggea neowawraea* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—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*.

(ii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, 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 FABACEAE

Sesbania tomentosa (OHAI)

Oahu—Coastal—Unit 1, Oahu—Coastal—Unit 2, Oahu—Coastal—Unit 3, Oahu—Coastal—Unit 4, Oahu—Coastal—Unit 5, Oahu—Coastal—Unit 6, Oahu—Coastal—Unit 7, Oahu—Coastal—Unit 8, Oahu—Coastal—Unit 9, Oahu—Coastal—Unit 10, Oahu—Coastal—Unit 11, Oahu—Coastal—Unit 12, Oahu—Coastal—Unit 13, Oahu—Coastal—Unit 14, and Oahu—Coastal—Unit 15, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Sesbania tomentosa* on Oahu. Within these units, 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; 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*.

Vigna o-wahuensis (NCN)

Oahu—Coastal—Unit 1, Oahu—Coastal—Unit 2, Oahu—Coastal—Unit 3, Oahu—Coastal—Unit 4, Oahu—Coastal—Unit 5, Oahu—Coastal—Unit 6, Oahu—Coastal—Unit 7, Oahu—Coastal—Unit 8, Oahu—Coastal—Unit 9, Oahu—Coastal—Unit 10, Oahu—Coastal—Unit 11, Oahu—Coastal—Unit 12, Oahu—Coastal—Unit 13, Oahu—Coastal—Unit 14, and Oahu—Coastal—Unit 15, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Vigna o-wahuensis* on Oahu. Within these units, 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; 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 GENTIANACEAE

Schenkia sebaeoides (AWIWI)

Oahu—Coastal—Unit 1, Oahu—Coastal—Unit 2, Oahu—Coastal—Unit 3, Oahu—Coastal—Unit 4, Oahu—Coastal—Unit 5, Oahu—Coastal—Unit 6, Oahu—Coastal—Unit 7, Oahu—Coastal—Unit 8, Oahu—Coastal—Unit 9, Oahu—Coastal—Unit 10, Oahu—Coastal—Unit 11, Oahu—Coastal—Unit 12, Oahu—Coastal—Unit 13, Oahu—Coastal—Unit 14, and Oahu—Coastal—Unit 15, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Schenkia sebaeoides* on Oahu. Within these units, 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; 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 dentata (HAIWALE)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—

Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyrtandra dentata* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, 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 Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, 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 Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, 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*.

Cyrtandra gracilis (HAIWALE)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyrtandra gracilis* on Oahu. Within these units, 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*.

Cyrtandra kaulantha (HAIWALE)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—

Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyrtandra kaulantha* on Oahu.

(i) In units Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, 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 Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—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 polyantha (HAIWALE)

Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyrtandra polyantha* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, 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 Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, 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*.

Cyrtandra sessilis (HAIWALE)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—

Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyrtandra sessilis* Oahu.

(i) In units Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, 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 Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—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 subumbellata (HAIWALE)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyrtandra subumbellata* on Oahu.

(i) In units Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, 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 Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—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 viridiflora (HAIWALE)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyrtandra viridiflora* on Oahu.

(i) In units Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, 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 Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—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 waiolani (HAIWALE)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyrtandra waiolani* on Oahu. Within these units, 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*.

FAMILY LAMIACEAE

Phyllostegia hirsuta (NCN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Montane Wet—Unit 1, Oahu—Wet Cliff—Unit 1, Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 3, Oahu—Wet Cliff—Unit 4, Oahu—Wet Cliff—Unit 5, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Phyllostegia hirsuta* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, 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 Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, 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 Oahu—Montane Wet—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,600 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 Oahu—Wet Cliff—Unit 1, Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 3, Oahu—Wet Cliff—Unit 4, Oahu—Wet Cliff—Unit 5, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—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*.

Phyllostegia kaalaensis (NCN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for Phyllostegia kaalaensis on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—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*.

(ii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, 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*.

Phyllostegia mollis (NCN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, and Oahu—Lowland Wet—Unit 5, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Phyllostegia mollis* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, 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 Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, and Oahu—Lowland Wet—Unit 5, 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*.

Phyllostegia parviflora (NCN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Phyllostegia parviflora* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, the physical and biological features of critical habitat for *Phyllostegia parviflora* var. *lydgatei* 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 Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, the physical and biological features of critical habitat for *Phyllostegia parviflora* var. *parviflora* 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 Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, the physical and biological features of critical habitat for *Phyllostegia parviflora* var. *parviflora* 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 Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, the physical and biological features of critical habitat for *Phyllostegia parviflora* var. *parviflora* 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*.

Stenogyne kanehoana (NCN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Stenogyne kanehoana* on Oahu. Within these units, 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 LOGANIACEAE

Labordia cyrtandrae (KAMAKAHALA)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Montane Wet—Unit 1, Oahu—Wet Cliff—Unit 1, Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 3, Oahu—Wet Cliff—Unit 4, Oahu—Wet Cliff—Unit 5, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Labordia cyrtandrae* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, 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 Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, 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 Oahu—Montane Wet—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,600 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 Oahu—Wet Cliff—Unit 1, Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 3, Oahu—Wet Cliff—Unit 4, Oahu—Wet Cliff—Unit 5, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—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 MALVACEAE

Abutilon sandwicense (NCN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Abutilon sandwicense* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—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*.

(ii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit

7b, and Oahu—Dry Cliff—Unit 8, 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*.

Hibiscus brackenridgei (MAO HAU HELE)

Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, Oahu—Lowland Dry—Unit 11, Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Hibiscus brackenridgei* var. *mokuleianus* and *Hibiscus brackenridgei* var. *molokaiana* on Oahu.

(i) In units Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, and Oahu—Lowland Dry—Unit 11, the physical and biological features of critical habitat for *Hibiscus brackenridgei* var. *mokuleianus* and *Hibiscus brackenridgei* var. *molokaiana* 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*, *Sapindus*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Plumbago*, *Sicyos*, *Sida*, *Waltheria*.

(ii) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, the physical and biological features of critical habitat for *Hibiscus brackenridgei* var. *mokuleianus* and *Hibiscus brackenridgei* var. *molokaiana* 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 MYRSINACEAE

Myrsine juddii (KOLEA)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Myrsine juddii* on Oahu. Within these units, 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*.

FAMILY MYRTACEAE

Eugenia koolauensis (NIOI)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—

Unit 7, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Eugenia koolauensis* on Oahu. Within these units, 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 ORCHIDACEAE

Platanthera holochila (NCN)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Platanthera holochila* on Oahu. Within these units, 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 and bog hummocks.

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

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

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

FAMILY PLANTAGINACEAE

Plantago princeps (LAUKAHI KUAHIWI)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, Oahu—Dry Cliff—Unit 8, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Plantago princeps* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, the physical and biological features of critical habitat for *Plantago princeps* var. *princeps* 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 Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7,

Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, the physical and biological features of critical habitat for *Plantago princeps* var. *longibracteata* 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 Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, the physical and biological features of critical habitat for *Plantago princeps* var. *princeps* 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 Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, the physical and biological features of critical habitat for *Plantago princeps* var. *princeps* 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*.

(v) In units Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, the physical and biological features of critical habitat for *Plantago princeps* var. *princeps* 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

Cenchrus agrimonioides
(KAMANOMANO)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cenchrus agrimonioides* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—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*.

(ii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, 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*.

Eragrostis fosbergii (FOSBERG'S LOVE GRASS)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Eragrostis fosbergii* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—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*.

(ii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, 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 PRIMULACEAE

Lysimachia filifolia (NCN)

Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Lysimachia filifolia* on Oahu. Within these units, 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 RHAMNACEAE

Colubrina oppositifolia (KAUILA)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Colubrina oppositifolia* on Oahu. Within these units, 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*.

Gouania meyenii (NCN)

Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, Oahu—Lowland Dry—Unit 11, Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Gouania meyenii* on Oahu.

(i) In units Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 6, Oahu—Lowland Dry—Unit 7, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, and Oahu—Lowland Dry—Unit 11, 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*, *Sapindus*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

(ii) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—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 Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, 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*.

Gouania vitifolia (NCN)

Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, Oahu—Lowland Dry—Unit 11, Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Gouania vitifolia* on Oahu.

(i) In units Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—

Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, and Oahu—Lowland Dry—Unit 11, 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*, *Sapindus*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

(ii) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—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 Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, and Oahu—Lowland Wet—Unit 5, 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 Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, 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 RUBIACEAE

Gardenia mannii (NANU)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Gardenia mannii* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, 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 Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, 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*.

Kadua coriacea (KIOELE)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Kadua coriacea* on Oahu. Within these units, 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*.

Kadua degeneri (NCN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Kadua degeneri* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—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*.

(ii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, 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*.

Kadua parvula (NCN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Kadua parvula* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—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*.

(ii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, 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*.

Psychotria hexandra var. *oahuensis* (KOPIKO)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Psychotria hexandra* var. *oahuensis* on Oahu.

(i) In units Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, 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 Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—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 christophersenii (ALANI)

Oahu—Montane Wet—Unit 1, Oahu—Wet Cliff—Unit 1, Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 3, Oahu—Wet Cliff—Unit 4, and Oahu—Wet

Cliff—Unit 5, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Melicope christophersenii* on Oahu.

(i) In unit Oahu—Montane Wet—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,600 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 Oahu—Wet Cliff—Unit 1, Oahu—Wet Cliff—Unit 2, Oahu—Wet Cliff—Unit 3, Oahu—Wet Cliff—Unit 4, and Oahu—Wet Cliff—Unit 5, 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*.

Melicope hiiakae (ALANI)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Melicope hiiakae* on Oahu. Within these units, 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*.

Melicope cornuta var. *cornuta* (NCN)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Melicope cornuta* var. *cornuta* on Oahu. Within these units, 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*.

Melicope lydgatei (ALANI)

Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Melicope lydgatei* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5,

Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, 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 Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, 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*.

Melicope makahae (ALANI)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Melicope makahae* on Oahu.

(i) In units Oahu Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—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*.

(ii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, 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*.

Melicope pallida (ALANI)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Melicope pallida* on Oahu. Within these units, 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 saint-johnii (ALANI)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Melicope saint-johnii* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, 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 Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, 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*.

Melicope cornuta var. *decurrens* (NCN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Melicope cornuta* var. *decurrens* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—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 to190 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 Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, 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*.

Zanthoxylum oahuense (AE)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland

Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Zanthoxylum oahuense* on Oahu. Within these units, 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*.

FAMILY SAPINDACEAE

Alectryon macrococcus (MAHOE)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Montane Wet—Unit 1, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Alectryon macrococcus* var. *macrococcus* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, 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 Oahu—Montane Wet—Unit 1, the physical and biological features of critical habitat are:

(A) Elevation: 3,300 to 6,600 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 Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, 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 SOLANACEAE

Solanum sandwicense (POPOLO, AIAKEAKUA)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Solanum sandwicense* on Oahu. Within these units, 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 URTICACEAE

Neraudia angulata (NCN)

Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, Oahu—Lowland Dry—Unit 11, Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Neraudia angulata* on Oahu.

(i) In units Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, and Oahu—Lowland Dry—Unit 11, the physical and biological features of critical habitat for *Neraudia angulata* var. *angulata* and *Neraudia angulata* var. *dentata 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*, *Sapindus*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

(ii) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—Lowland Mesic—Unit 3, the physical and biological features of critical habitat for *Neraudia angulata* var. *angulata* and *Neraudia angulata* var. *dentata* 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 Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, the physical and biological features of critical habitat for *Neraudia angulata* var. *angulata* and *Neraudia angulata* var. *dentata* 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*.

Urera kaalae (OPUHE)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, and Oahu—Lowland Wet—Unit 5, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Urera kaalae* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—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*.

(ii) In units Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, and Oahu—Lowland Wet—Unit 5, 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 VIOLACEAE

Isodendrion laurifolium (AUPAKA)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Isodendrion laurifolium* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, 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 Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, 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*.

Isodendrion longifolium (AUPAKA)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Isodendrion longifolium* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, 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 Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, Oahu—Lowland Wet—Unit 5, Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, 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*.

Isodendrion pyrifolium (WAHINE NOHO KULA)

Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, Oahu—Lowland Dry—Unit 11, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Isodendrion pyrifolium* on Oahu.

(i) In units Oahu—Lowland Dry—Unit 1, Oahu—Lowland Dry—Unit 2, Oahu—Lowland Dry—Unit 8, Oahu—Lowland Dry—Unit 9, Oahu—Lowland Dry—Unit 10, and Oahu—Lowland Dry—Unit 11, 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*, *Sapindus*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

(ii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, 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*.

Viola chamissoniana ssp. *chamissoniana* (PAMAKANI)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—

Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Viola chamissoniana* ssp. *chamissoniana* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—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*.

(ii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, 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*.

Viola oahuensis (NCN)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Viola oahuensis* on Oahu.

(i) In units Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, 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 Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—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 VISCACEAE

Korthalsella degeneri (HULUMOA)

Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Korthalsella degeneri* on Oahu. Within these units, the physical and biological features of critical habitat are:

(i) Elevation: Unrestricted.

(ii) Annual precipitation: Less than 75 in (190 cm).

(iii) Substrate: Greater than 65 degree slope, rocky talus.

(iv) Canopy: None.
(v) Subcanopy: *Antidesma*, *Chamaesyce*, *Diospyros*, *Dodonaea*.
(vi) Understory: *Bidens*, *Eragrostis*, *Melanthera*, *Schiedea*.
(vii) Host plants *Sapindus oahuensis* and *Nestigis sandwicensis*.

(2) *Ferns and allies*.

FAMILY ADIANTACEAE

Pteris lidgatei (NCN)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Pteris lidgatei* on Oahu. Within these units, 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*.

FAMILY ASPLENIACEAE

Ctenitis squamigera (PAUOA)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Ctenitis squamigera* on Oahu. Within these units, 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*.

Asplenium dielerectum (NCN)

Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Asplenium dielerectum* on Oahu. Within these units, 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*.

Asplenium dielfalcatum (NCN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, Oahu—Lowland Mesic—Unit 7, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Asplenium dielfalcatum* on Oahu.
(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—

Lowland Mesic—Unit 4, Oahu—Lowland Mesic—Unit 5, Oahu—Lowland Mesic—Unit 6, and Oahu—Lowland Mesic—Unit 7, 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 Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, 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*.

Diellia unisora (NCN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Diellia unisora* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—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*.

(ii) In units Oahu—Dry Cliff—Unit 1, Oahu—Dry Cliff—Unit 2, Oahu—Dry Cliff—Unit 3, Oahu—Dry Cliff—Unit 4, Oahu—Dry Cliff—Unit 6, Oahu—Dry Cliff—Unit 7a, Oahu—Dry Cliff—Unit 7b, and Oahu—Dry Cliff—Unit 8, 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*.

Diplazium molokaiense (NCN)

Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, Oahu—Lowland Mesic—Unit 3, Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, and Oahu—Lowland Wet—Unit 5, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Diplazium molokaiense* on Oahu.

(i) In units Oahu—Lowland Mesic—Unit 1, Oahu—Lowland Mesic—Unit 2, and Oahu—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*.

(ii) In units Oahu—Lowland Wet—Unit 1, Oahu—Lowland Wet—Unit 2, Oahu—Lowland Wet—Unit 3, Oahu—Lowland Wet—Unit 4, and Oahu—Lowland Wet—Unit 5, 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 GRAMMITIDACEAE

Adenophorus periens (PALAI LAAU)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Adenophorus periens* on Oahu.

(i) In units Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, 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 Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—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 LYCOPODIACEAE

Phlegmariurus nutans (WAWAEIOLE)

Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, Oahu—Lowland Wet—Unit 16, Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—Wet Cliff—Unit 8, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Phlegmariurus nutans* on Oahu.

(i) In units Oahu—Lowland Wet—Unit 6, Oahu—Lowland Wet—Unit 7, Oahu—Lowland Wet—Unit 8, Oahu—Lowland Wet—Unit 9, Oahu—Lowland Wet—Unit 10, Oahu—Lowland Wet—Unit 11, Oahu—Lowland Wet—Unit 12, Oahu—Lowland Wet—Unit 13, Oahu—Lowland Wet—Unit 14, Oahu—Lowland Wet—Unit 15, and Oahu—Lowland Wet—Unit 16, 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 Oahu—Wet Cliff—Unit 6, Oahu—Wet Cliff—Unit 7, and Oahu—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 MARSILEACEAE

Marsilea villosa (IHI IHI)

Oahu—Coastal—Unit 9, Oahu—Coastal—Unit 11, Oahu—Coastal—Unit 12, and Oahu—Lowland Dry—Unit 7, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Marsilea villosa* on Oahu.

(i) In units Oahu—Coastal—Unit 9, Oahu—Coastal—Unit 11, and Oahu—Coastal—Unit 12, 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; weathered clay soils; seasonal wetlands; mudflats.

(D) Canopy: *Hibiscus*, *Myoporum*, *Santalum*, *Scaevola*.

(E) Subcanopy: *Gossypium*, *Sida*, *Vitex*.

(F) Understory: *Eragrostis*, *Jacquemontia*, *Lyceum*, *Nama*, *Sesuvium*, *Sporobolus*, *Vigna*.

(ii) In unit Oahu—Lowland Dry—Unit 7, 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, seasonal wetlands.

(D) Canopy: *Diospyros*, *Myoporum*, *Pleomele*, *Santalum*, *Sapindus*.

(E) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(F) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

FAMILY PTERIDACEAE

Doryopteris takeuchii (NCN)

Oahu—Lowland Dry—Unit 6 and Oahu—Lowland Dry—Unit 7, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Doryopteris takeuchii* on Oahu. Within these units, 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*, *Sapindus*.

(v) Subcanopy: *Chamaesyce*, *Dodonaea*, *Leptecophylla*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(vi) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

(k) *Maps and critical habitat unit descriptions for the island of Hawaii, HI.* Critical habitat units are described in this paragraph (k). Map coordinates were created using World Geodetic System 1984 (WGS84). The map in paragraph (k)(1) shows the general locations of the critical habitat units designated on the island of Hawaii. Existing humanmade features and structures, such as buildings, aqueducts, runways, roads, and other paved areas, and the land on which they are located existing within the legal boundaries on April 11, 2024 are not included in the critical habitat designation. Federal actions limited to those areas, therefore, would not trigger a consultation

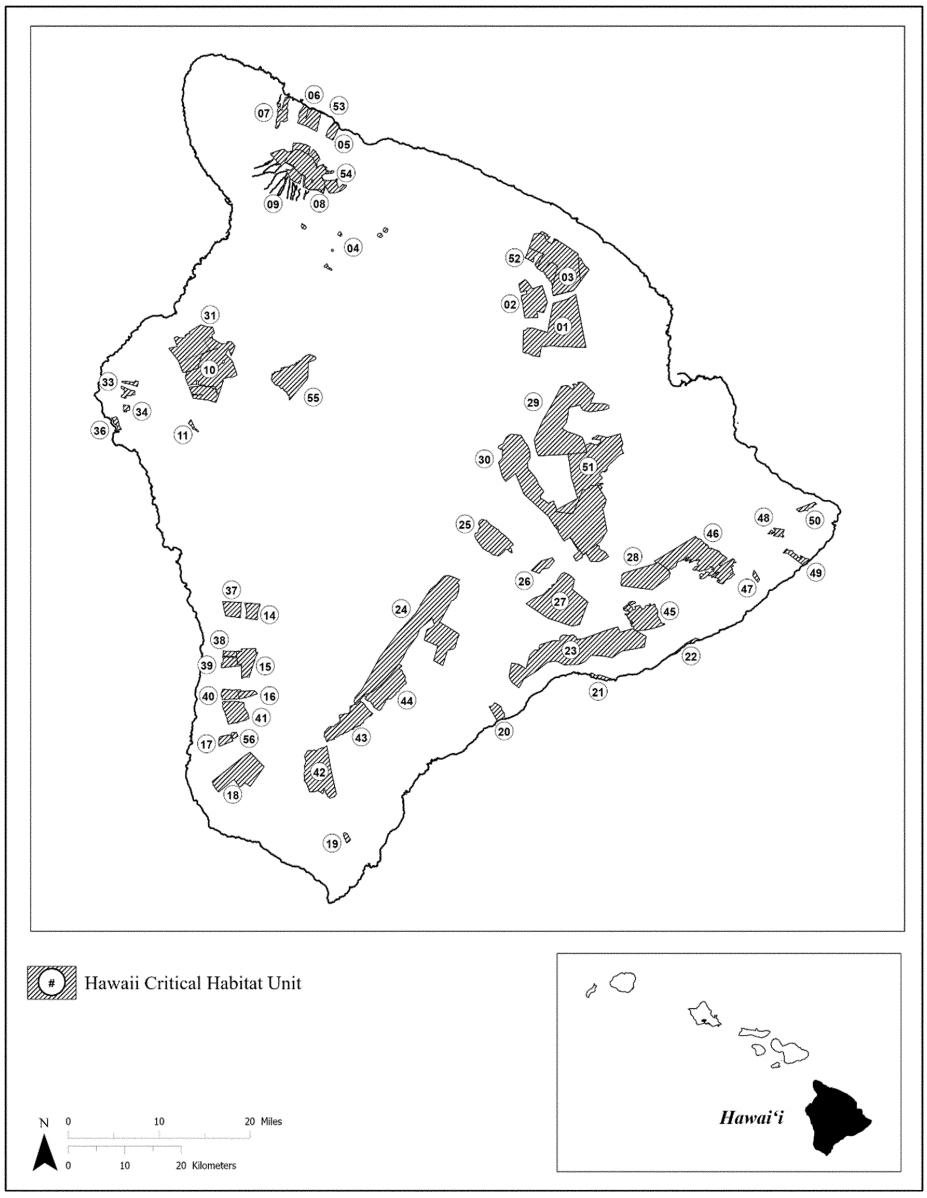
under section 7 of the Act unless they may affect the species or physical or biological features in adjacent critical habitat.

(1) Index map follows:

Figure 1 to paragraph (k)

MAP 1

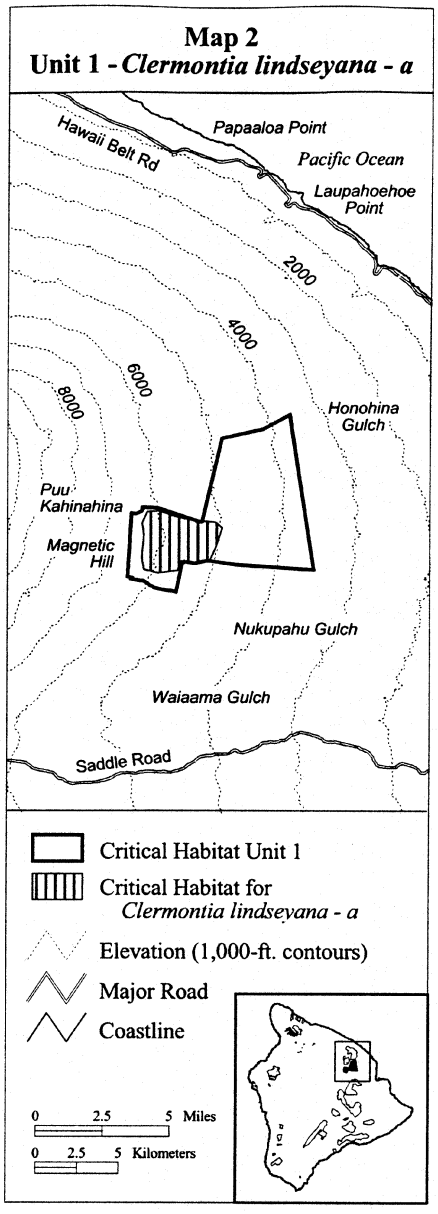
Hawaii Critical Habitat—Island Index Map



(2) Hawaii 1—*Clermontia lindseyana*—a (1,337 ha, 3,303 ac)

(i) [Reserved]

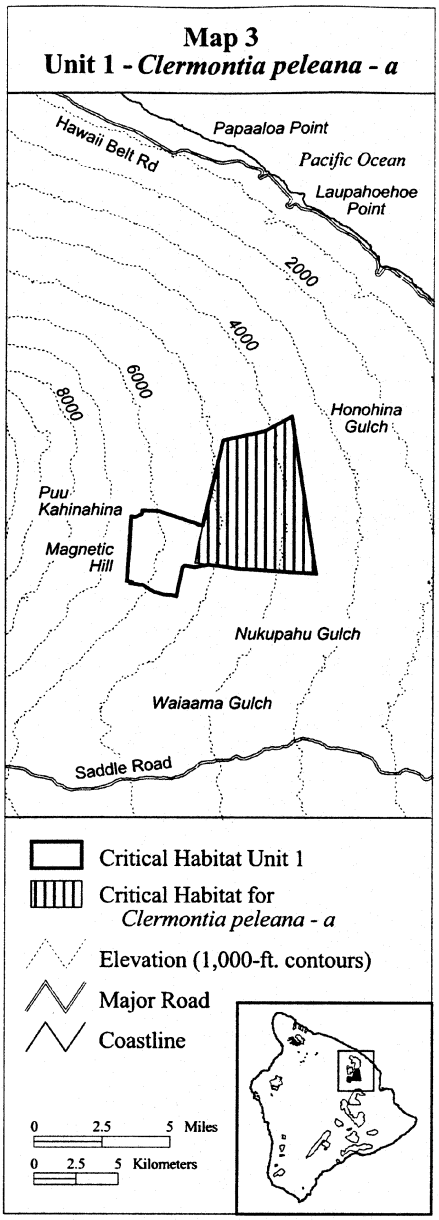
(ii) Map 2 follows:



(3) Hawaii 1—*Clermontia peleana*—a (4,704 ha, 11,624 ac)

(i) [Reserved]

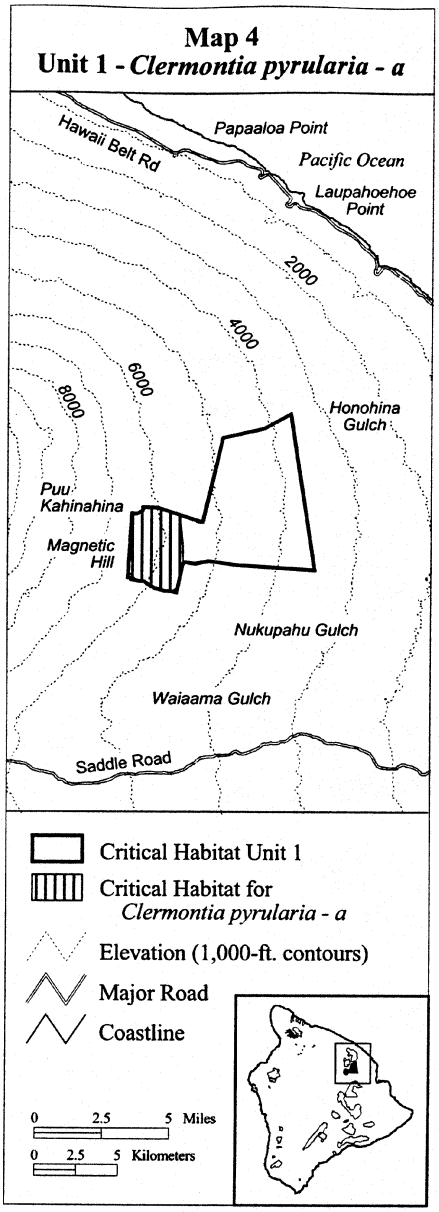
(ii) Map 3 follows:



(4) Hawaii 1—*Clermontia pyrularia*—a (1,378 ha, 3,405 ac)

(i) [Reserved]

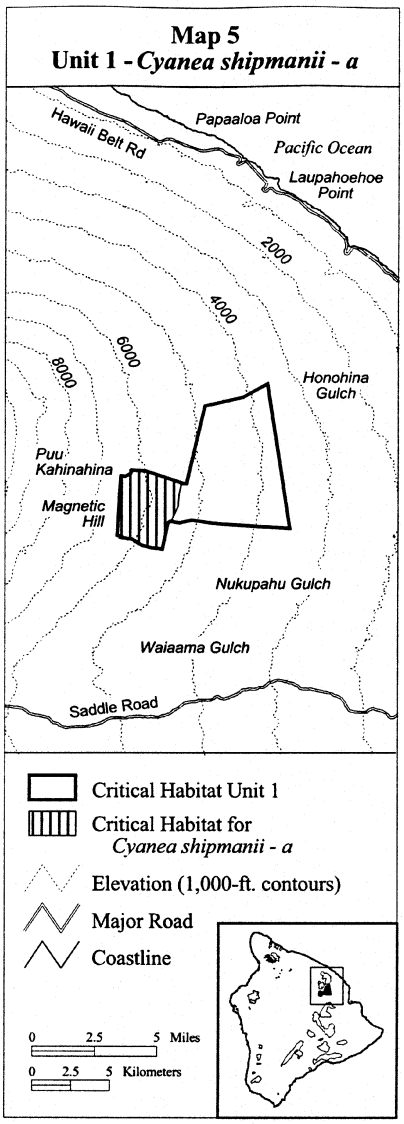
(ii) Map 4 follows:



(5) Hawaii 1—*Cyanea shipmanii*—a (1,577 ha, 3,898 ac)

(i) [Reserved]

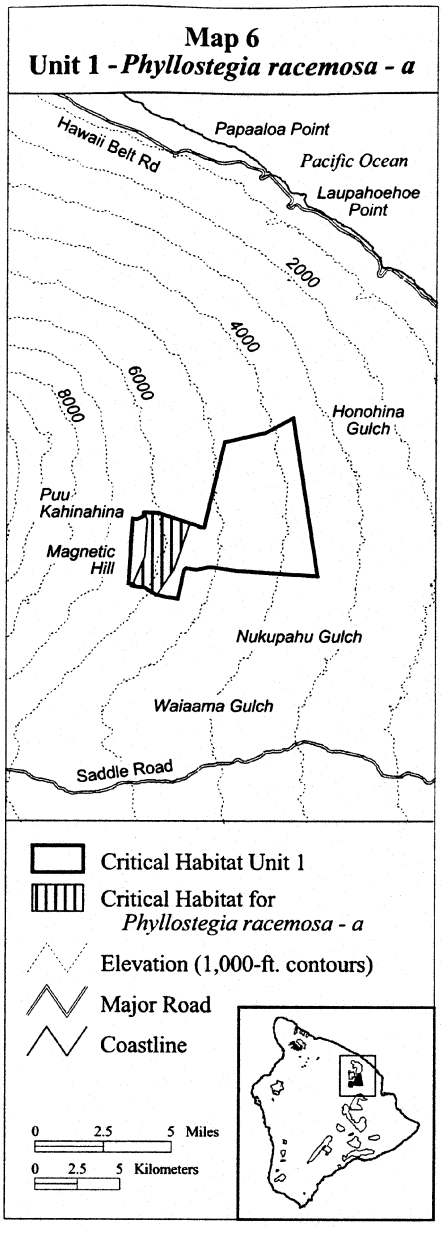
(ii) Map 5 follows:



(6) Hawaii 1—*Phyllostegia racemosa*—a (938 ha, 2,317 ac)

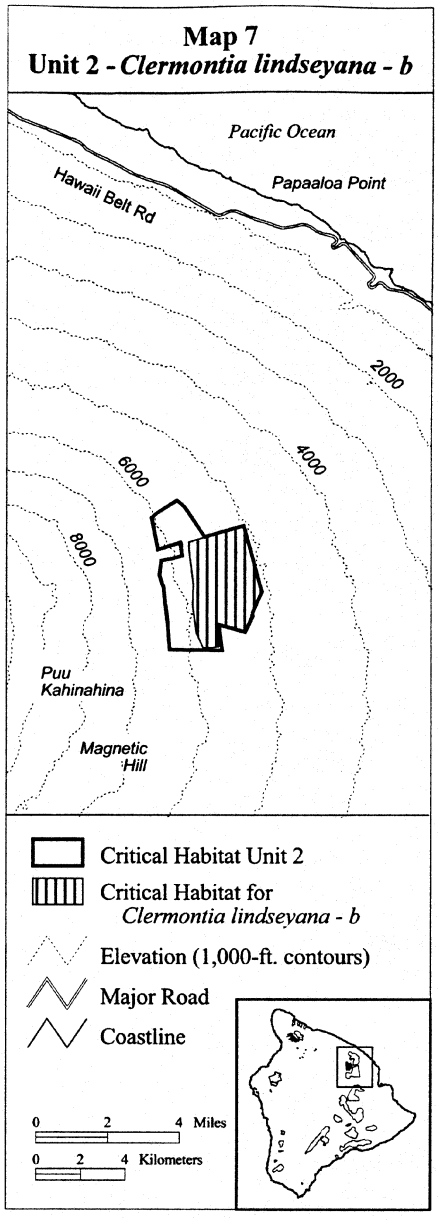
(i) [Reserved]

(ii) Map 6 follows:



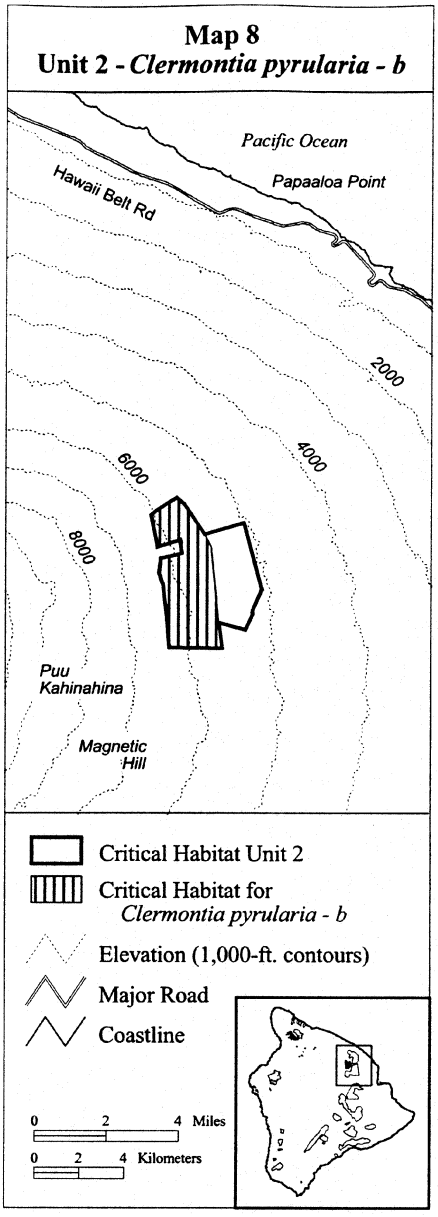
(7) Hawaii 2—*Clermontia lindseyana*—b (1,262 ha, 3,119 ac)

(i) [Reserved]
(ii) Map 7 follows:



(8) Hawaii 2—*Clermontia pyrularia*—b (1,383 ha, 3,418 ac)

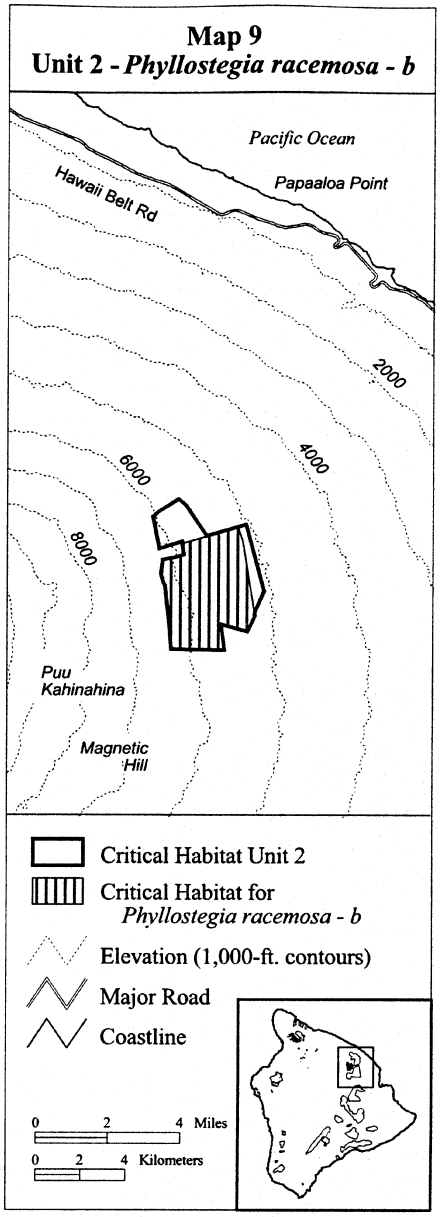
(i) [Reserved]
(ii) Map 8 follows:



(9) Hawaii 2—*Phyllostegia racemosa*—b (1,683 ha, 4,158 ac)

(i) [Reserved]

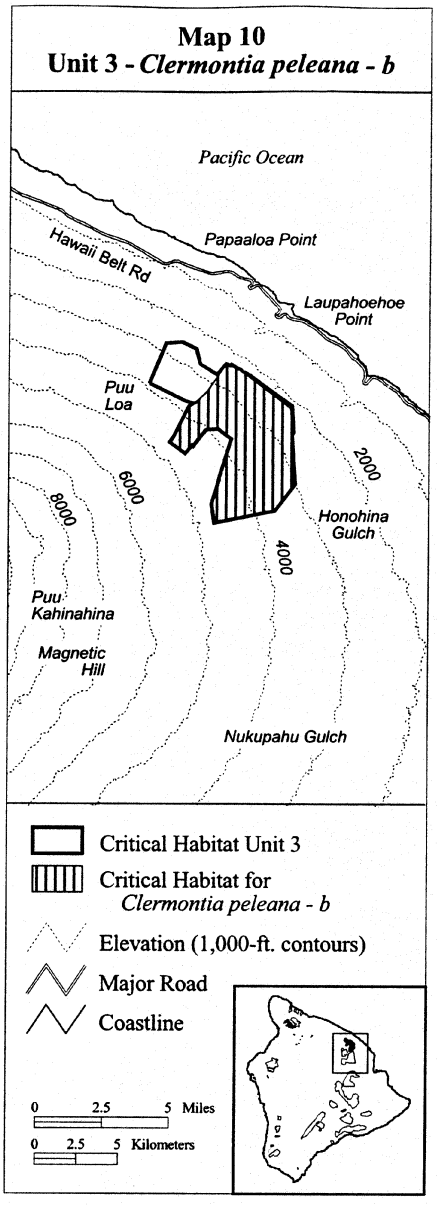
(ii) Map 9 follows:



(10) Hawaii 3—*Clermontia peleana*—b (4,098 ha, 10,126 ac)

(i) [Reserved]

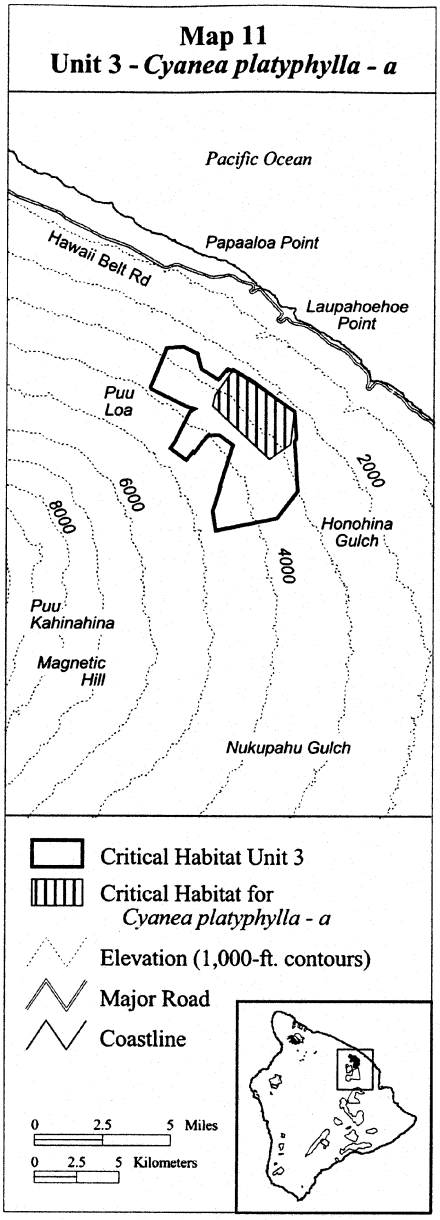
(ii) Map 10 follows:



(11) Hawaii 3—*Cyanea platyphylla*—a (1,403 ha, 3,467 ac)

(i) [Reserved]

(ii) Map 11 follows:



(12) Hawaii 3—*Cyanea tritomantha*-a (12,059 ac; 4,880 ha).

(i) This unit is also critical habitat for Hawaii 3—*Cyrtandra wagneri*-a, Hawaii 3—*Melicope remyi*-a, Hawaii 3—*Phyllostegia floribunda*-a, Hawaii 3—*Pittosporum hawaiiense*-a, Hawaii 3—

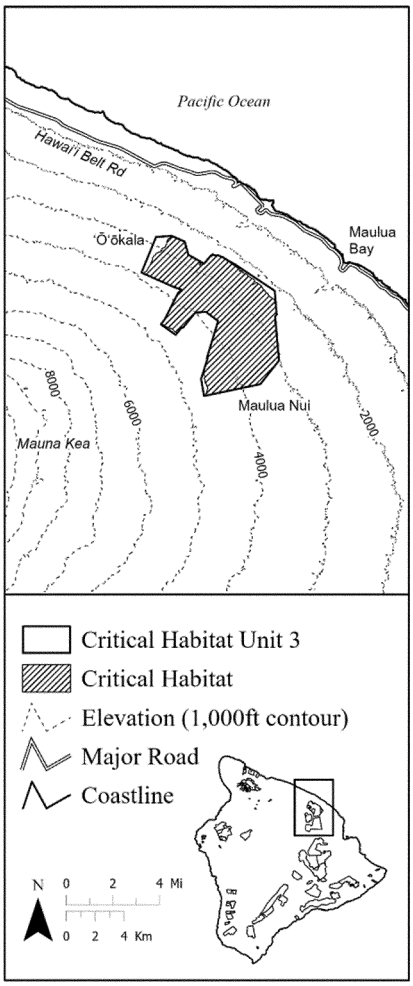
Schiedea diffusa ssp. *macraei*-a, and Hawaii 3—*Stenogyne cranwelliae*-a (see paragraphs (k)(15), (k)(16), (k)(17), (k)(19), (k)(20), (k)(21), respectively, of this section).

(ii) Map 11a follows:

Figure 12 to paragraph (k)

MAP 11A

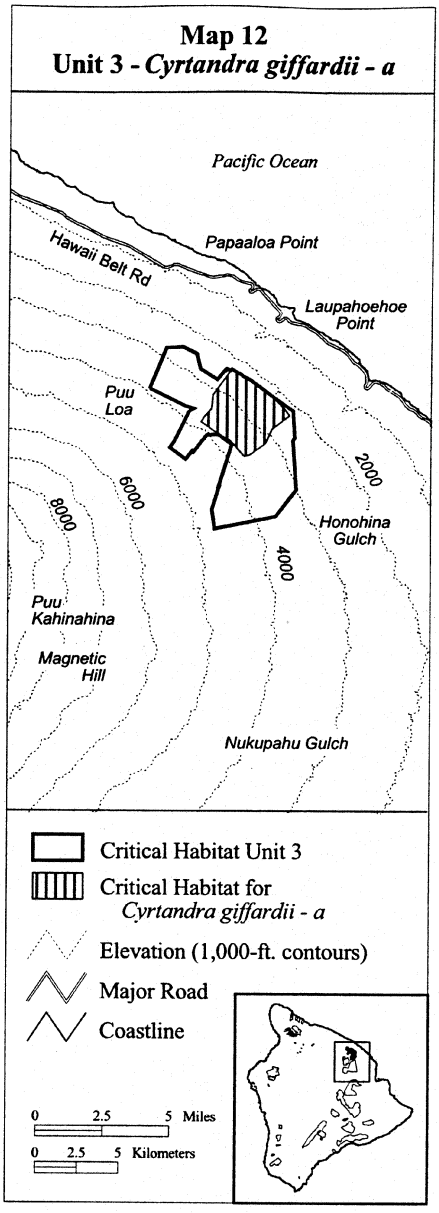
Hawaii 3—*Cyanea tritomantha*-a, Hawaii 3—*Cyrtandra wagneri*-a, Hawaii 3—*Melicope remyi*-a, Hawaii 3—*Phyllostegia floribunda*-a, Hawaii 3—*Pittosporum hawaiiense*-a, Hawaii 3—*Schiedea diffusa* ssp. *macraei*-a, Hawaii 3—*Stenogyne cranwelliae*-a



(13) Hawaii 3—*Cyrtandra giffardii*—a (1,510 ha, 3,731 ac)

(i) [Reserved]

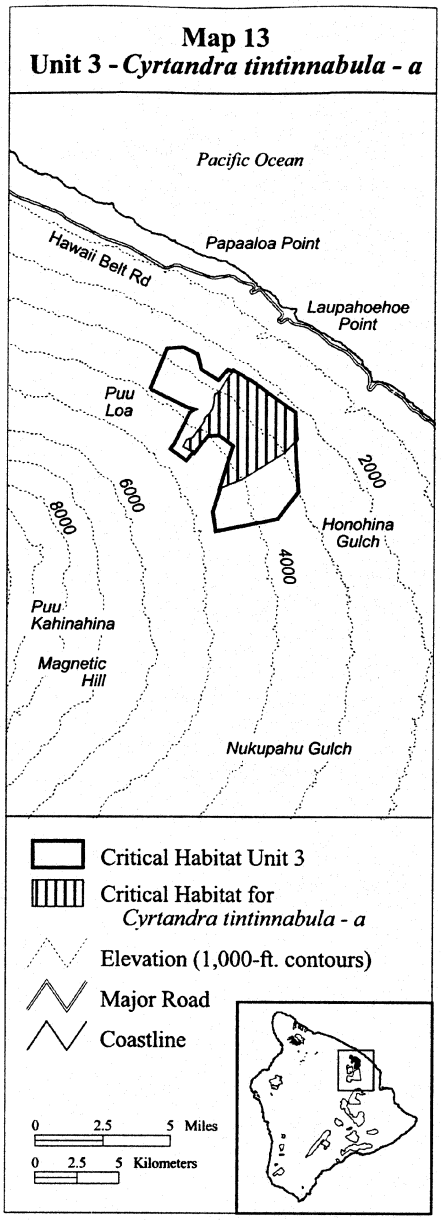
(ii) Map 12 follows:



(14) Hawaii 3—*Cyrtandra tintinnabula*—a (2,322 ha, 5,738 ac)

(i) [Reserved]

(ii) Map 13 follows:



(15) Hawaii 3—*Cyrtandra wagneri*-a (12,059 ac; 4,880 ha). See paragraph

(k)(12)(ii) of this section for the map of this unit.

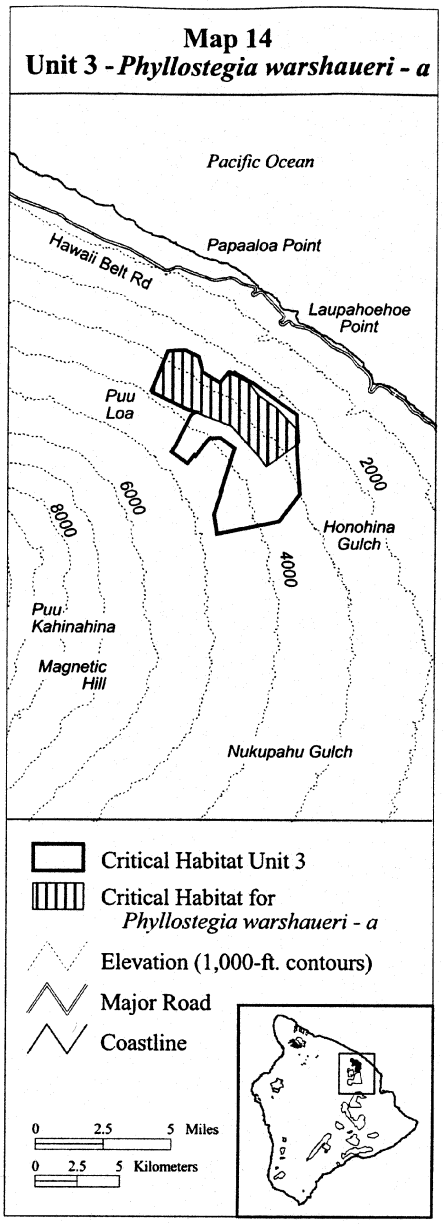
(16) Hawaii 3—*Melicope remyi*-a (12,059 ac; 4,880 ha). See paragraph (k)(12)(ii) of this section for the map of this unit.

(17) Hawaii 3—*Phyllostegia floribunda*-a (12,059 ac; 4,880 ha). See paragraph (k)(12)(ii) of this section for the map of this unit.

(18) Hawaii 3—*Phyllostegia warshaueri*—a (2,471 ha, 6,105 ac)

(i) [Reserved]

(ii) Map 14 follows:



(19) Hawaii 3—*Pittosporum hawaiiense*-a (12,059 ac; 4,880 ha). See paragraph (k)(12)(ii) of this section for the map of this unit.

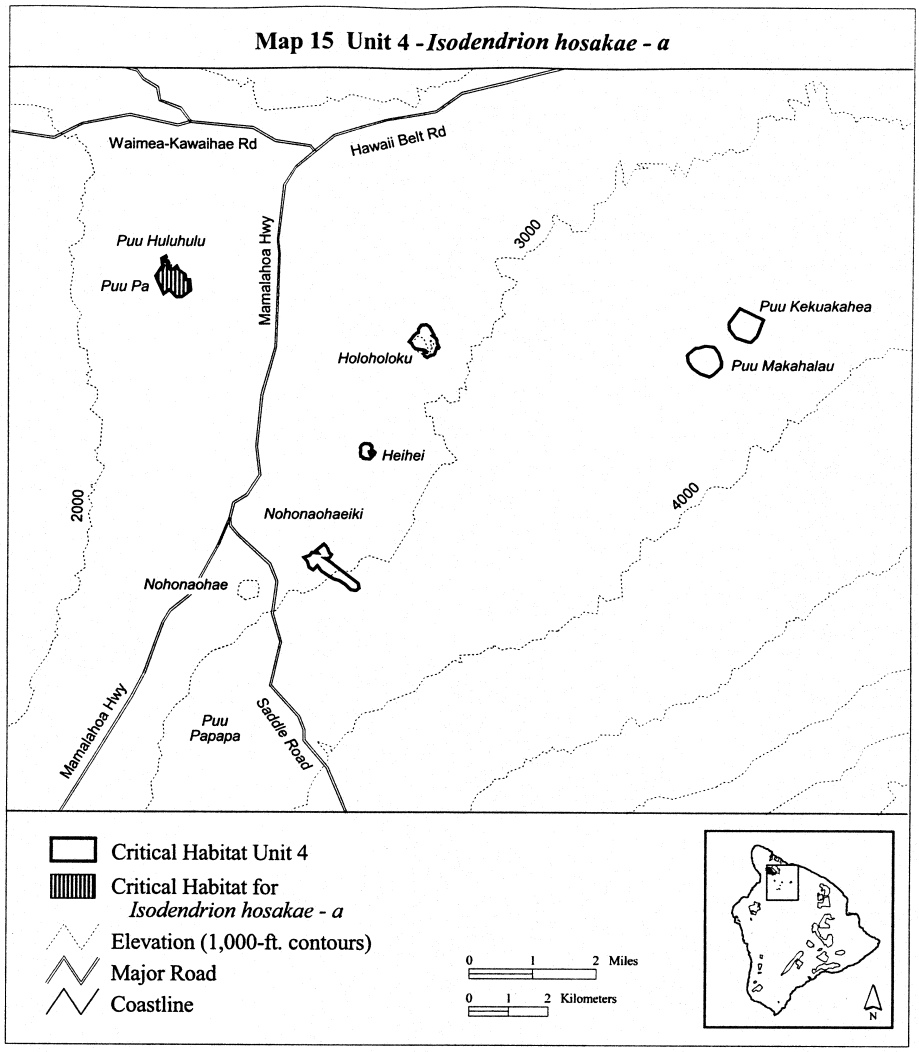
(20) Hawaii 3—*Schiedea diffusa* ssp. *macraei*-a (12,059 ac; 4,880 ha). See paragraph (k)(12)(ii) of this section for the map of this unit.

(21) Hawaii 3—*Stenogyne cranwelliae*-a (12,059 ac; 4,880 ha). See paragraph (k)(12)(ii) of this section for the map of this unit.

(22) Hawaii 4—*Isodendrion hosakae*—a (49 ha, 121 ac)

(i) [Reserved]

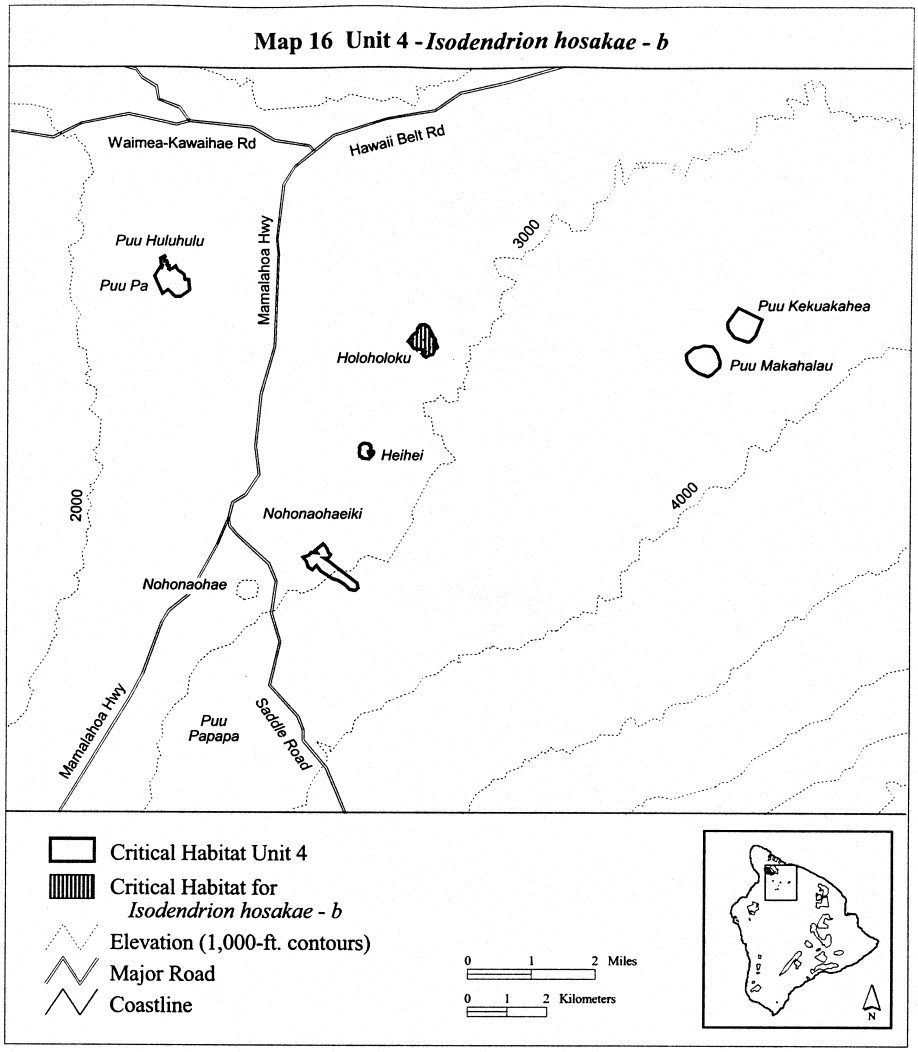
(ii) Map 15 follows:



(23) Hawaii 4—*Isodendrion hosakae*—b (35 ha, 87 ac)

(i) [Reserved]

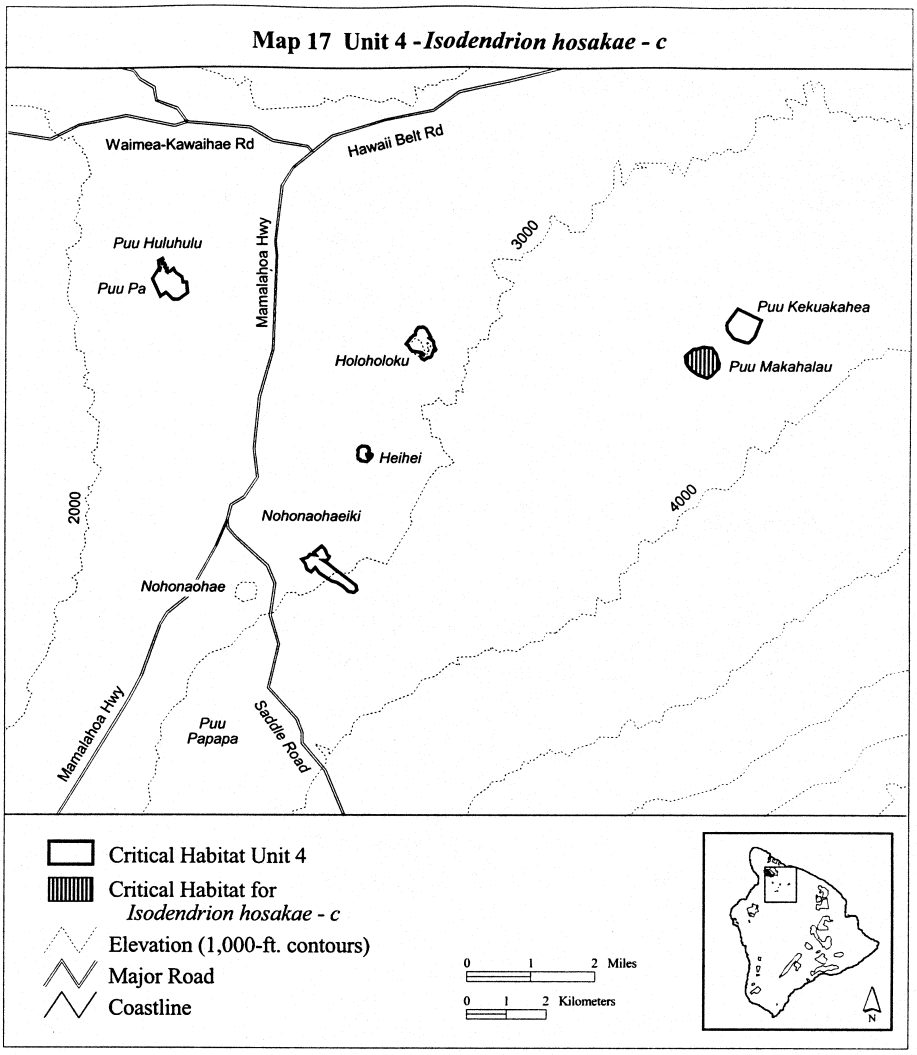
(ii) Map 16 follows:



(24) Hawaii 4—*Isodendrion hosakae*—c (49 ha, 121 ac)

(i) [Reserved]

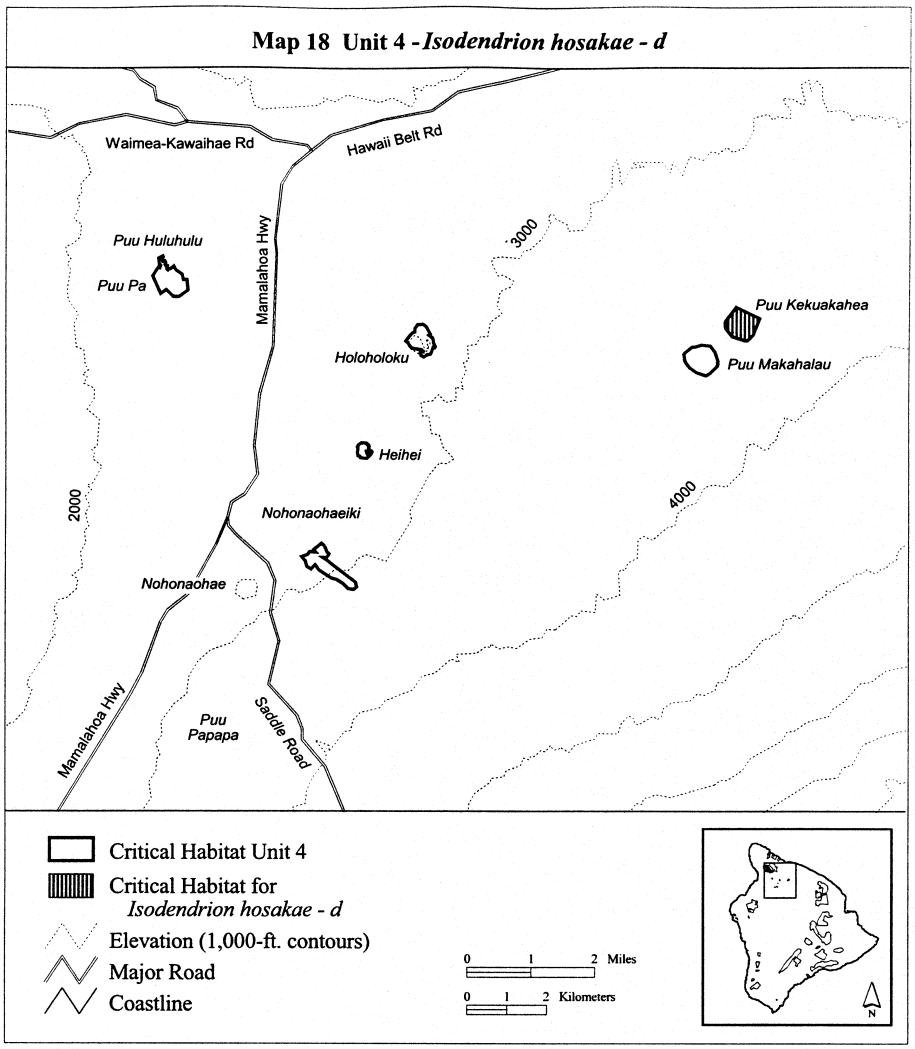
(ii) Map 17 follows:



(25) Hawaii 4—*Isodendrion hosakae*—d (49 ha, 121 ac)

(i) [Reserved]

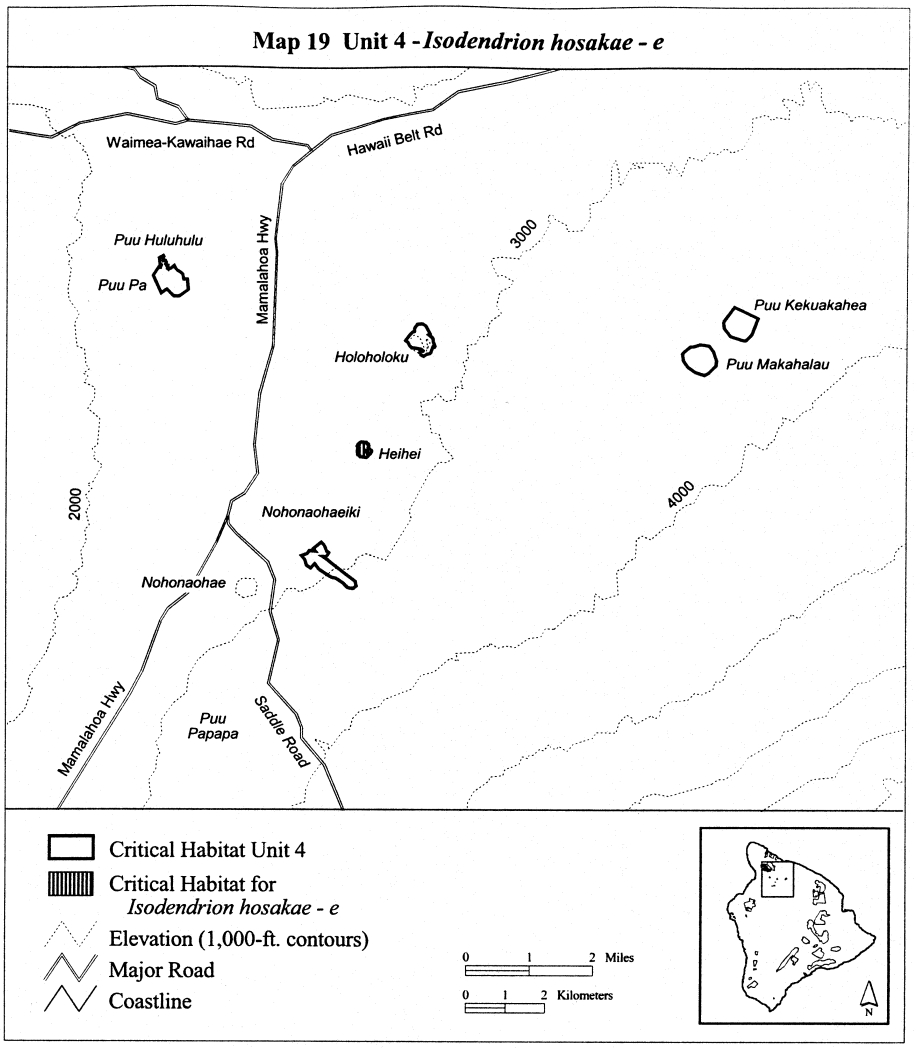
(ii) Map 18 follows:



(26) Hawaii 4—*Isodendrion hosakae*—e (11 ha, 26 ac)

(i) [Reserved]

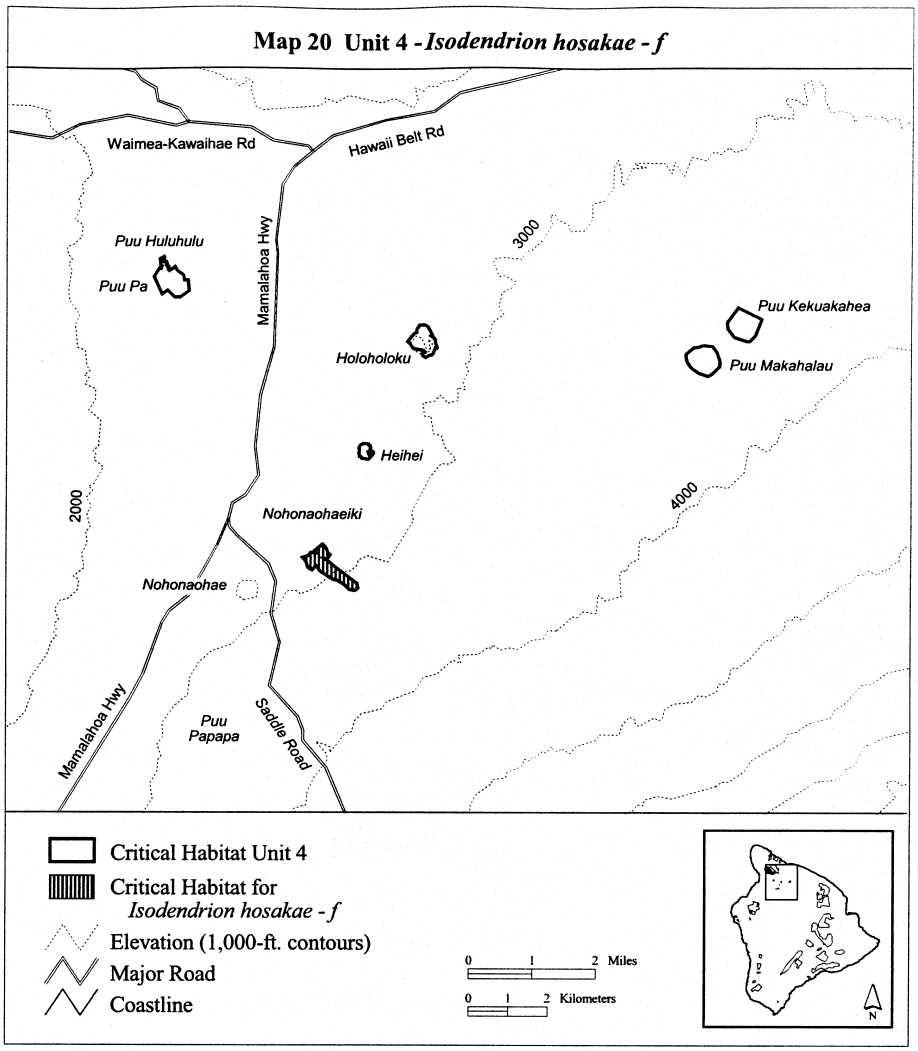
(ii) Map 19 follows:



(27) Hawaii 4—*Isodendrion hosakae*—f (51 ha, 127 ac)

(i) [Reserved]

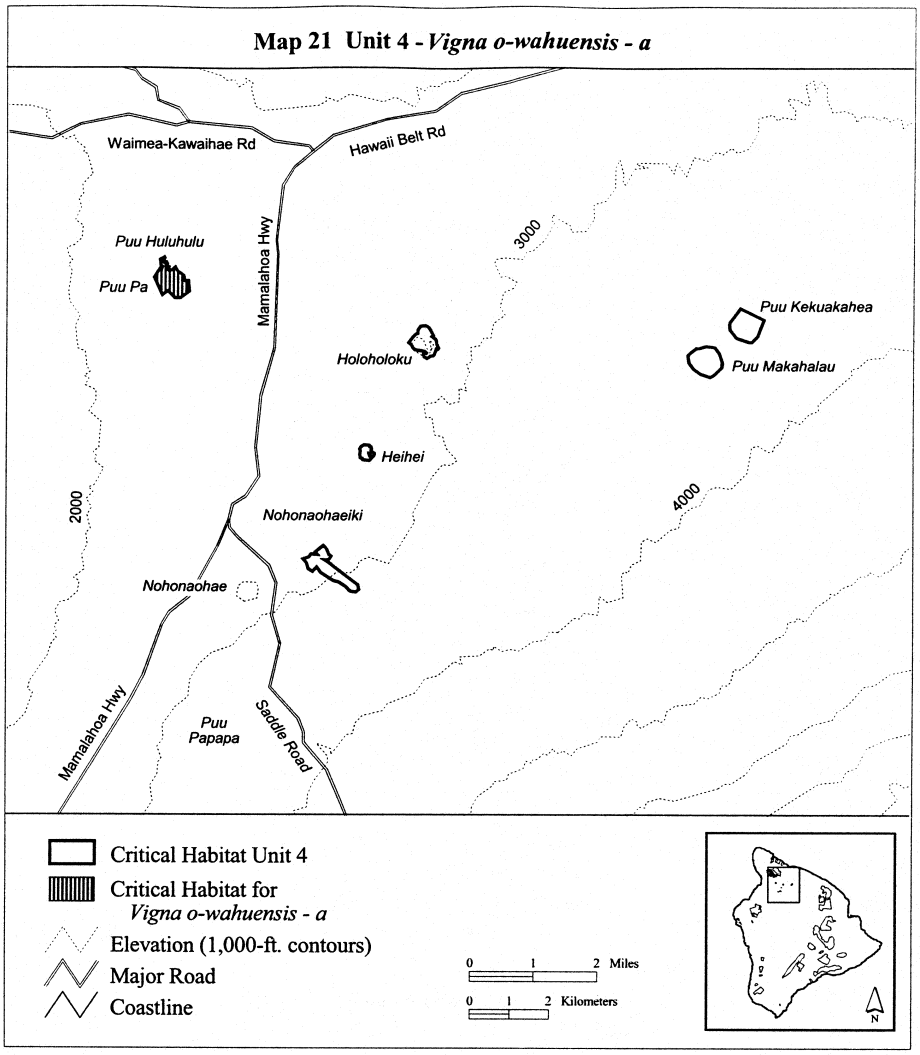
(ii) Map 20 follows:



(28) Hawaii 4—*Vigna o-wahuensis*—a (49 ha, 121 ac)

(i) [Reserved]

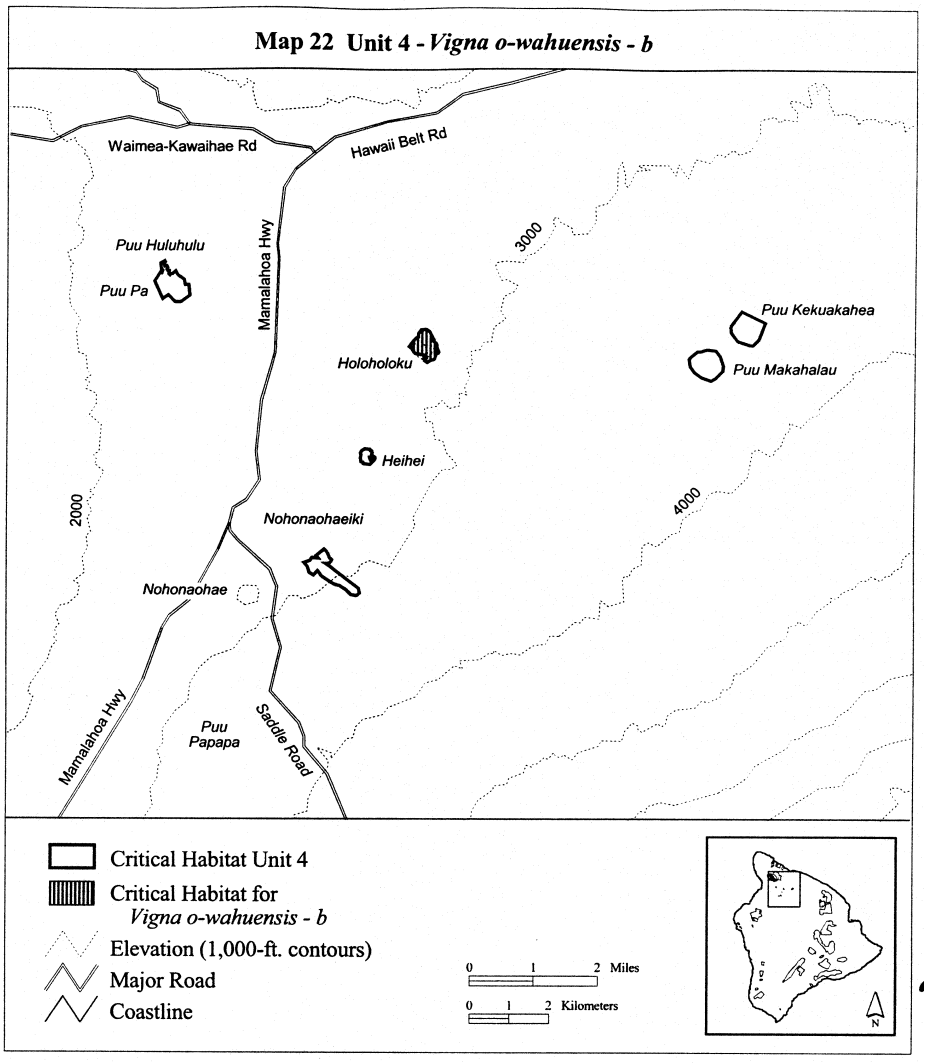
(ii) Map 21 follows:



(29) Hawaii 4—*Vigna o-wahuensis*—b (35 ha, 87 ac)

(i) [Reserved]

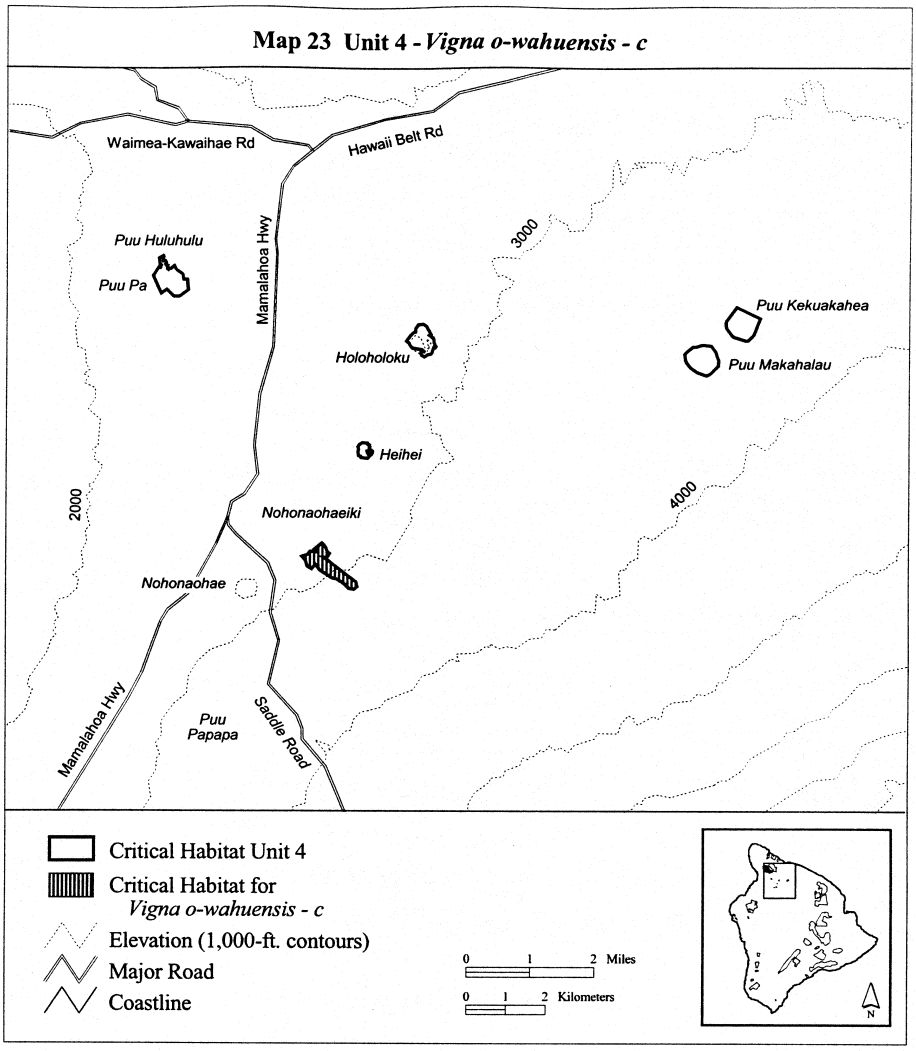
(ii) Map 22 follows:



(30) Hawaii 4—*Vigna o-wahuensis*—c (51 ha, 127 ac)

(i) [Reserved]

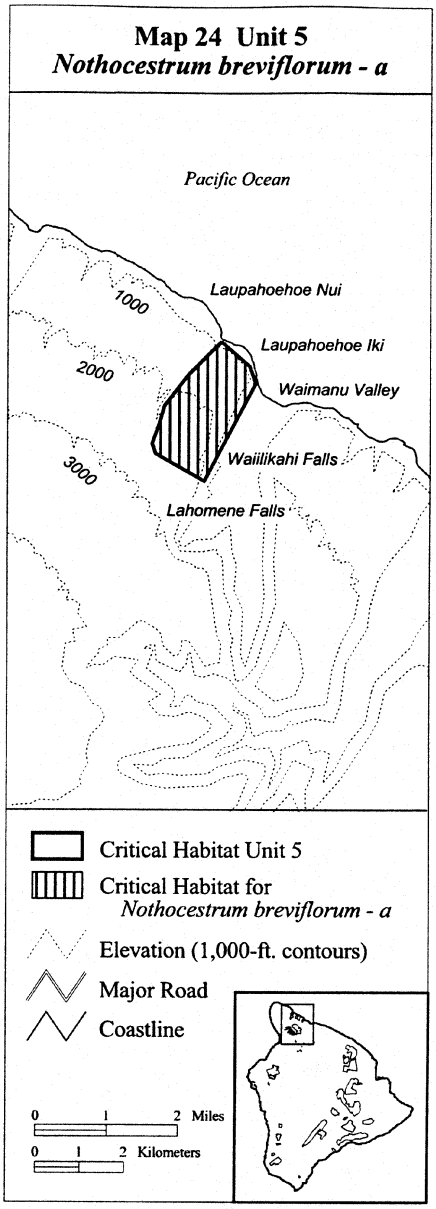
(ii) Map 23 follows:


Map 23 Unit 4 - Vigna o-wahuensis - c
Waimea-Kawaihae Rd
Hawaii Belt Rd
Puu Huluhulu
Puu Pa
Mamalahoa Hwy
3000
Puu Kekuakahea
Puu Makahalau
Holoholoku
Heihei
2000
4000
Nohonaohaeiki
Nohonaohae
Mamalahoa Hwy
Puu Papapa
Saddle Road
Critical Habitat Unit 4
Critical Habitat for
Vigna o-wahuensis - c
Elevation (1,000-ft. contours)
Major Road
Coastline
0 1 2 Miles
0 1 2 Kilometers
N

(31) Hawaii 5—*Nothocestrum breviflorum*—a (403 ha, 995 ac)

(i) [Reserved]

(ii) Map 24 follows:



(32) Hawaii 6—*Bidens hillebrandiana* ssp. *hillebrandiana*-a (2 ac; 1 ha).

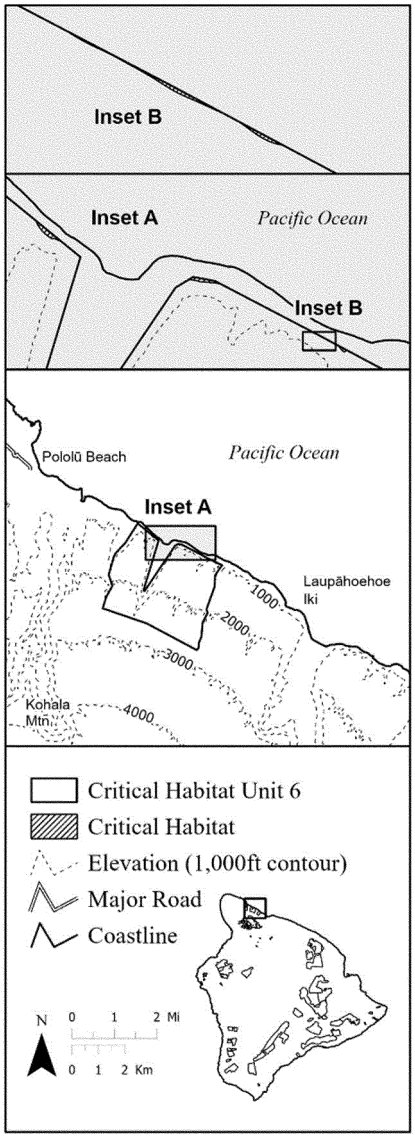
(i) [Reserved]

(ii) Map 24a follows:

Figure 26 to paragraph (k)

MAP 24A

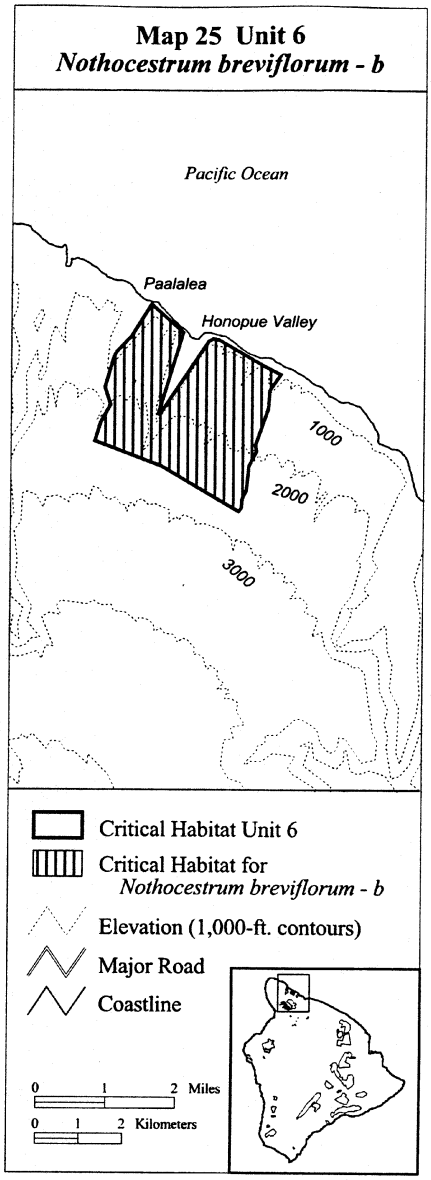
Hawaii 6—*Bidens hillebrandiana* ssp. *hillebrandiana*-a


Inset B
Inset A
Pacific Ocean
Inset B
Pololū Beach
Pacific Ocean
Inset A
Laupāhoehoe Iki
1000
2000
3000
4000
Kohala Mtn.
Critical Habitat Unit 6
Critical Habitat
Elevation (1,000ft contour)
Major Road
Coastline
N
0 1 2 Mi
0 1 2 Km

(33) Hawaii 6—*Nothocestrum breviflorum—b* (1,113 ha, 2,750 ac)

(i) [Reserved]

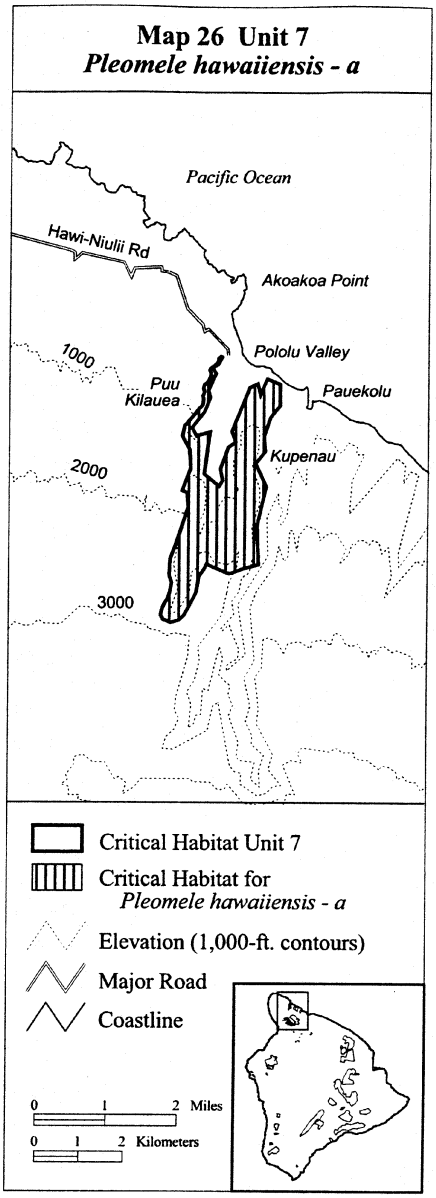
(ii) Map 25 follows:



(34) Hawaii 7—*Dracaena konaensis*—a (677 ha, 1,673 ac)

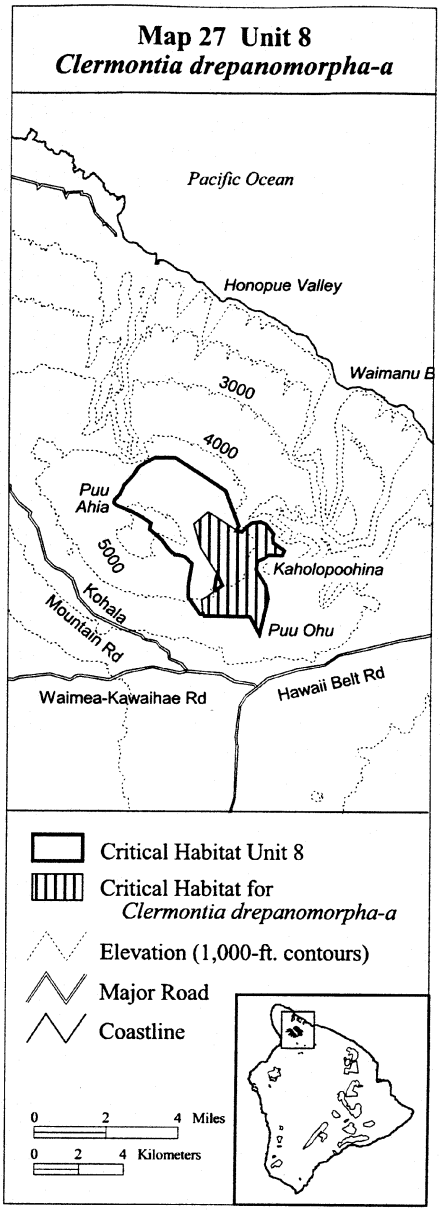
(i) [Reserved]

(ii) *Note:* The reference to ''Hawaii 7—*Pleomele hawaiiensis*—a'' on the map is equivalent to ''Hawaii 7—*Dracaena konaensis*—a''. Map 26 follows:



(35) Hawaii 8—*Clermontia drepanomorpha*—a (1,906 ha, 4,709 ac)

(i) [Reserved]
(ii) Map 27 follows:



(36) Hawaii 8—*Cyanea tritomantha*-b (6,805 ac; 2,754 ha).

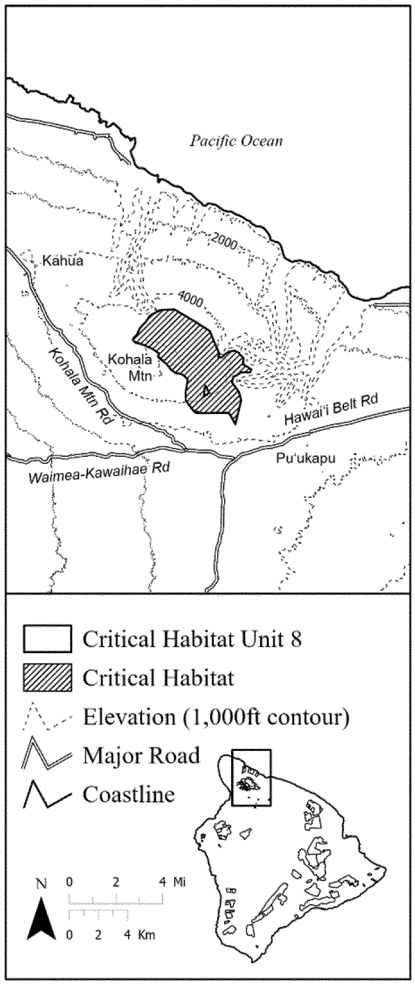
(i) This unit is also critical habitat for Hawaii 8—*Melicope remyi*-b, Hawaii 8—*Phyllostegia floribunda*-b, Hawaii 8—*Pittosporum hawaiiense*-b, Hawaii 8—*Schiedea diffusa* ssp. *macraei*-b, and Hawaii 8—*Stenogyne cranwelliae*-b (see paragraphs (k)(37), (k)(38), (k)(40), (k)(41), and (k)(42), respectively, of this section).

(ii) Map 27a follows:

Figure 30 to paragraph (k)

MAP 27A

Hawaii 8—*Cyanea tritomantha*-b, Hawaii 8—*Melicope remyi*-b, Hawaii 8—*Phyllostegia floribunda*-b, Hawaii 8—*Pittosporum hawaiiense*-b, Hawaii 8—*Schiedea diffusa* ssp. *macraei*-b, Hawaii 8—*Stenogyne cranwelliae*-b


Pacific Ocean
2000
Kahua
4000
Kohala Mtn
Kohala Mtn Rd
Hawai'i Belt Rd
Pu'ukapu
Waimea-Kawaihae Rd
Critical Habitat Unit 8
Critical Habitat
Elevation (1,000ft contour)
Major Road
Coastline
N
0 2 4 Mi
0 2 4 Km

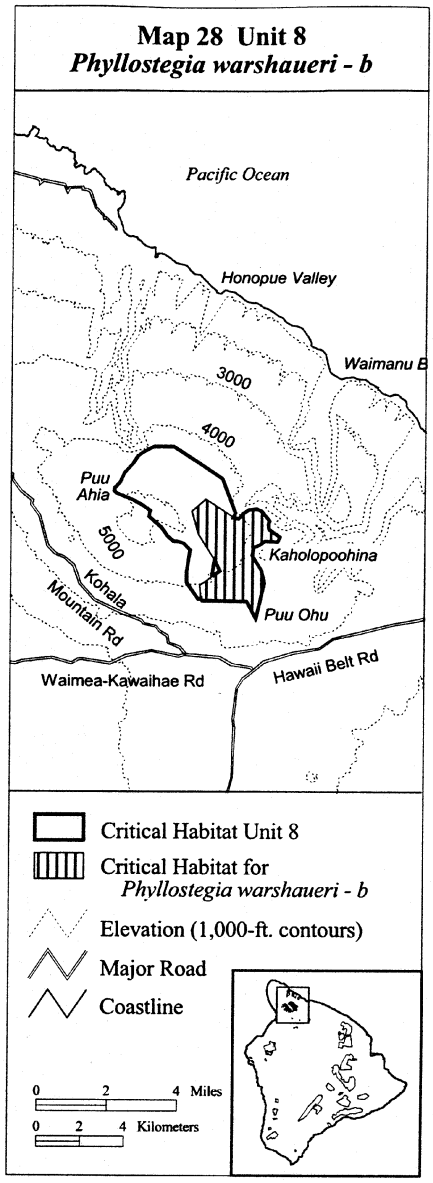
(37) Hawaii 8—*Melicope remyi*-b (6,805 ac; 2,754 ha). See paragraph (k)(36)(ii) of this section for the map of this unit.

(38) Hawaii 8—*Phyllostegia floribunda*-b (6,805 ac; 2,754 ha). See paragraph (k)(36)(ii) of this section for the map of this unit.

(39) Hawaii 8—*Phyllostegia warshaueri*—b (1,177 ha, 2,908 ac)

(i) [Reserved]

(ii) Map 28 follows:



(40) Hawaii 8—*Pittosporum hawaiiense*-b (6,805 ac; 2,754 ha). See paragraph (k)(36)(ii) of this section for the map of this unit.

(41) Hawaii 8—*Schiedea diffusa* ssp. *macraei*-b (6,805 ac; 2,754 ha). See paragraph (k)(36)(ii) of this section for the map of this unit.

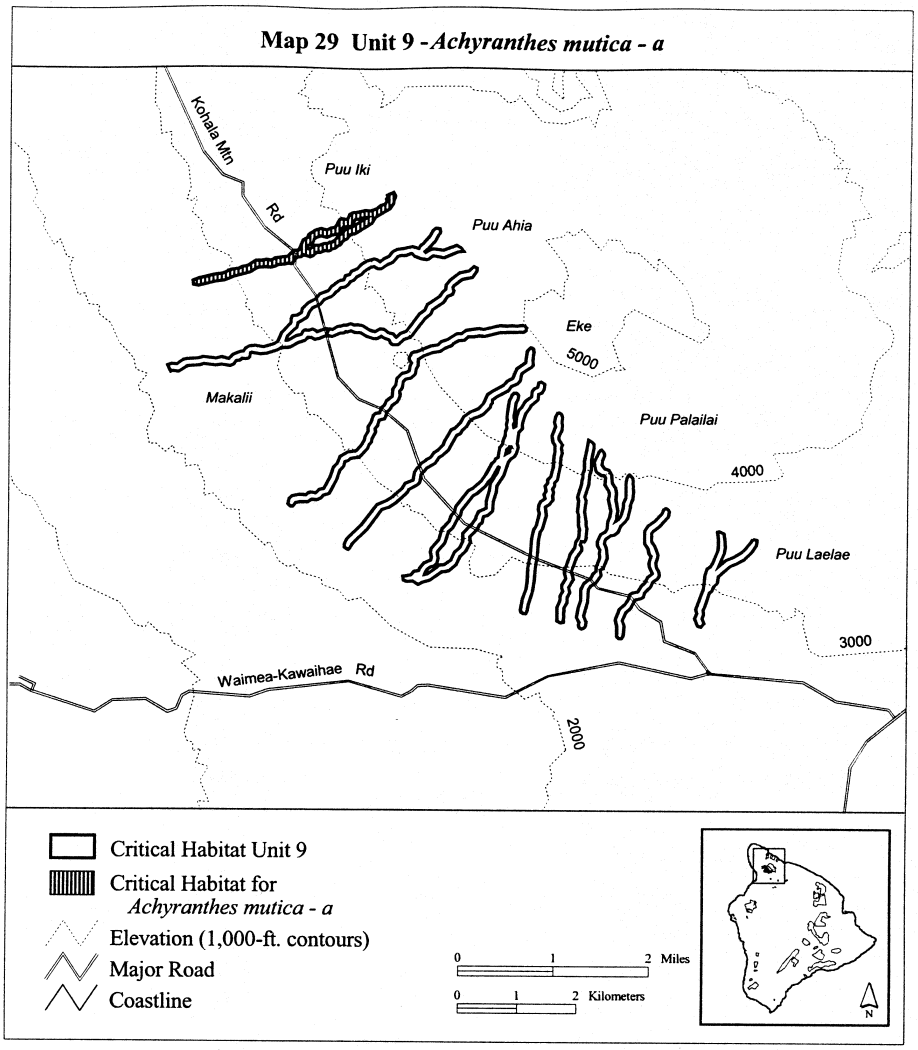
(42) Hawaii 8—*Stenogyne cranwelliae*-b (6,805 ac; 2,754 ha). See paragraph (k)(36)(ii) of this section for the map of this unit.

(43) Hawaii 9—*Achyranthes mutica*—a (63 ha, 157 ac)

(i) [Reserved]

(ii) Excluding one area bounded by the following 31 points (8 ha, 19 ac): Start at 211235, 2224062; 211172, 2224016; 211129, 2224012; 211093, 2223986; 211042, 2223992; 210945, 2223954; 210872, 2223952; 210792, 2223885; 210751, 2223908; 210770, 2223960; 210841, 2223994; 210870, 2224063; 210928, 2224102; 210992, 2224116; 211080, 2224094; 211174, 2224135; 211293, 2224156; 211335, 2224196; 211345, 2224253; 211373, 2224282; 211439, 2224272; 211501, 2224297; 211562, 2224404; 211619, 2224407; 211657, 2224425; 211731, 2224441; 211766, 2224436; 211506, 2224267; 211403, 2224240; 211340, 2224159; 211274, 2224128; return to starting point.

(iii) Map 29 follows:

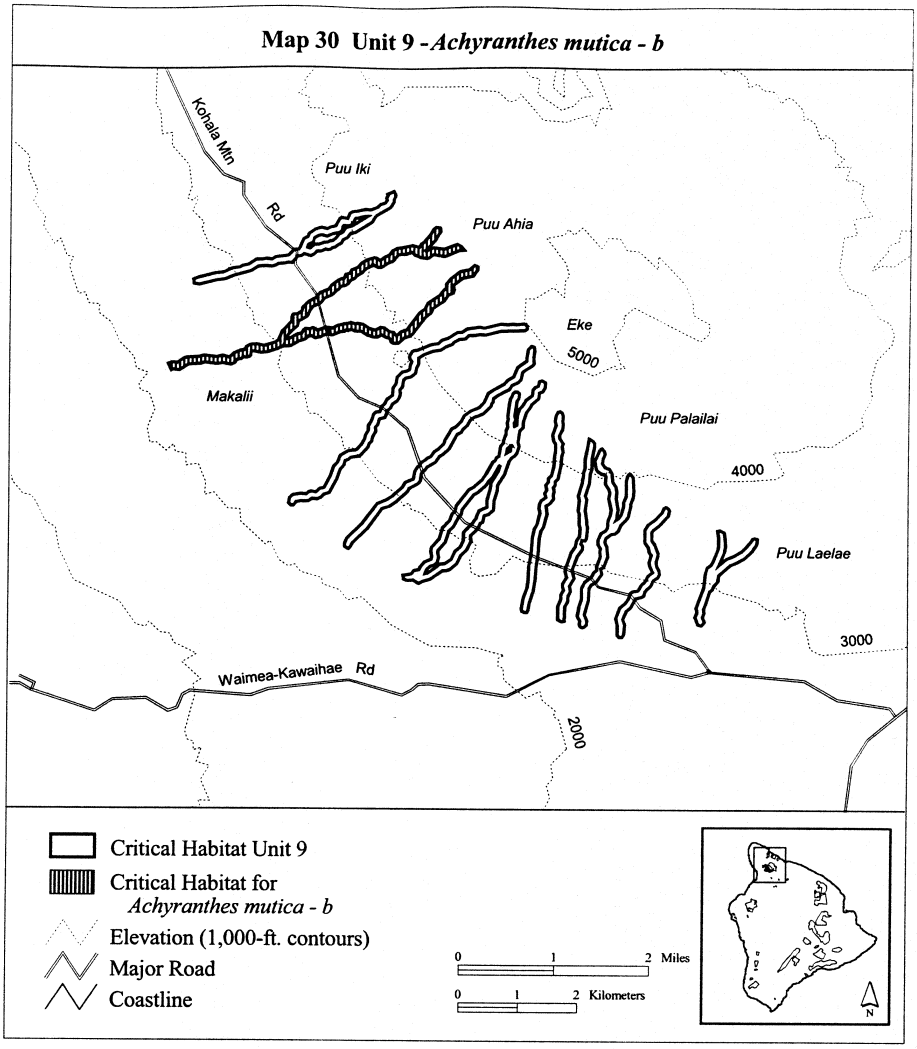


(44) Hawaii 9—*Achyranthes mutica*—b (124 ha, 306 ac)

(i) [Reserved]

(ii) Excluding one area bounded by the following five points (<1 ha, <1 ac): Start at 211099, 2222496; 211109, 2222499; 211114, 2222499; 211118, 2222497; 211103, 2222479; return to starting point.

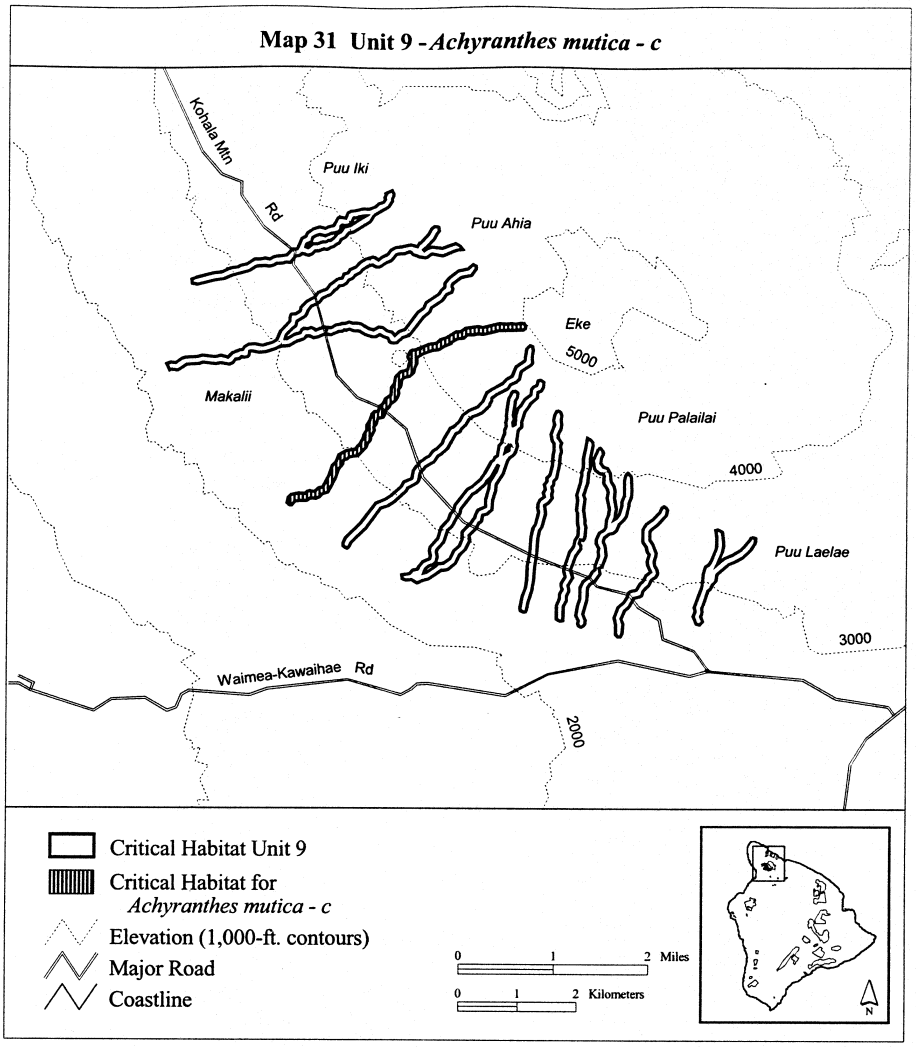
(iii) Map 30 follows:



(45) Hawaii 9—*Achyranthes mutica*—c (67 ha, 166 ac)

(i) [Reserved]

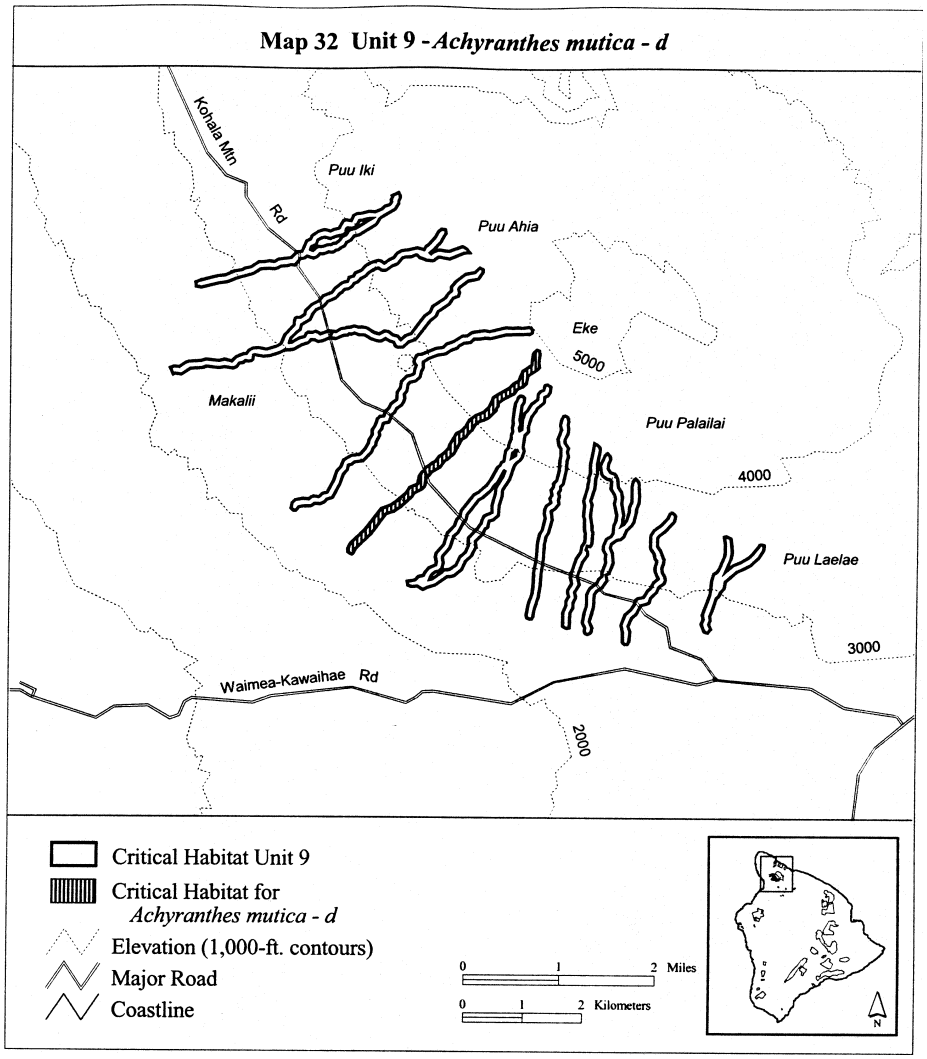
(ii) Map 31 follows:



(46) Hawaii 9—*Achyranthes mutica*—d (58 ha, 143 ac)

(i) [Reserved]

(ii) Map 32 follows:



(47) Hawaii 9—*Achyranthes mutica*—e (96 ha, 238 ac)

(i) [Reserved]

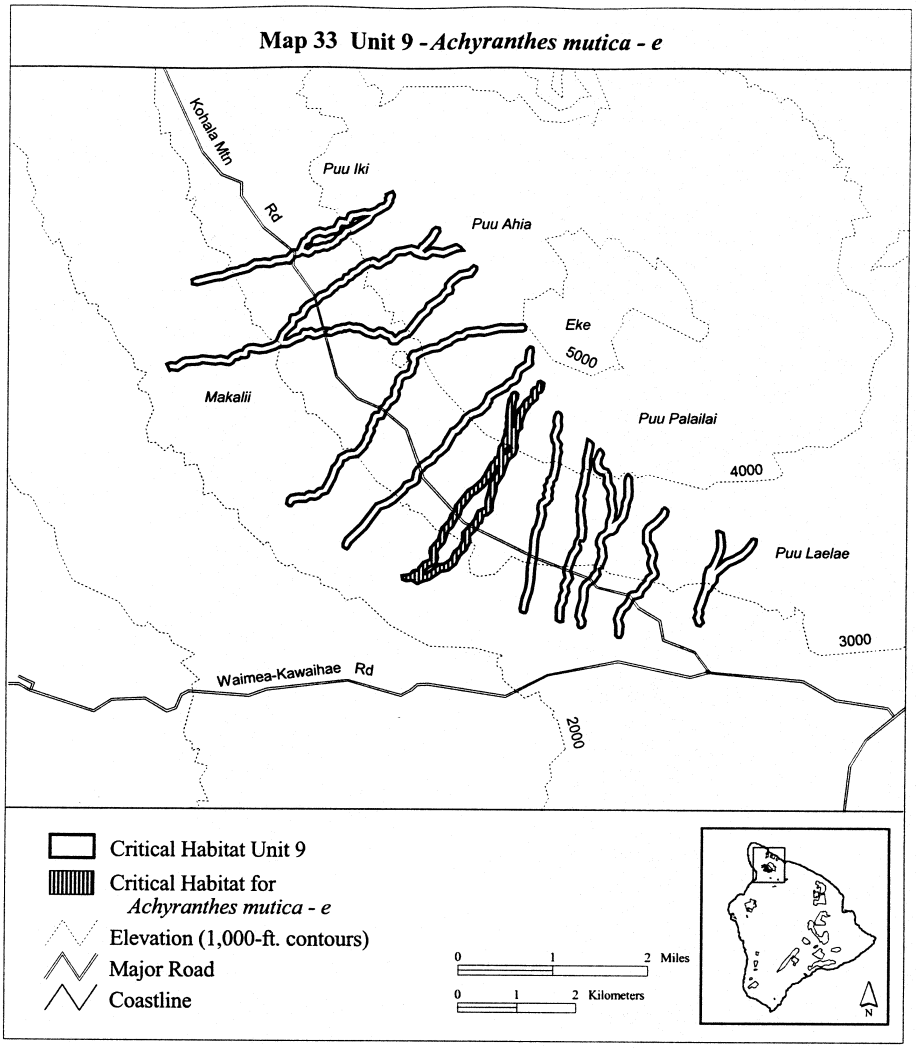
(ii) Excluding two areas:

(A) Bounded by the following seven points (1 ha, 1 ac): Start at 214223, 2220569; 214237, 2220545; 214219, 2220515; 214216, 2220461; 214146, 2220412; 214161, 2220500; 214199, 2220523; return to starting point.

(B) Bounded by the following 42 points (38 ha, 94 ac): Start at 214049, 2220213; 214008, 2220110; 213892, 2219916; 213877, 2219786; 213826, 2219614; 213823, 2219491; 213696, 2219433; 213663, 2219365; 213649, 2219307; 213619, 2219275; 213591, 2219218; 213434, 2219056; 213440, 2218923; 213385, 2218816; 213302, 2218748; 213232, 2218602; 213126, 2218523; 213033, 2218514; 212998, 2218479; 212834, 2218368; 212794, 2218356; 212809, 2218402; 212825, 2218431; 212855, 2218461; 212888, 2218485; 212953,

2218499; 212996, 2218545; 213022, 2218636; 213007, 2218725; 213013, 2218754; 213131, 2218887; 213194, 2219087; 213261, 2219149; 213346, 2219306; 213394, 2219361; 213412, 2219449; 213602, 2219700; 213668, 2219734; 213820, 2219870; 213852, 2219933; 213913, 2219992; 214024, 2220195; return to starting point.

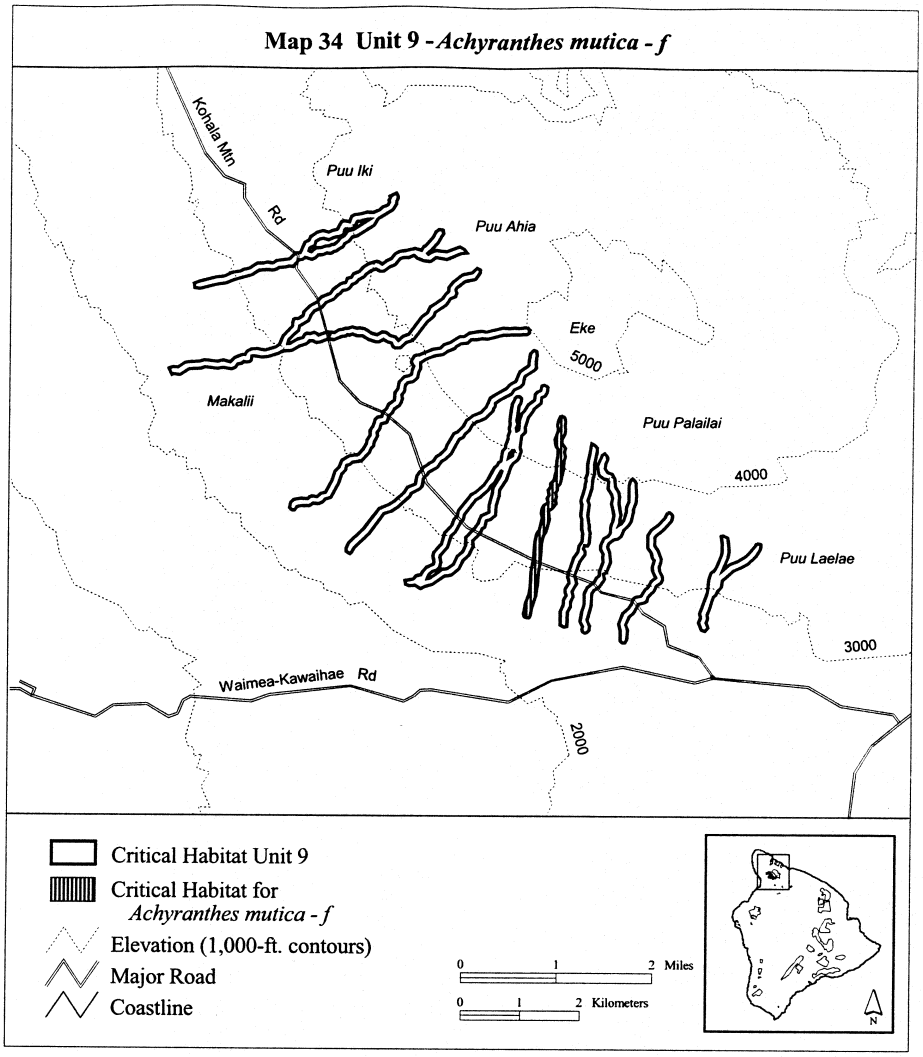
(iii) Map 33 follows:



(48) Hawaii 9—*Achyranthes mutica*—f (43 ha, 105 ac)

(i) [Reserved]

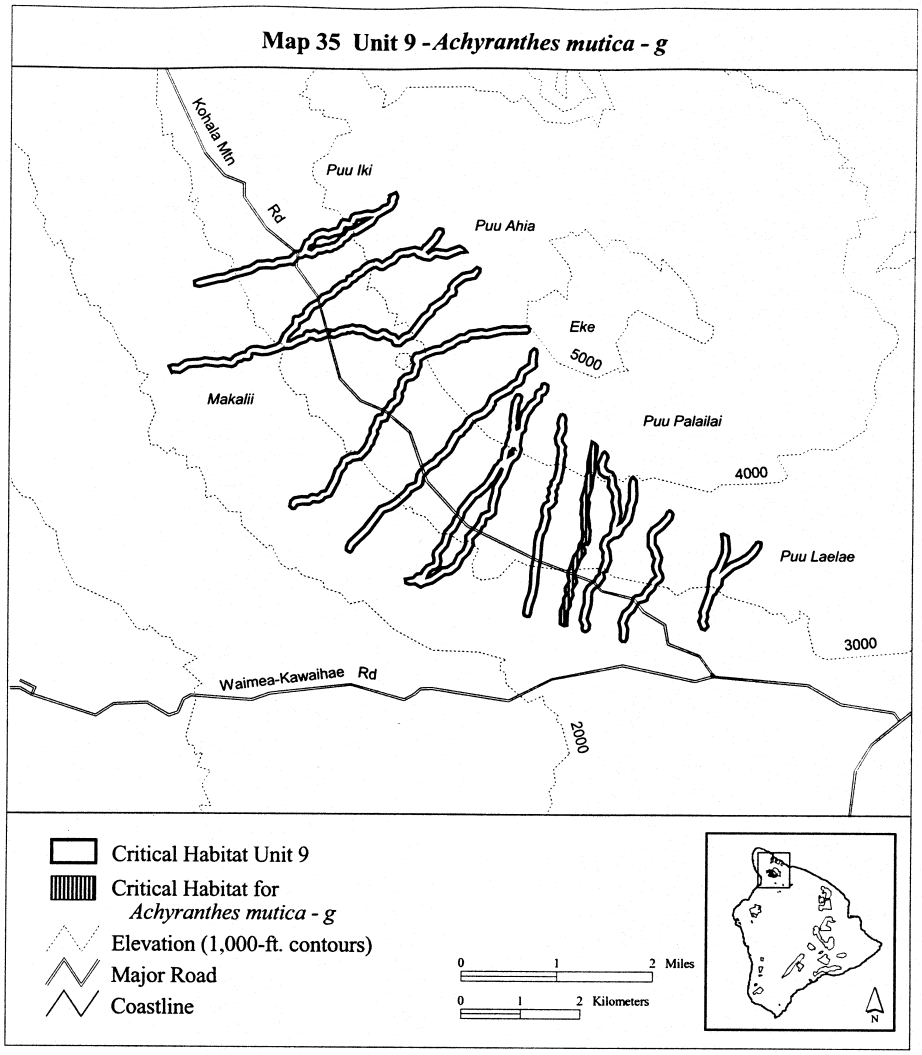
(ii) Map 34 follows:



(49) Hawaii 9—*Achyranthes mutica*—g (37 ha, 92 ac)

(i) [Reserved]

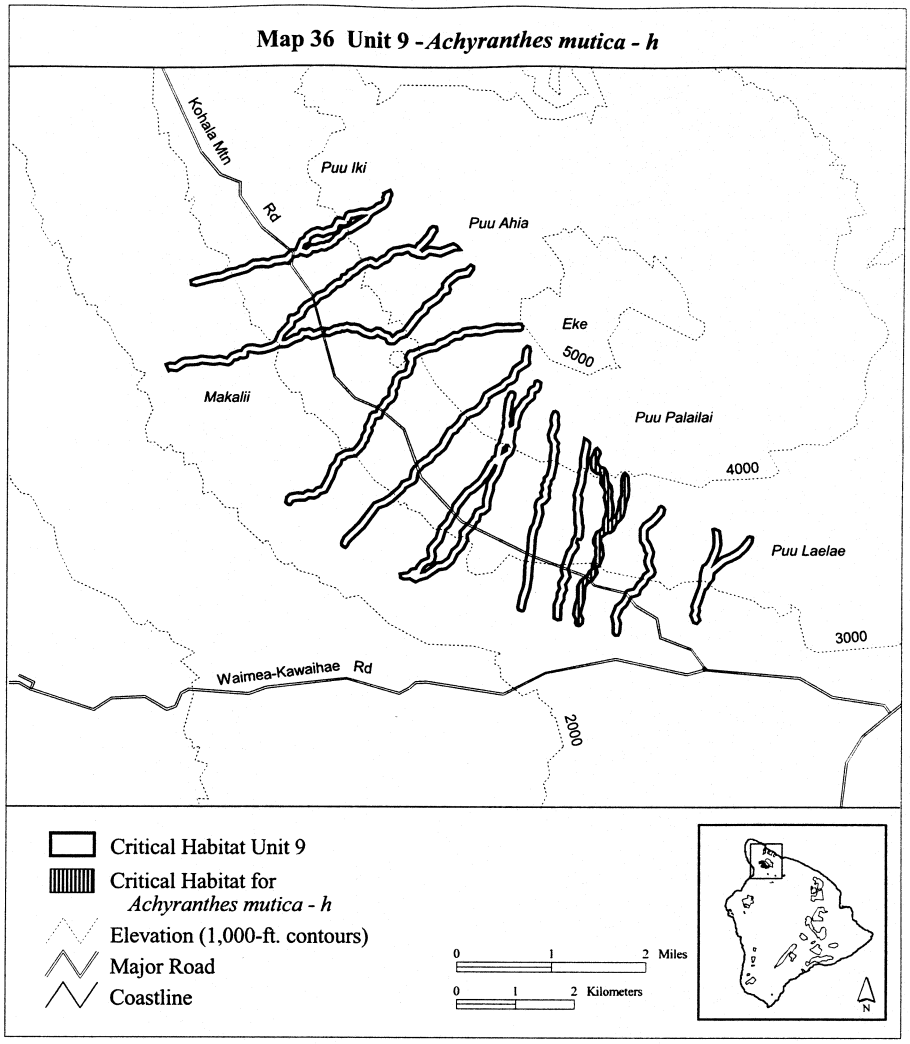
(ii) Map 35 follows:



(50) Hawaii 9—*Achyranthes mutica*—h (51 ha, 127 ac)

(i) [Reserved]

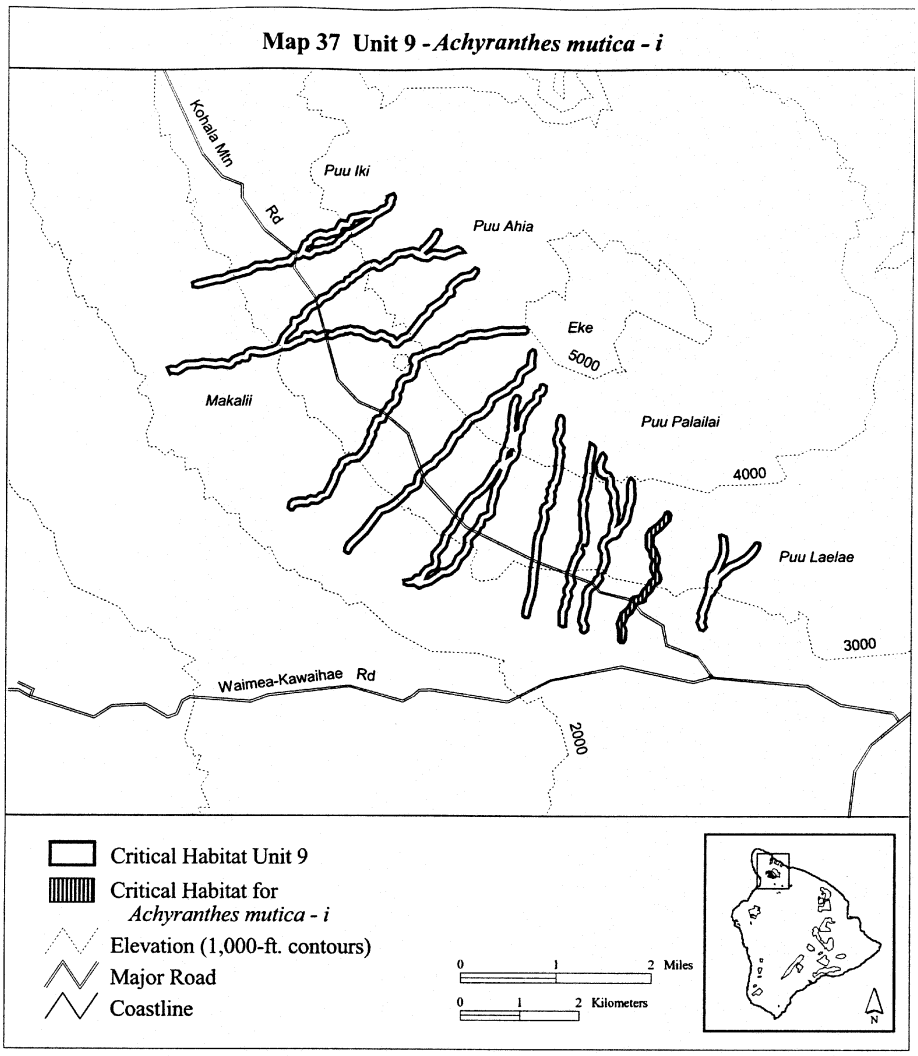
(ii) Map 36 follows:



(51) Hawaii 9—*Achyranthes mutica*—i (31 ha, 76 ac)

(i) [Reserved]

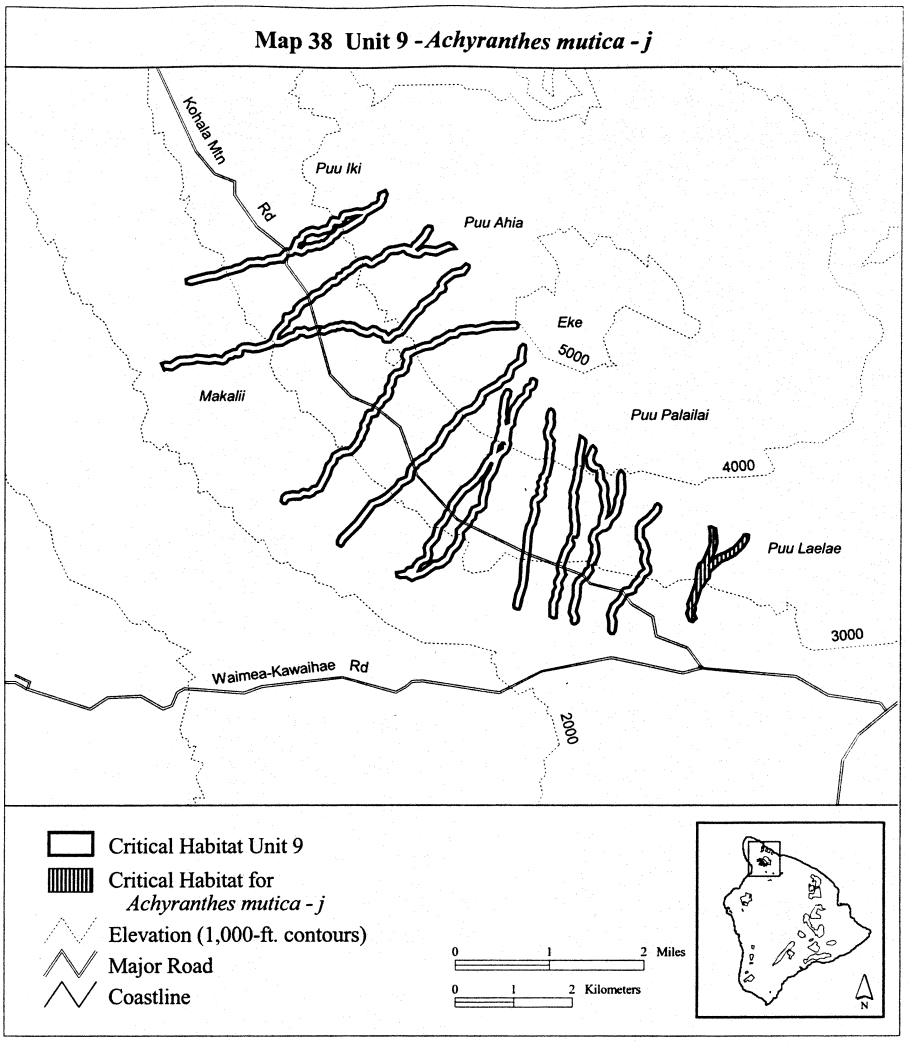
(ii) Map 37 follows:



(52) Hawaii 9—*Achyranthes mutica*—j (33 ha, 81 ac)

(i) [Reserved]

(ii) Map 38 follows:



(53) Hawaii 9—*Cyanea tritomantha*-c (1 ac; <1 ha).

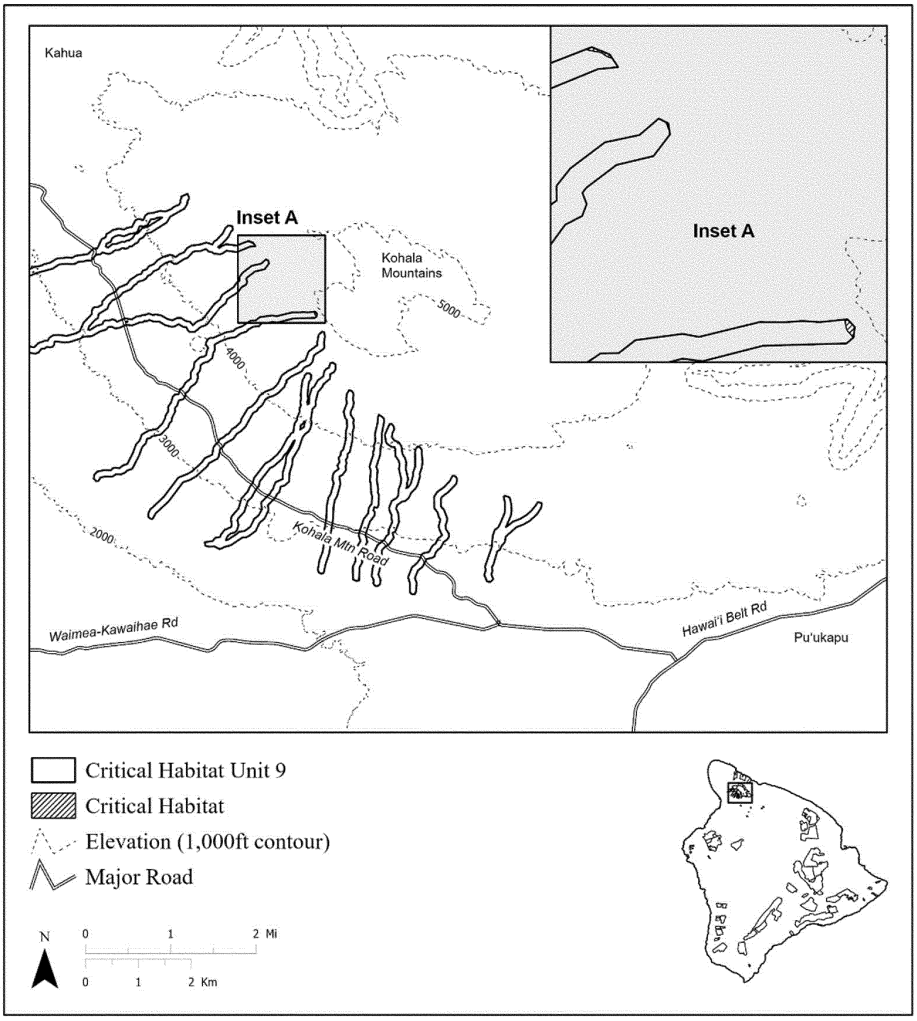
(i) This unit is also critical habitat for Hawaii 9—*Melicope remyi*-c, Hawaii 9—*Phyllostegia floribunda*-c, Hawaii 9—*Pittosporum hawaiiense*-c, Hawaii 9—*Schiedea diffusa* ssp. *macraei*-c, and Hawaii 9—*Stenogyne cranwelliae*-c (see paragraphs (k)(54), (k)(55), (k)(56), (k)(57), and (k)(58) respectively, of this section).

(ii) Map 38a follows:

Figure 42 to paragraph (k)

MAP 38A

Hawaii 9—*Cyanea tritomantha*-c, Hawaii 9—*Melicope remyi*-c, Hawaii 9—*Phyllostegia floribunda*-c, Hawaii 9—*Pittosporum hawaiiense*-c, Hawaii 9—*Schiedea diffusa* ssp. *macraei*-c, Hawaii 9—*Stenogyne cranwelliae*-c



(54) Hawaii 9—*Melicope remyi*-c (1 ac; <1 ha). See paragraph (k)(53)(ii) of this section for the map of this unit.

(55) Hawaii 9—*Phyllostegia floribunda*-c (1 ac; <1 ha). See paragraph (k)(53)(ii) of this section for the map of this unit.

(56) Hawaii 9–*Pittosporum hawaiiense*-c (1 ac; < 1 ha). See paragraph (k)(53)(ii) of this section for the map of this unit.

(57) Hawaii 9–*Schiedea diffusa* ssp. *macraei*-c (1 ac; < 1 ha). See paragraph (k)(53)(ii) of this section for the map of this unit.

(58) Hawaii 9–*Stenogyne cranwelliae*-c (1 ac; < 1 ha). See paragraph (k)(53)(ii) of this section for the map of this unit.

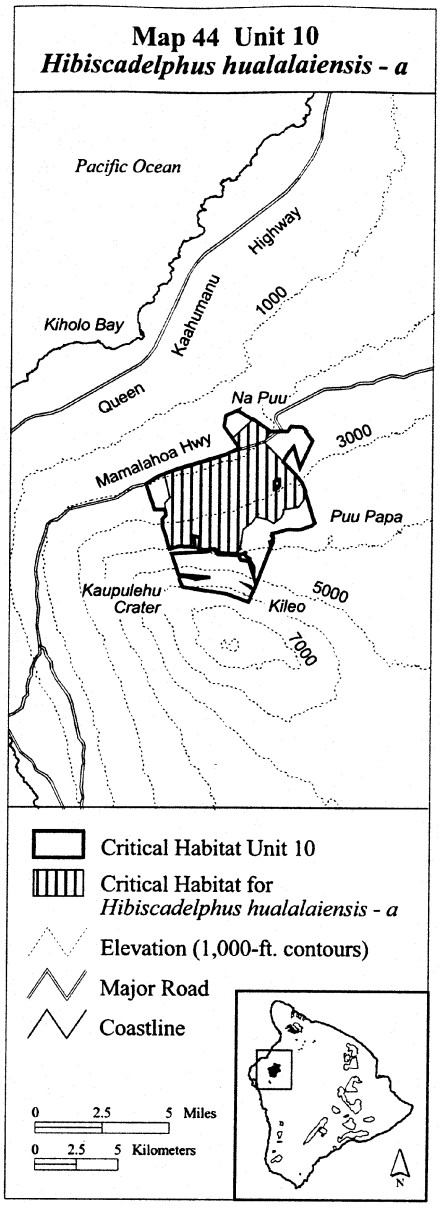
(59) Hawaii 10—*Hibiscadelphus hualalaiensis*—a (3,979 ha, 9,831 ac)

(i) [Reserved]

(ii) Excluding one area bounded by the following 12 points (15 ha, 38 ac): Start at 202034, 2189562; 202141, 2189566; 202153, 2189649; 202308, 2189645; 202298, 2189564; 202339, 2189548; 202329, 2189219; 202193, 2189187; 202230, 2189088; 202042,

2189024; 202020, 2189151; 202024, 2189554; return to starting point.

(iii) Map 44 follows:



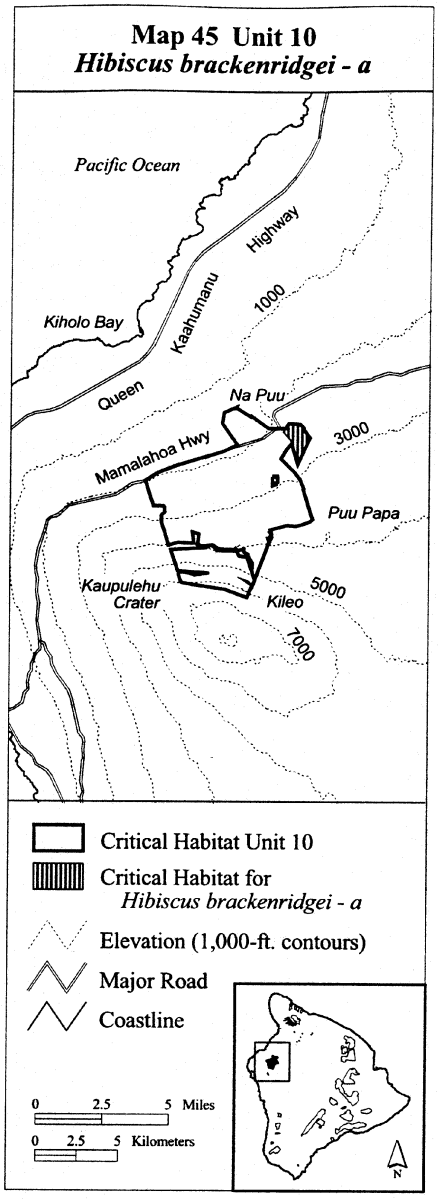
(60) Hawaii 10—*Isodendrion pyrifolium*—a (1,179 ha; 2,914 ac). See paragraph (k)(40)(ii) of this section for the map of this unit.

(61) Hawaii 10—*Mezoneuron kavaiense*—a (1,179 ha; 2,914 ac). See paragraph (k)(40)(ii) of this section for the map of this unit.

(62) Hawaii 10—*Hibiscus brackenridgei*—a (196 ha, 485 ac)

(i) [Reserved]

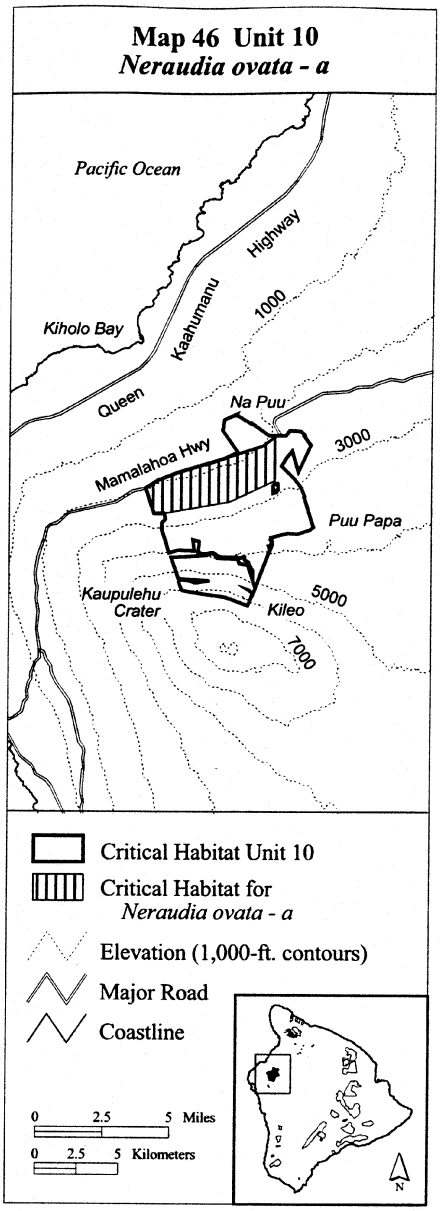
(ii) Map 45 follows:



(63) Hawaii 10—*Neraudia ovata*—a (1,859 ha, 4,593 ac)

(i) [Reserved]

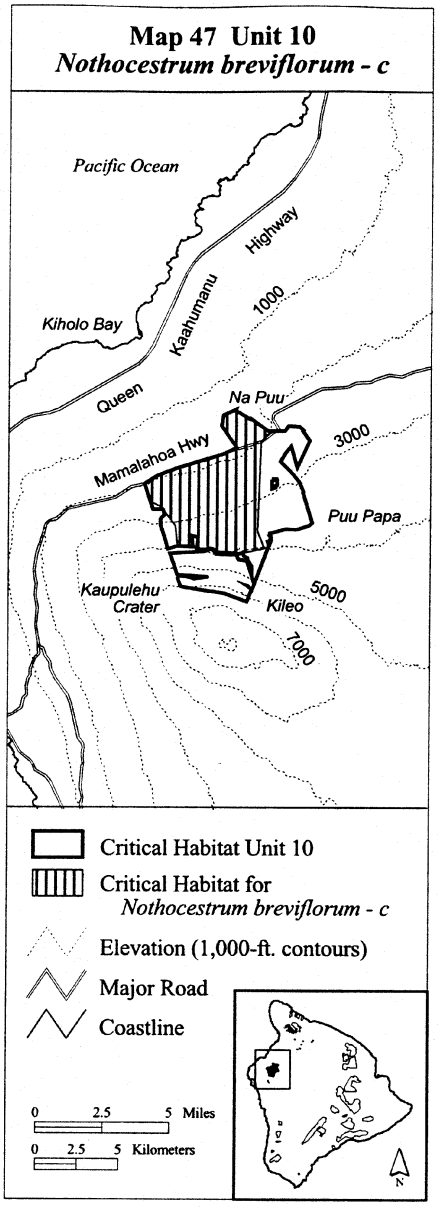
(ii) Map 46 follows:



(64) Hawaii 10—*Nothocestrum breviflorum*—c (3,627 ha, 8,964 ac)

(i) [Reserved]

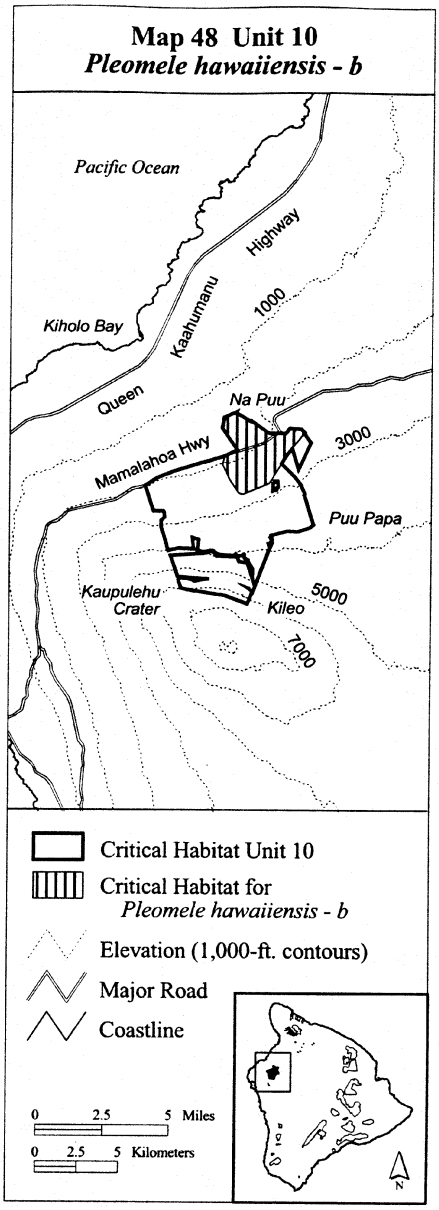
(ii) Map 47 follows:



(65) Hawaii 10—*Dracaena konaensis*—b (1,338 ha, 3,306 ac)

(i) [Reserved]

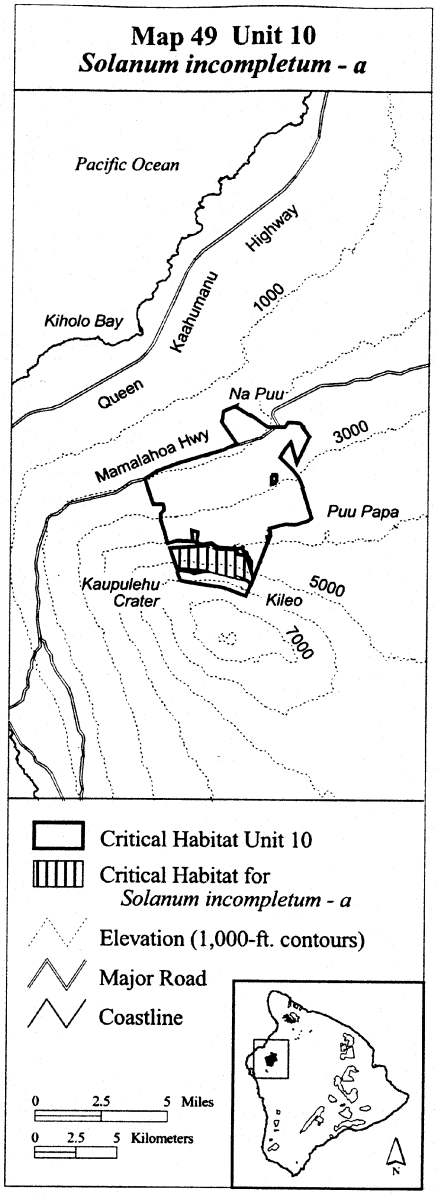
(ii) *Note:* The reference to ''Hawaii 10—*Pleomele hawaiiensis*—b'' on the map is equivalent to ''Hawaii 10—*Dracaena konaensis*—b''. Map 48 follows:



(66) Hawaii 10—*Solanum incompletum*—a (705 ha, 1,741 ac)

(i) [Reserved]

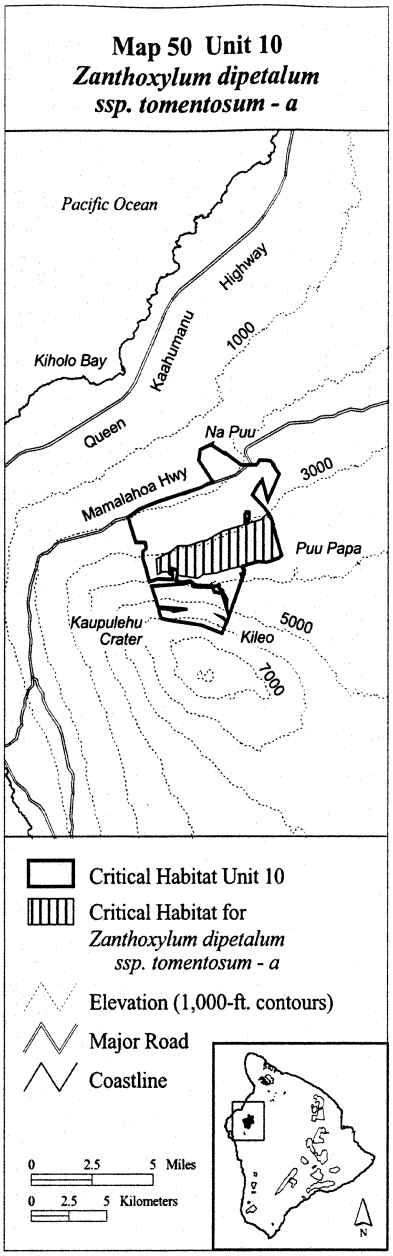
(ii) Map 49 follows:



(67) Hawaii 10—*Zanthoxylum dipetalum* ssp. *tomentosum*—a (1,685 ha, 4,164 ac)

(i) [Reserved]

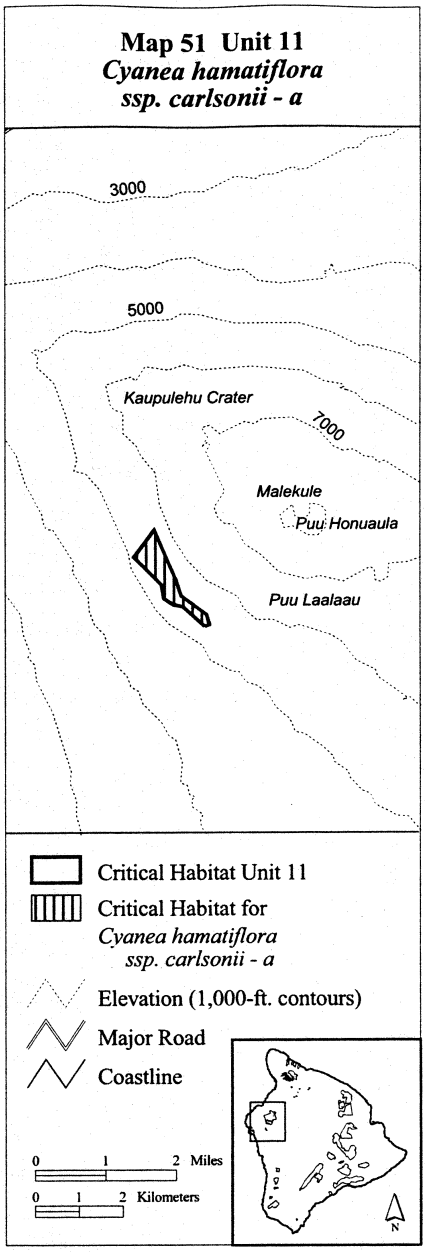
(ii) Map 50 follows:



(68) Hawaii 11—*Cyanea hamatiflora* ssp. *carlsonii*—a (92 ha, 227 ac)

(i) [Reserved]

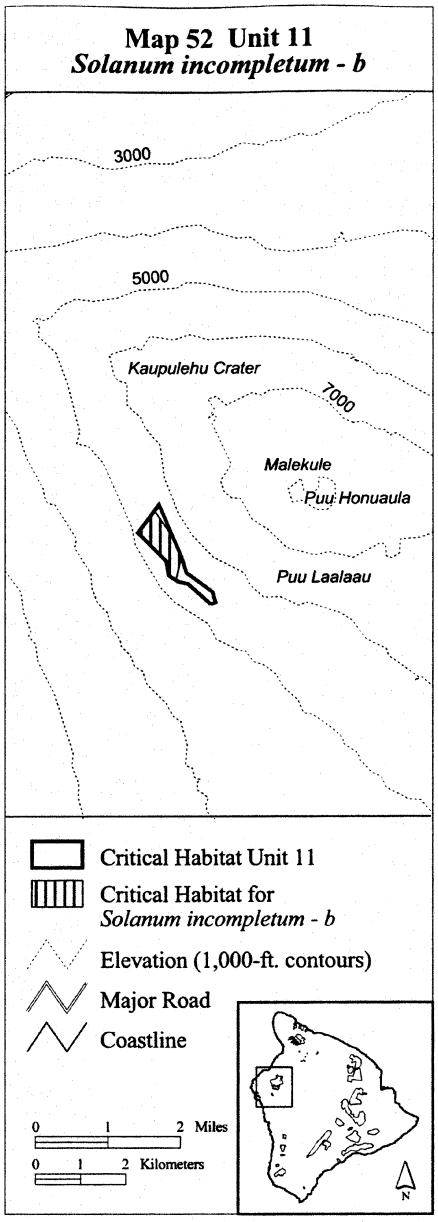
(ii) Map 51 follows:



(69) Hawaii 11—*Solanum incompletum*—b (57 ha, 141 ac)

(i) [Reserved]

(ii) Map 52 follows:

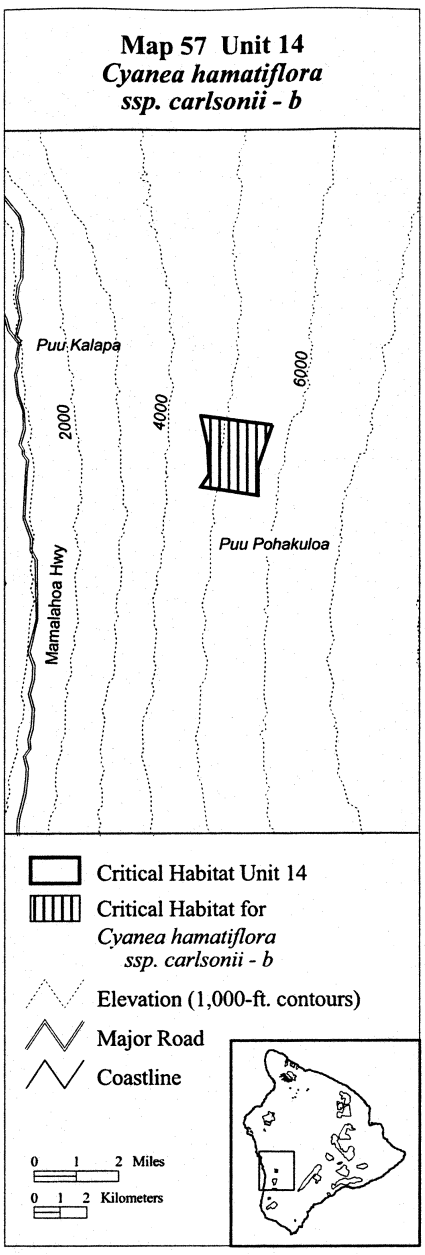


(70) [Reserved]

(71) Hawaii 14—*Cyanea hamatiflora* ssp. *carlsonii*—b (597 ha, 1,475 ac)

(i) [Reserved]

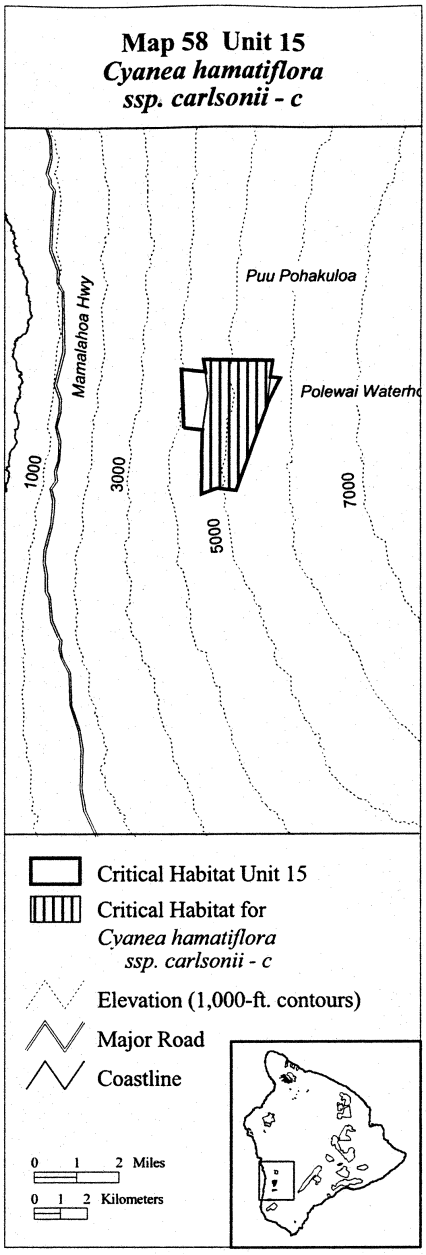
(ii) Map 57 follows:



(72) Hawaii 15—*Cyanea hamatiflora* ssp. *carlsonii*—c (1,045 ha, 2,583 ac)

(i) [Reserved]

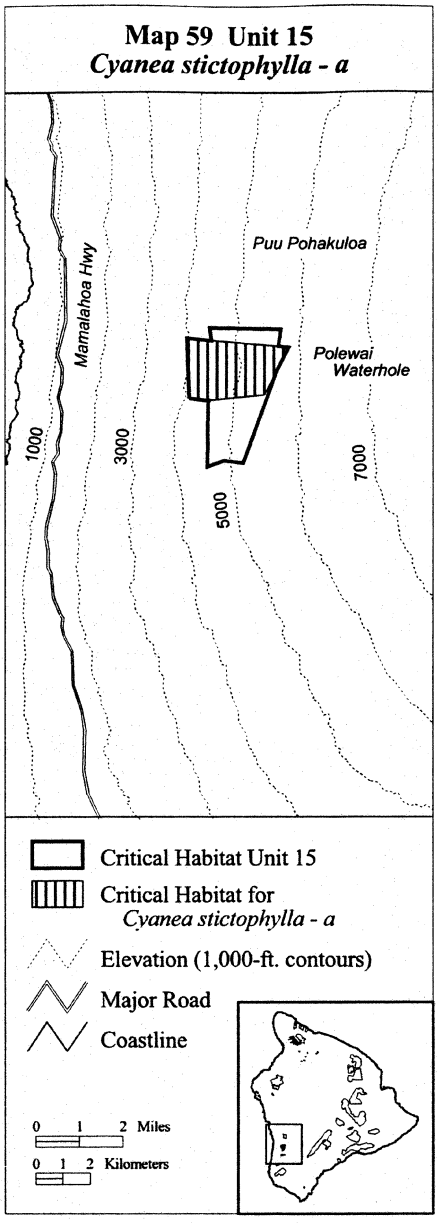
(ii) Map 58 follows:



(73) Hawaii 15—*Cyanea stictophylla*—a (685 ha, 1,693 ac)

(i) [Reserved]

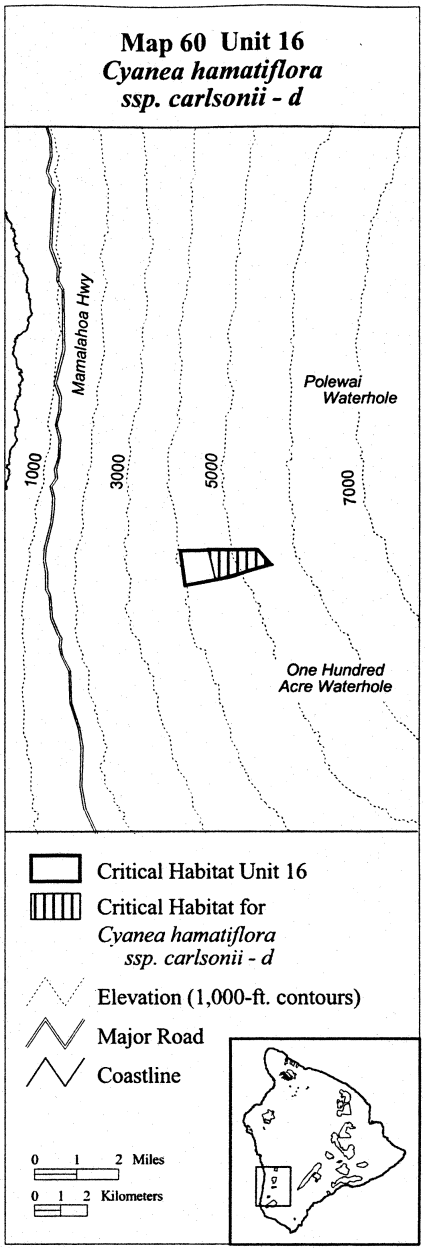
(ii) Map 59 follows:



(74) Hawaii 16—*Cyanea hamatiflora* ssp. *carlsonii*—d (186 ha, 459 ac)

(i) [Reserved]

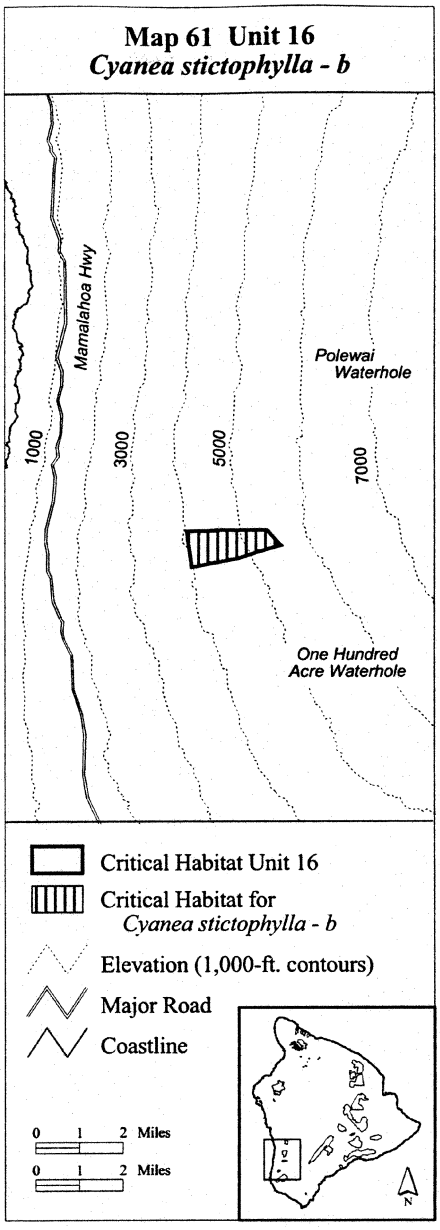
(ii) Map 60 follows:



(75) Hawaii 16—*Cyanea stictophylla*—b (327 ha, 809 ac)

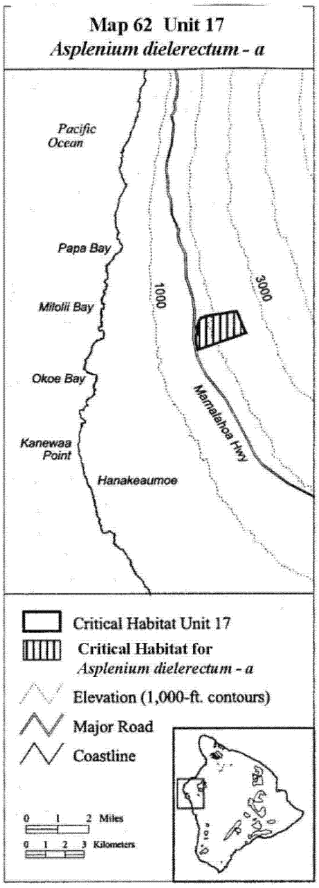
(i) [Reserved]

(ii) Map 61 follows:



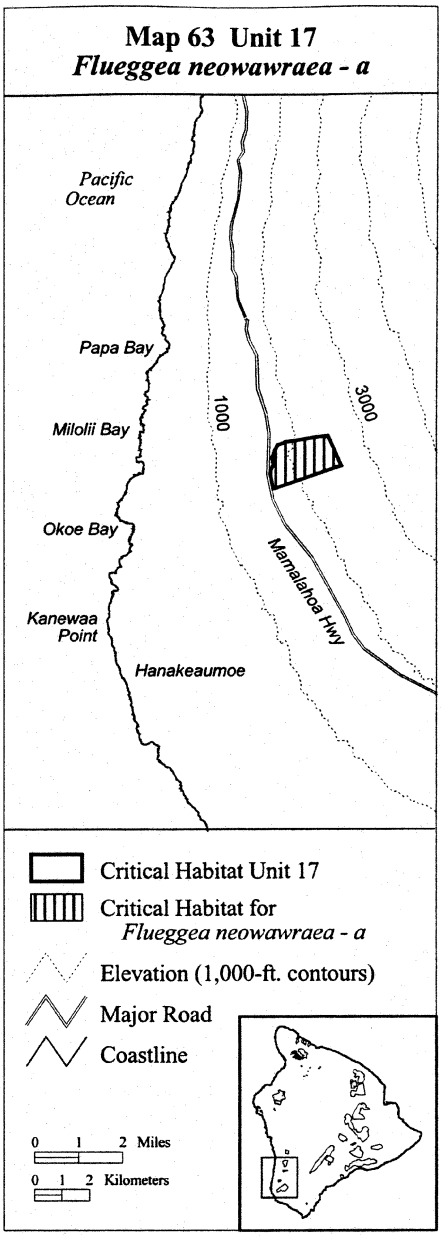
(76) Hawaii 17—*Asplenium dielerectum*—a (329 ha, 814 ac)

(i) [Reserved]
(ii) Map 62 follows:



(77) Hawaii 17—*Flueggea neowawraea*—a (327 ha, 807 ac)

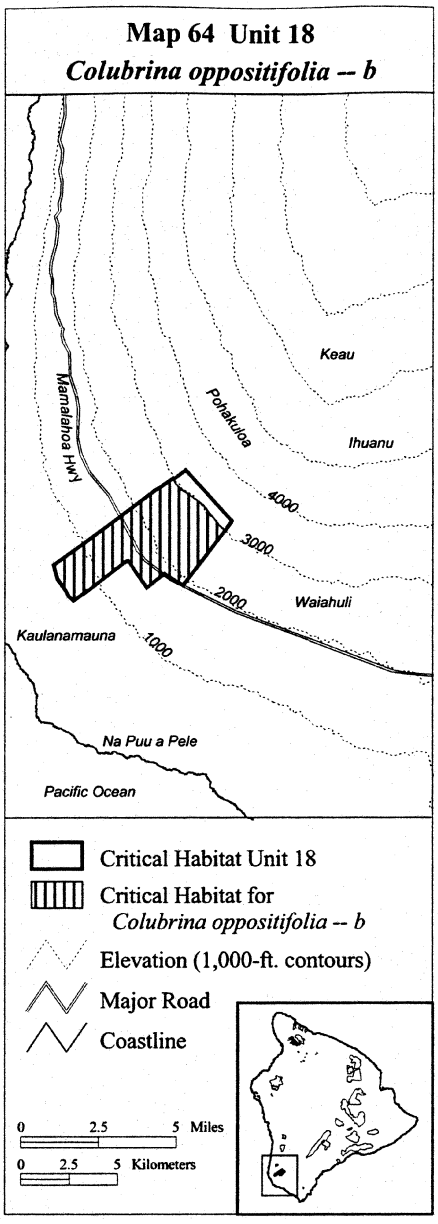
(i) [Reserved]
(ii) Map 63 follows:



(78) Hawaii 18—*Colubrina oppositifolia*—b (2,717 ha, 6,713 ac)

(i) [Reserved]

(ii) Map 64 follows:



(79) Hawaii 15–*Cyanea marksii*-a-Section 4 (182 ac; 73 ha).

(i) This unit is also critical habitat for Hawaii 15–*Phyllostegia floribunda*-d-Section 4, Hawaii 15–*Pittosporum hawaiiense*-d-Section 4, Hawaii 15–*Schiedea diffusa* ssp. *macraei*-d-Section

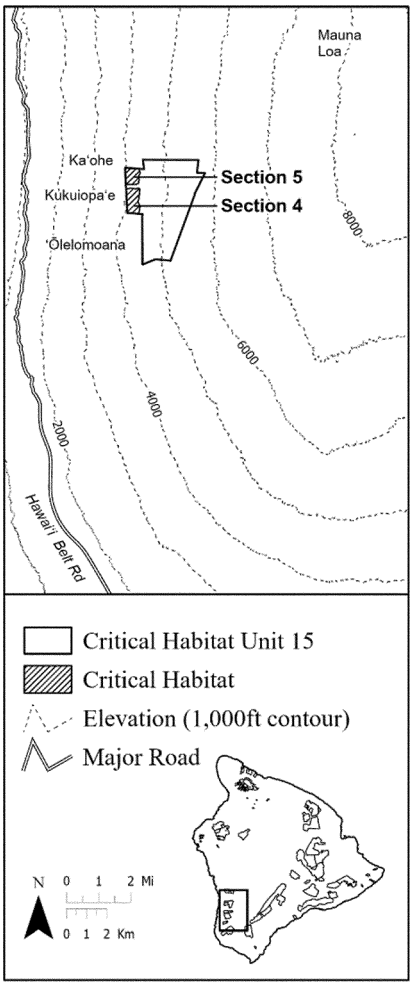
4, and Hawaii 15–*Stenogyne cranwelliae*-d-Section 4 (see paragraphs (k)(82), (k)(84), (k)(86), and (k)(88), respectively, of this section).

(ii) Map 58a follows:

Figure 60 to paragraph (k)

MAP 58A

Hawaii 15–*Cyanea marksii*-a-Section 4, Hawaii 15–*Cyanea marksii*-b-Section 5, Hawaii 15–*Phyllostegia floribunda*-d-Section 4, Hawaii 15–*Phyllostegia floribunda*-e-Section 5, Hawaii 15–*Pittosporum hawaiiense*-d-Section 4, Hawaii 15–*Pittosporum hawaiiense*-e-Section 5, Hawaii 15–*Schiedea diffusa* ssp. *macraei*-d-Section 4, Hawaii 15–*Schiedea diffusa* ssp. *macraei*-e-Section 5, Hawaii 15–*Stenogyne cranwelliae*-d-Section 4, Hawaii 15–*Stenogyne cranwelliae*-e-Section 5



(80) Hawaii 15–*Cyanea marksii*-b-Section 5 (127 ac; 51 ha).

(i) This unit is also critical habitat for Hawaii 15–*Phyllostegia floribunda*-e-

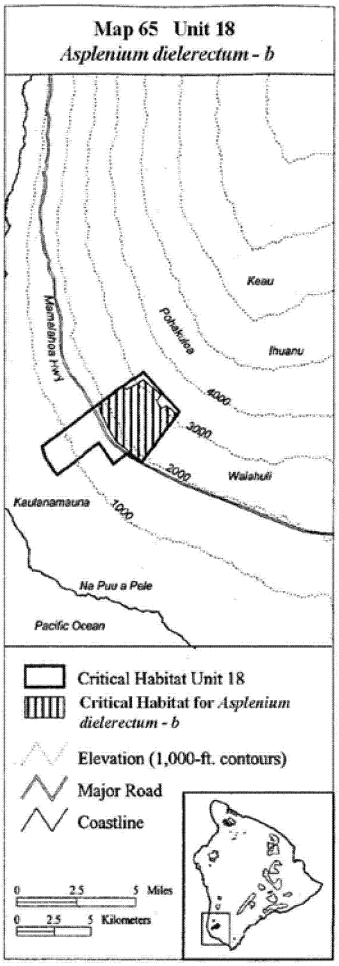
Section 5, Hawaii 15–*Pittosporum hawaiiense*-e-Section 5, Hawaii 15–*Schiedea diffusa* ssp. *macraei*-e-Section 5, and Hawaii 15–*Stenogyne cranwelliae*-e-Section 5 (see paragraphs (k)(83), (k)(85), (k)(87), and (k)(89), respectively, of this section).

(ii) See paragraph (k)(79)(ii) of this section for the map of this unit.

(81) Hawaii 18—*Asplenium dielerectum*—b (1,615 ha, 3,992 ac)

(i) [Reserved]

(ii) Map 65 follows:



(82) Hawaii 15–*Phyllostegia floribunda*-d-Section 4 (182 ac; 73 ha). See paragraph (k)(79)(ii) of this section for the map of this unit.

(83) Hawaii 15–*Phyllostegia floribunda*-e-Section 5 (127 ac; 51 ha). See paragraph (k)(79)(ii) of this section for the map of this unit.

(84) Hawaii 15–*Pittosporum hawaiiense*-d-Section 4 (182 ac; 73 ha). See paragraph (k)(79)(ii) of this section for the map of this unit.

(85) Hawaii 15–*Pittosporum hawaiiense*-e-Section 5 (127 ac; 51 ha). See paragraph (k)(79)(ii) of this section for the map of this unit.

(86) Hawaii 15–*Schiedea diffusa* ssp. *macraei*-d-Section 4 (182 ac; 73 ha). See paragraph (k)(79)(ii) of this section for the map of this unit.

(87) Hawaii 15–*Schiedea diffusa* ssp. *macraei*-e-Section 5 (127 ac; 51 ha). See paragraph (k)(79)(ii) of this section for the map of this unit.

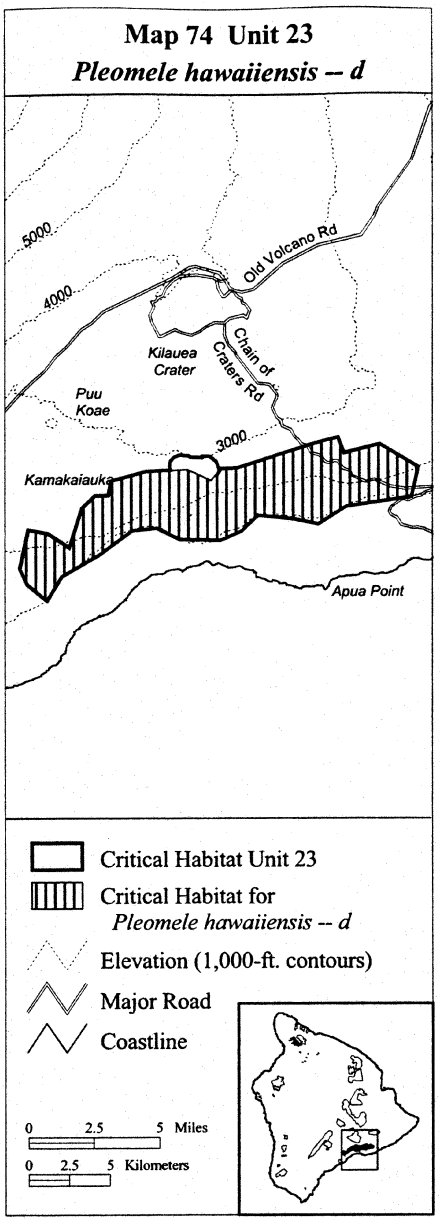
(88) Hawaii 15–*Stenogyne cranwelliae*-d-Section 4 (182 ac; 73 ha). See paragraph (k)(79)(ii) of this section for the map of this unit.

(89) Hawaii 15–*Stenogyne cranwelliae*-e-Section 5 (127 ac; 51 ha). See paragraph (k)(79)(ii) of this section for the map of this unit.

(90) Hawaii 23—*Dracaena konaensis*—d (8,943 ha, 22,097 ac)

(i) [Reserved]

(ii) *Note:* The reference to ''Hawaii 23—*Pleomele hawaiiensis*—d'' on the map is equivalent to ''Hawaii 23—*Dracaena konaensis*—d''. Map 74 follows:



(91) Hawaii 16–*Cyanea marksii*-c (156 ac; 63 ha).

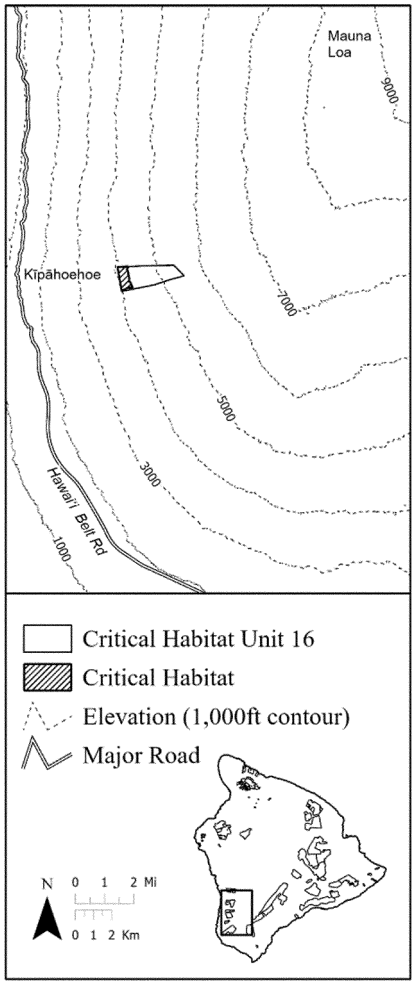
(i) This unit is also critical habitat for Hawaii 16–*Phyllostegia floribunda*-f, Hawaii 16–*Pittosporum hawaiiense*-f, Hawaii 16–*Schiedea diffusa* ssp. *macraei*-f, and Hawaii 16–*Stenogyne cranwelliae*-f (see paragraphs (k)(93), (k)(94), (k)(95), and (k)(96), respectively, of this section).

(ii) Map 60a follows:

Figure 63 to paragraph (k)

MAP 60A

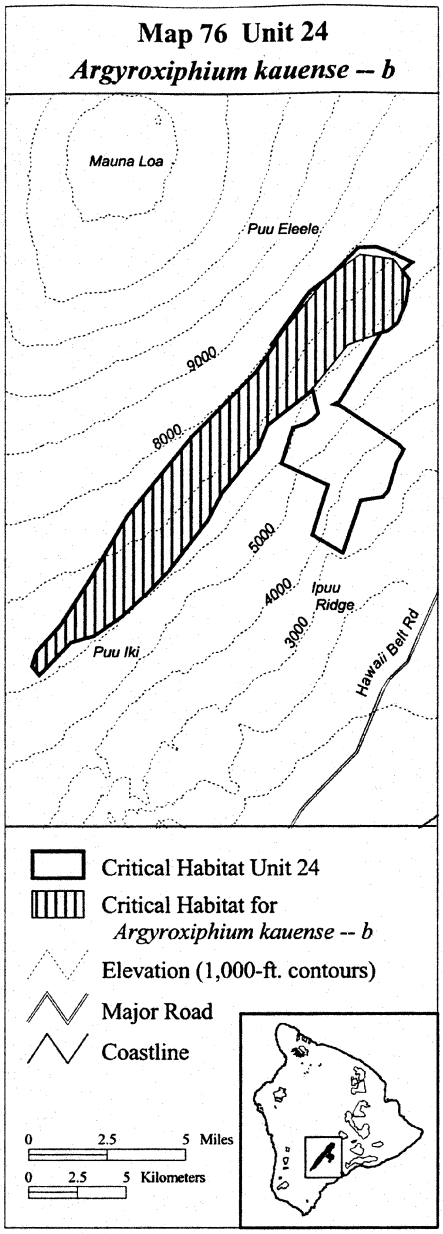
Hawaii 16–*Cyanea marksii*-c, Hawaii 16–*Phyllostegia floribunda*-f, Hawaii 16–*Pittosporum hawaiiense*-f, Hawaii 16–*Schiedea diffusa* ssp. *macraei*-f, Hawaii 16–*Stenogyne cranwelliae*-f


Mauna
Loa
9000
Kipahoehoe
7000
5000
3000
Hawai'i Belt Rd
1000
Critical Habitat Unit 16
Critical Habitat
Elevation (1,000ft contour)
Major Road
N 0 1 2 Mi
0 1 2 Km

(92) Hawaii 24—*Argyroxiphium kauense*—b (7,795 ha, 19,261 ac)

(i) [Reserved]

(ii) Map 76 follows:



(93) Hawaii 16–*Phyllostegia floribunda*-f (156 ac; 63 ha). See paragraph (k)(91)(ii) of this section for the map of this unit.

(94) Hawaii 16–*Pittosporum hawaiiense*-f (156 ac; 63 ha). See paragraph (k)(91)(ii) of this section for the map of this unit.

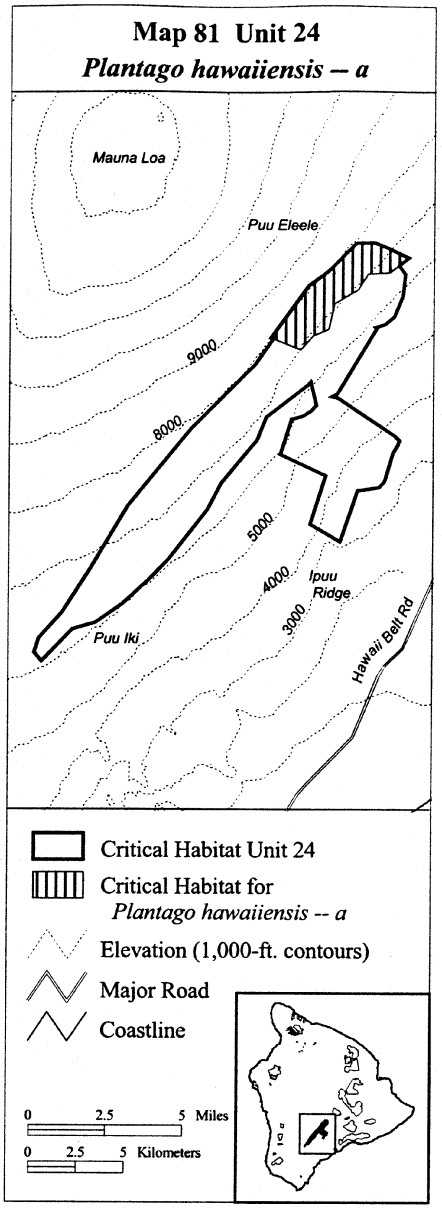
(95) Hawaii 16–*Schiedea diffusa* ssp. *macraei*-f (156 ac; 63 ha). See paragraph (k)(91)(ii) of this section for the map of this unit.

(96) Hawaii 16–*Stenogyne cranwelliae*-f (156 ac; 63 ha). See paragraph (k)(91)(ii) of this section for the map of this unit.

(97) Hawaii 24—*Plantago hawaiensis*—a (1,348 ha, 3,330 ac)

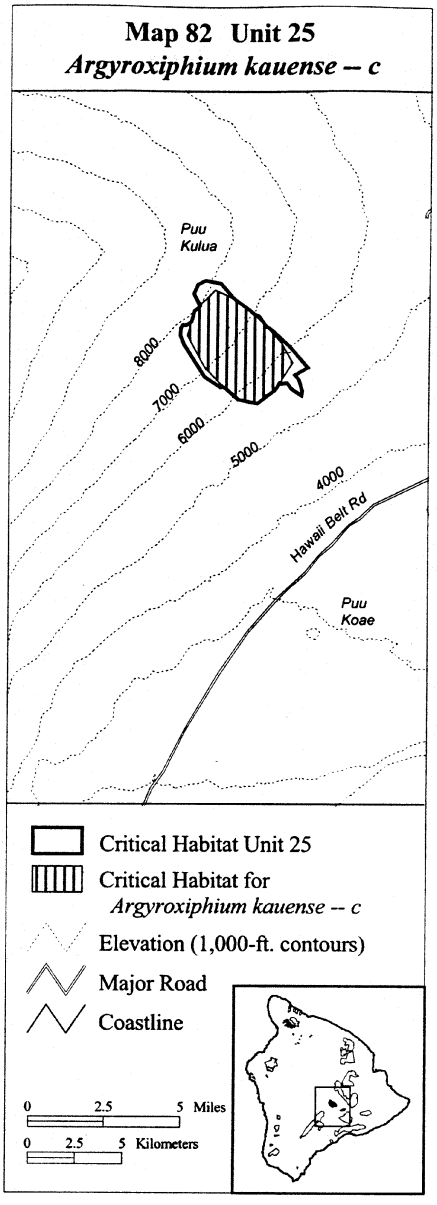
(i) [Reserved]

(ii) Map 81 follows:



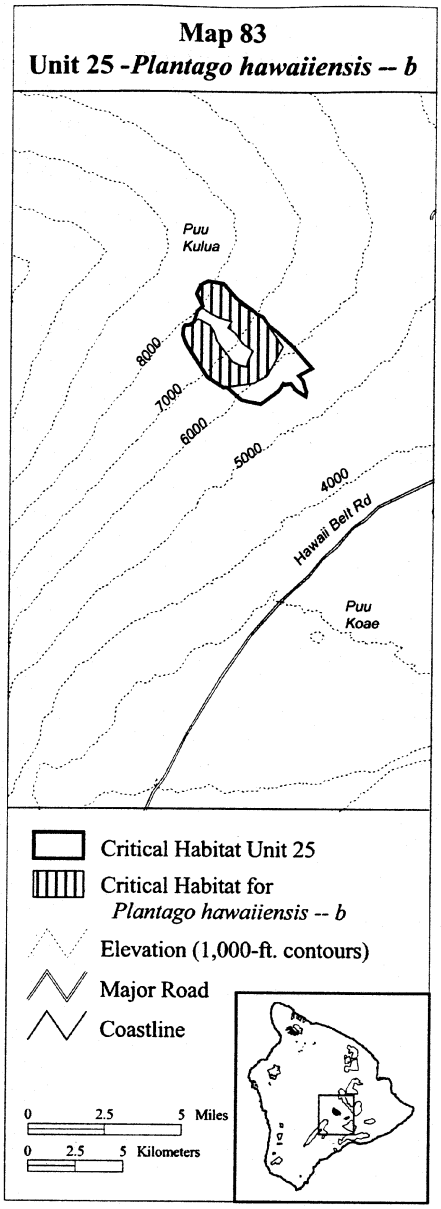
(98) Hawaii 25—*Argyroxiphium kauense*—c (2,006 ha, 4,957 ac)

(i) [Reserved]
(ii) Map 82 follows:



(99) Hawaii 25—*Plantago hawaiensis*—b (1,522 ha, 3,762 ac)

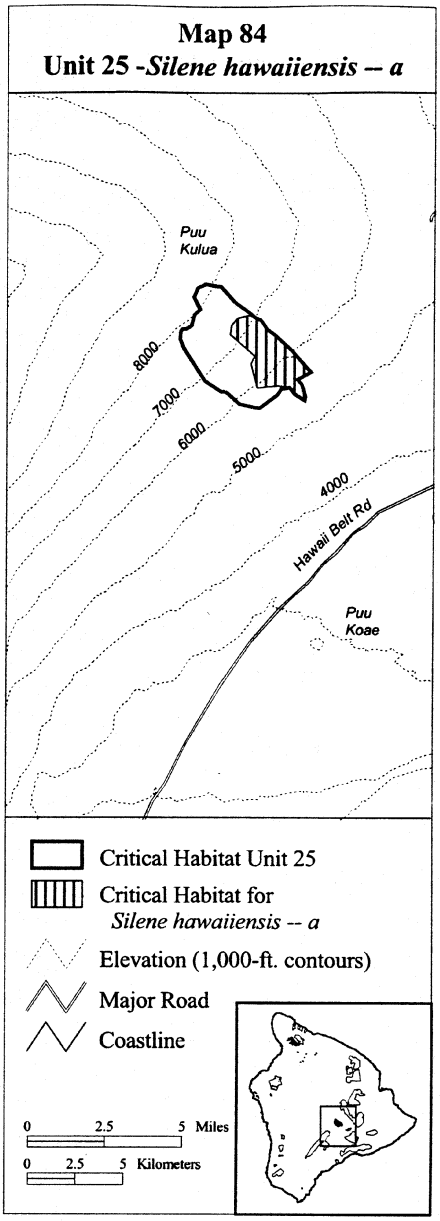
(i) [Reserved]
(ii) Map 83 follows:



(100) Hawaii 25—*Silene hawaiiensis*—a (854 ha, 2,110 ac)

(i) [Reserved]

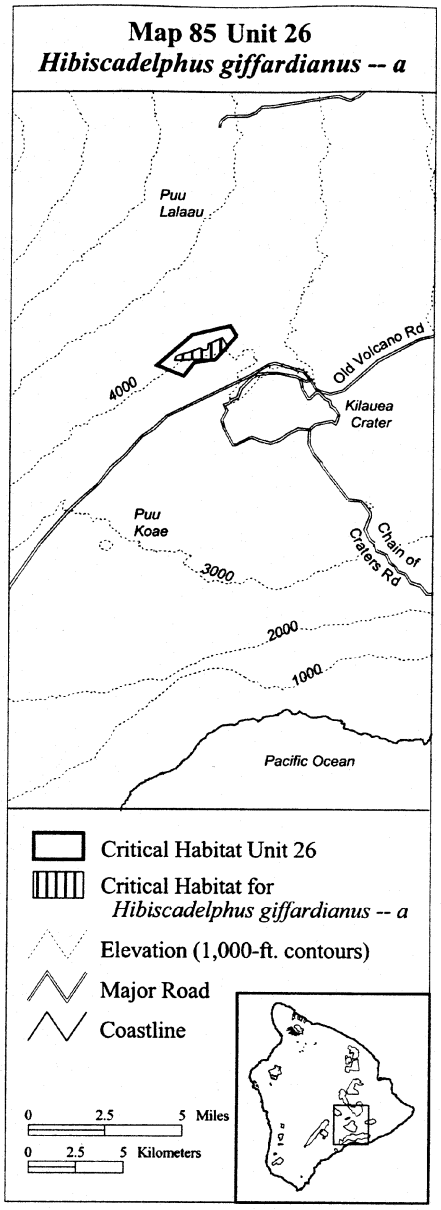
(ii) Map 84 follows:



(101) Hawaii 26—*Hibiscadelphus giffardianus*—a (149 ha, 367 ac)

(i) [Reserved]

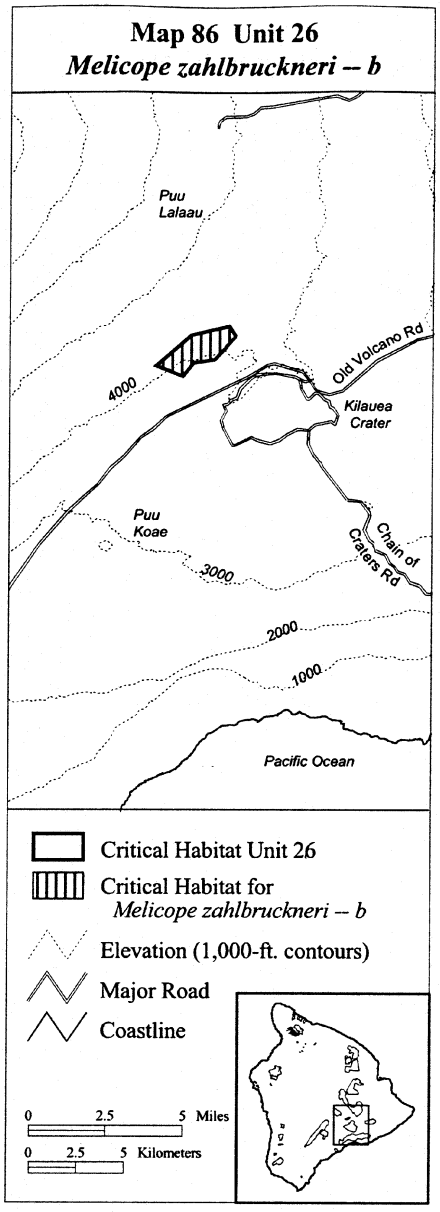
(ii) Map 85 follows:



(102) Hawaii 26—*Melicope zahlbruckneri*—b (495 ha, 1,224 ac)

(i) [Reserved]

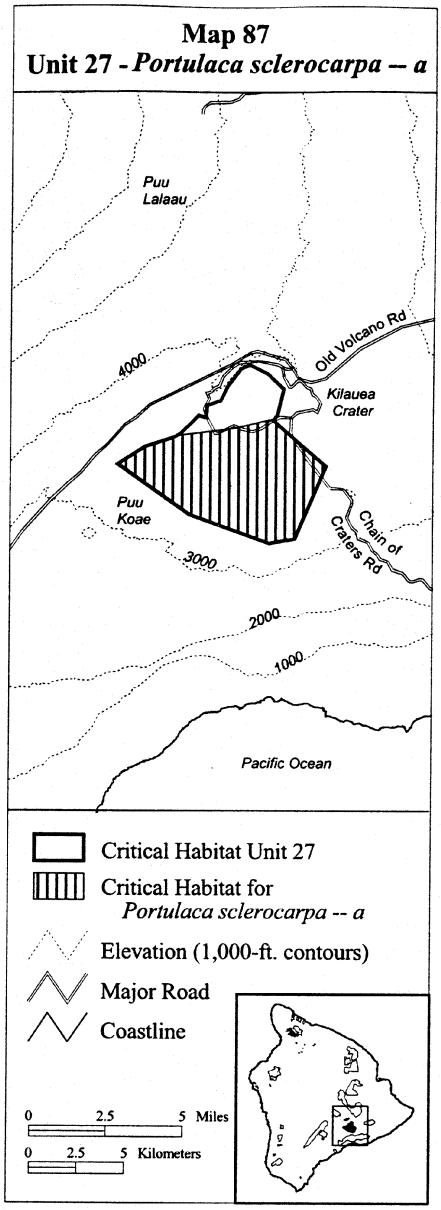
(ii) Map 86 follows:



(103) Hawaii 27—*Portulaca sclerocarpa*—a (4,390 ha, 10,848 ac)

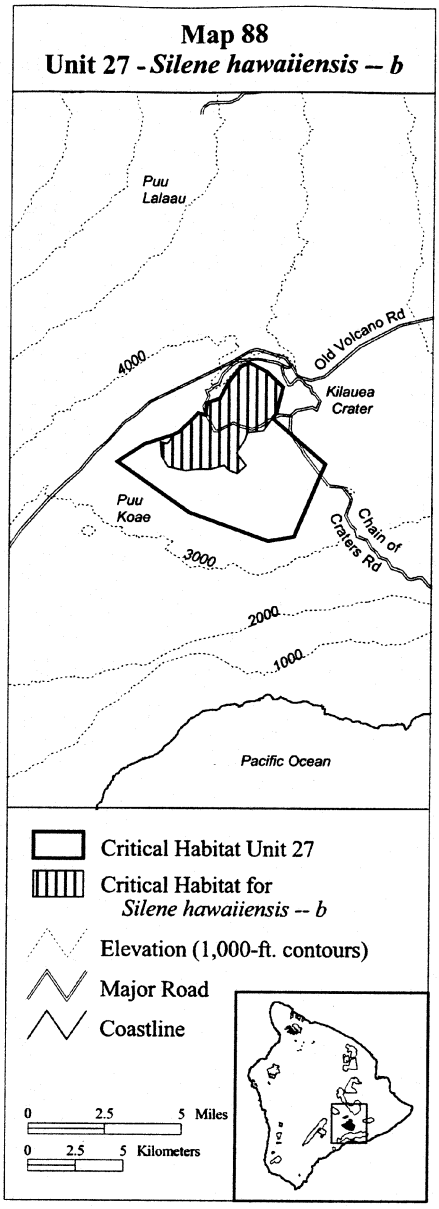
(i) [Reserved]

(ii) Map 87 follows:



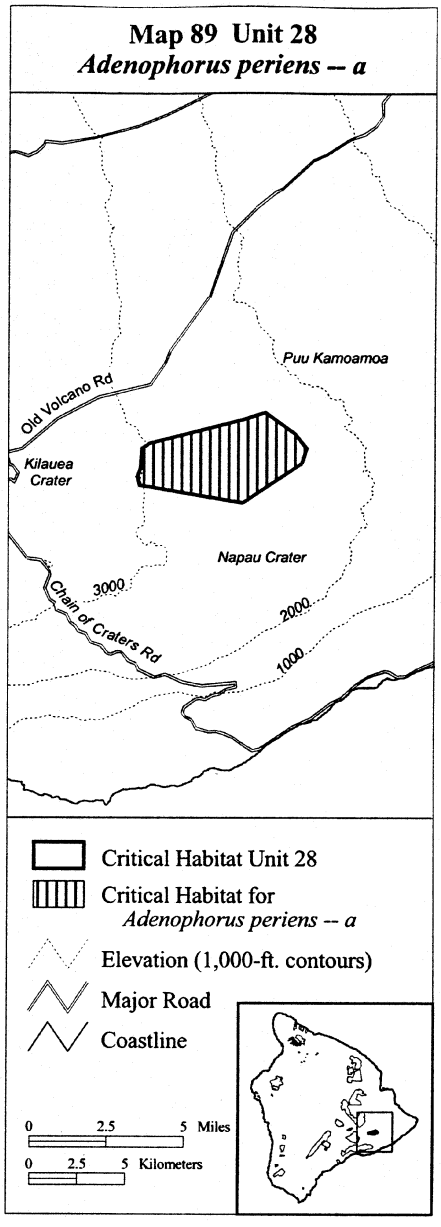
(104) Hawaii 27—*Silene hawaiiensis*—b (1,942 ha, 4,798 ac)

(i) [Reserved]
(ii) Map 88 follows:



(105) Hawaii 28—*Adenophorus periens*—a (2,733 ha, 6,754 ac)

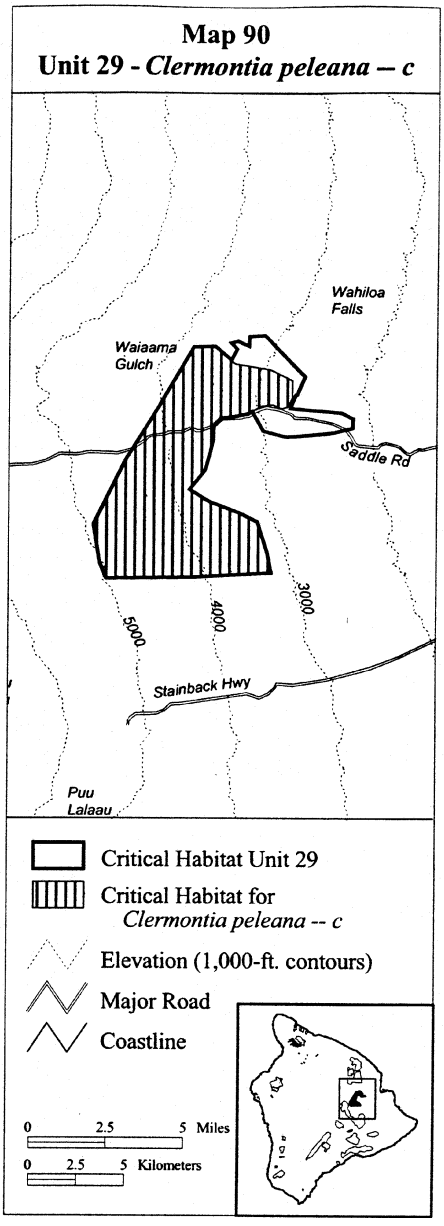
(i) [Reserved]
(ii) Map 89 follows:



(106) Hawaii 29—*Clermontia peleana*—c (6,845 ha, 16,914 ac)

(i) [Reserved]

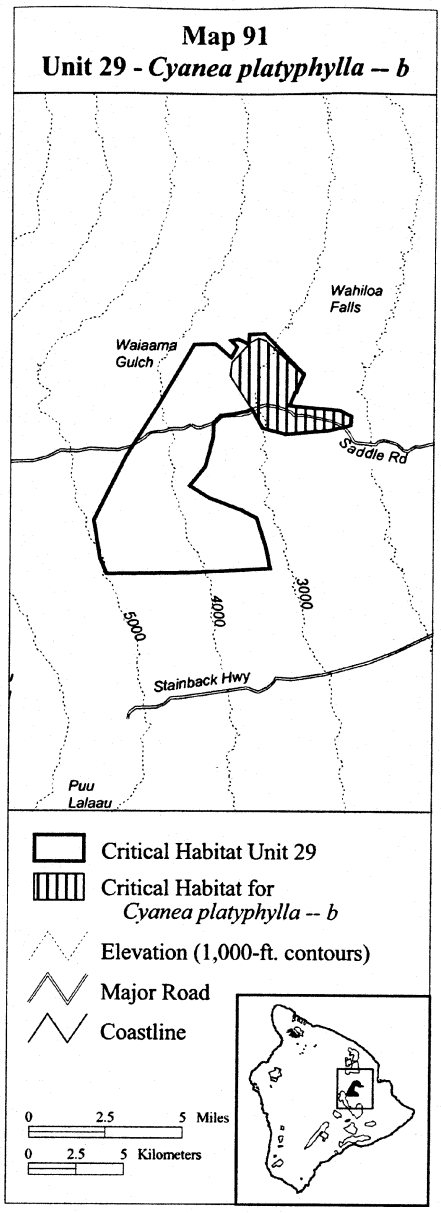
(ii) Map 90 follows:



(107) Hawaii 29—*Cyanea platyphylla*—b (1,524 ha, 3,767 ac)

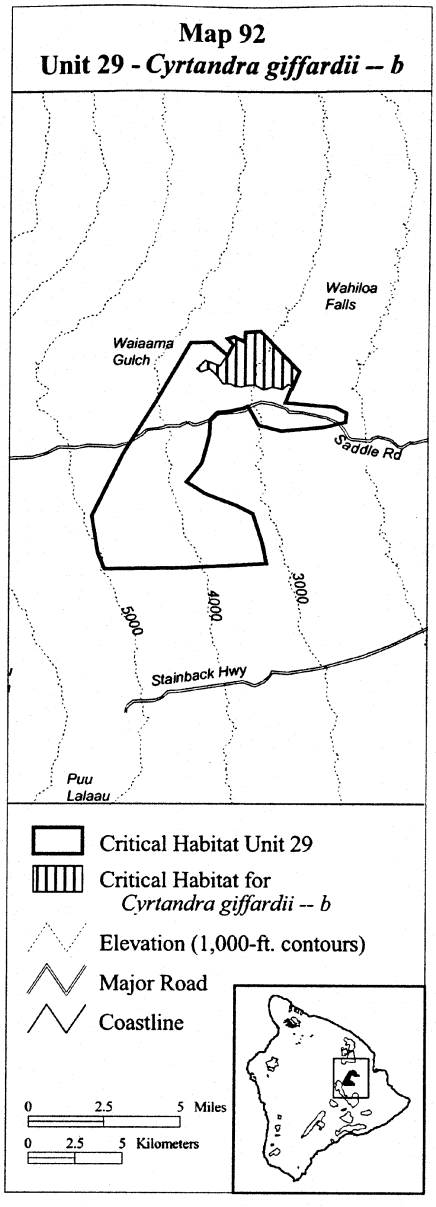
(i) [Reserved]

(ii) Map 91 follows:



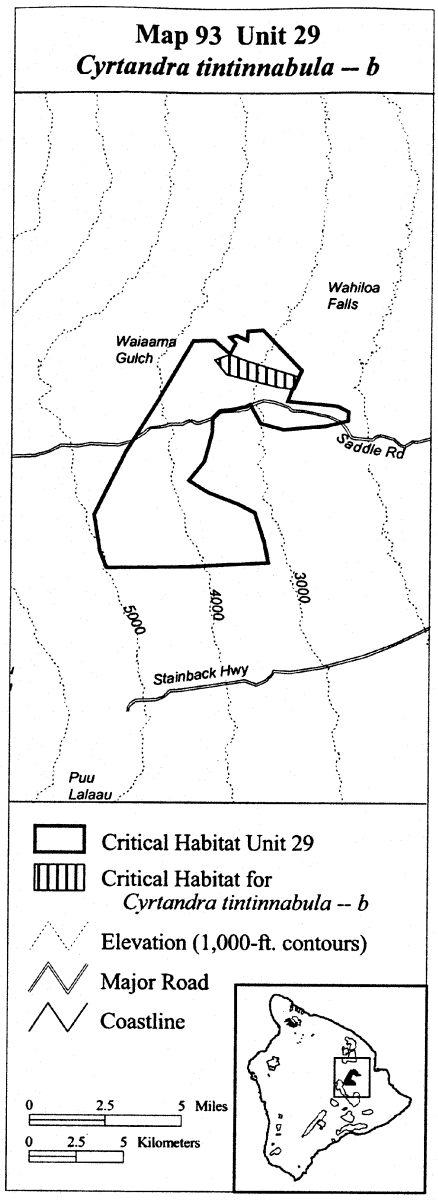
(108) Hawaii 29—*Cyrtandra giffardii*—b (938 ha, 2,319 ac)

(i) [Reserved]
(ii) Map 92 follows:



(109) Hawaii 29—*Cyrtandra tintinnabula*—b (378 ha, 934 ac)

(i) [Reserved]
(ii) Map 93 follows:



(110) Hawaii 23–*Phyllostegia floribunda*-g (9 ac; 4 ha).

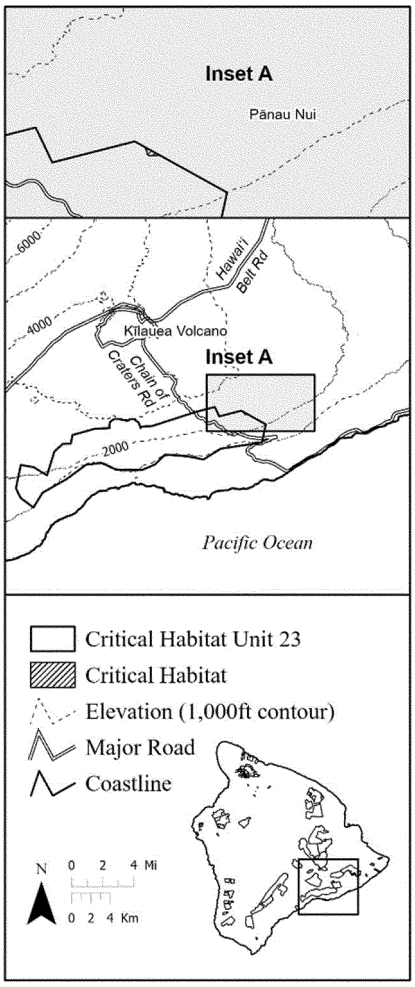
(i) This unit is also critical habitat for Hawaii 23–*Pittosporum hawaiiense*-g (see paragraph (k)(111) of this section).

(ii) Map 74a follows:

Figure 78 to paragraph (k)

MAP 74A

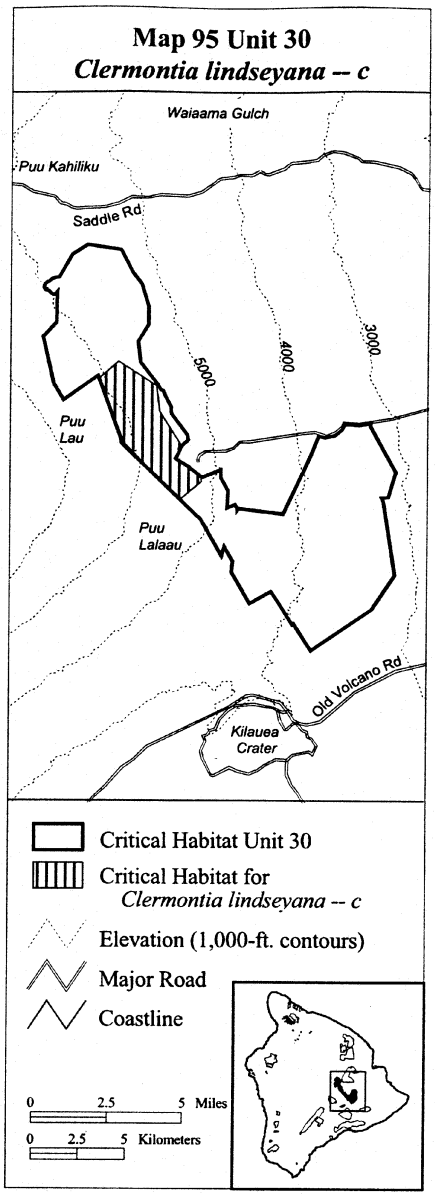
Hawaii 23–*Phyllostegia floribunda*-g, Hawaii 23–*Pittosporum hawaiiense*-g


Inset A
Pānau Nui
6000
4000
2000
Hawai'i Belt Rd
Kīlauea Volcano
Chain of Craters Rd
Inset A
Pacific Ocean
Critical Habitat Unit 23
Critical Habitat
Elevation (1,000ft contour)
Major Road
Coastline
N
0 2 4 Mi
0 2 4 Km

(111) Hawaii 23–*Pittosporum hawaiiense*-g (9 ac; 4 ha). See paragraph (k)(110)(ii) of this section for the map of this unit.

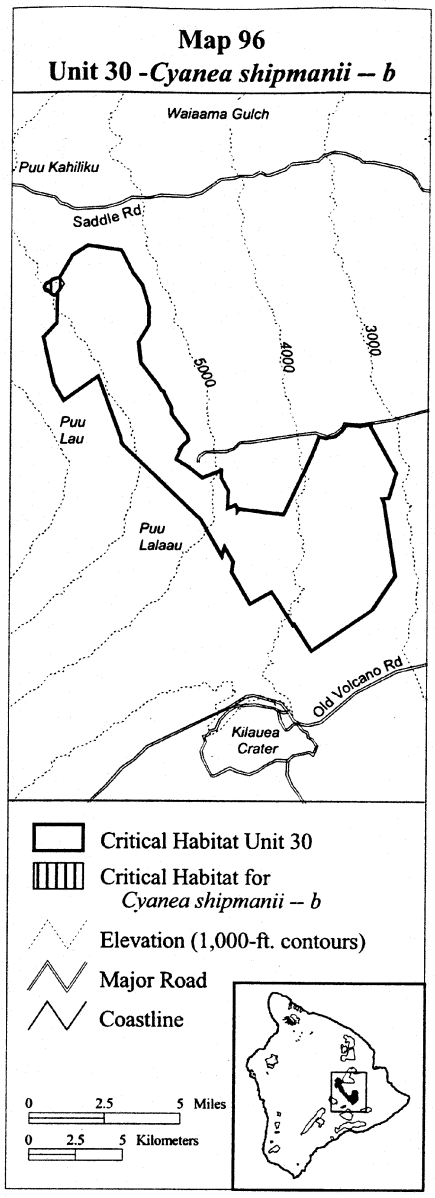
(111a) Hawaii 30—*Clermontia lindseyana*—c (1,634 ha, 4,037 ac)

(i) [Reserved]
(ii) Map 95 follows:



(112) Hawaii 30—*Cyanea shipmanii*—b (62 ha, 152 ac)

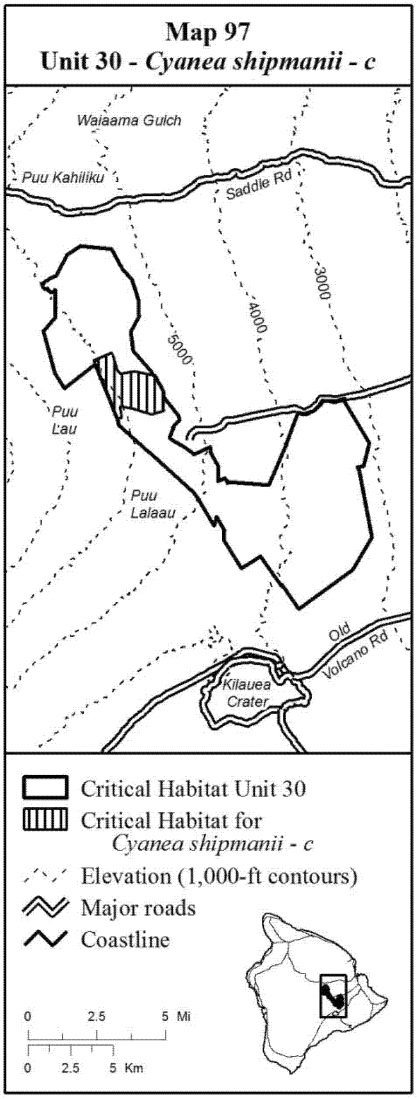
(i) [Reserved]
(ii) Map 96 follows:



(113) Hawaii 30—*Cyanea shipmanii*—c (825 ha, 2,038 ac)

(i) [Reserved]

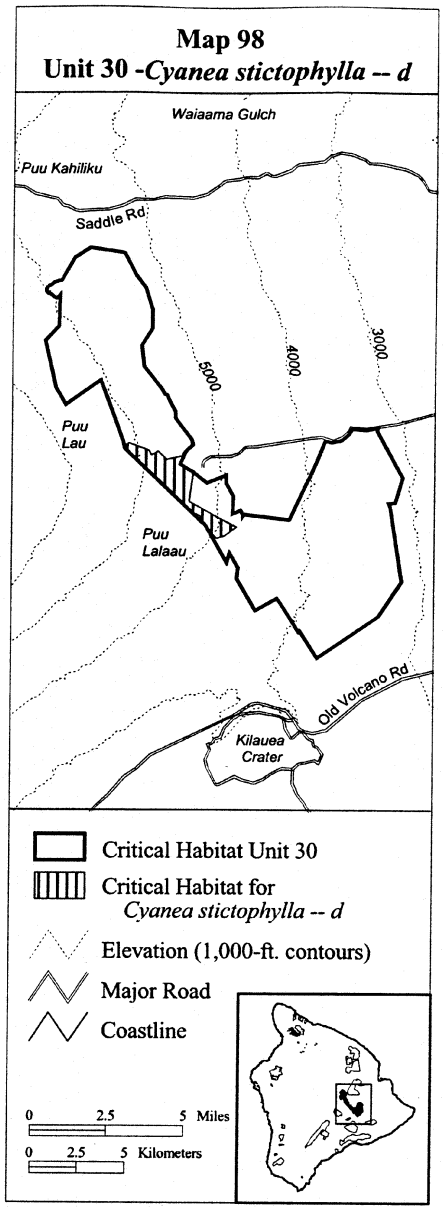
(ii) *Note:* Map 97 follows:


Map 97
Unit 30 - Cyanea shipmanii - c
Waiaama Gulch
Puu Kahiliku
Saddle Rd
3000
4000
5000
Puu
Lau
Puu
Lalaau
Old
Volcano Rd
Kilauea
Crater
Critical Habitat Unit 30
Critical Habitat for
Cyanea shipmanii - c
Elevation (1,000-ft contours)
Major roads
Coastline
0 2.5 5 Mi
0 2.5 5 Km

(114) Hawaii 30—*Cyanea stictophylla*—d (623 ha, 1,539 ac)

(i) [Reserved]

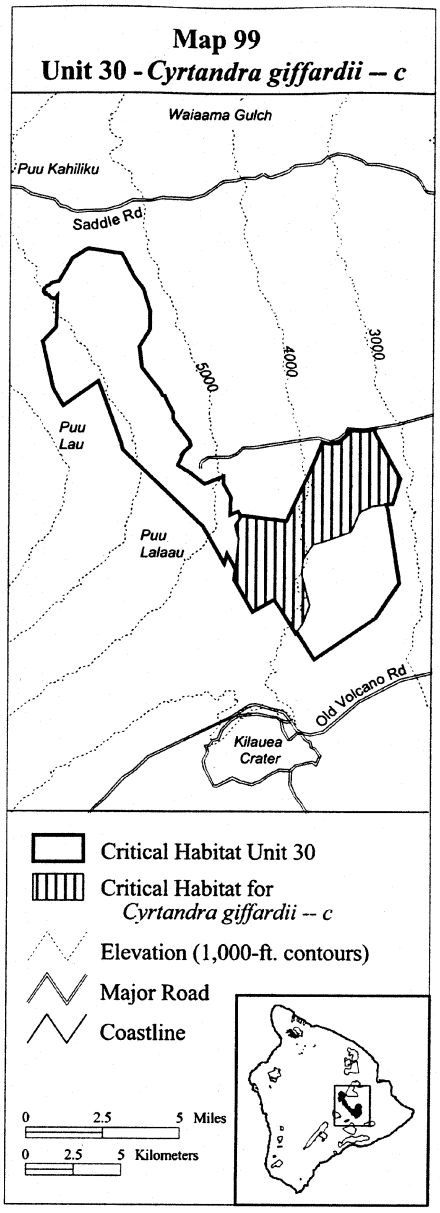
(ii) Map 98 follows:



(115) Hawaii 30—*Cyrtandra giffardii*—c (3,872 ha, 9,567 ac)

(i) [Reserved]

(ii) Map 99 follows:



(116) Hawaii 24–*Cyanea tritomantha*-d-Section 8 (1,956 ac; 792 ha).

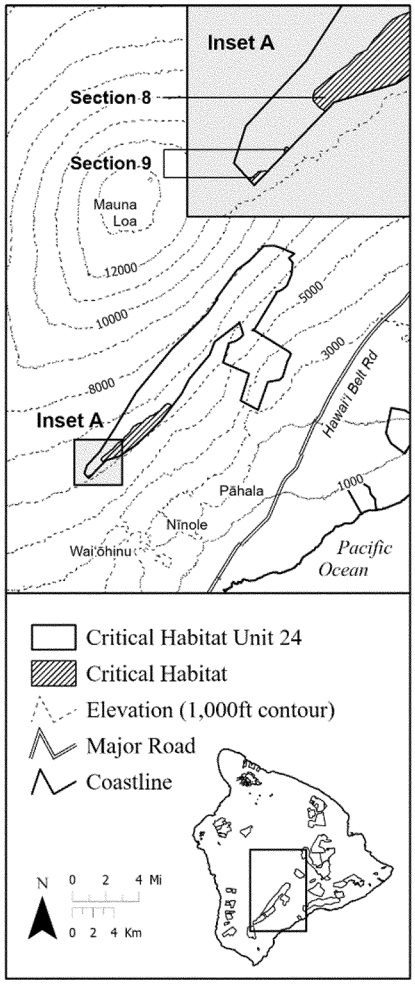
(i) This unit is also critical habitat for Hawaii 24–*Pittosporum hawaiiense*-h-Section 8, Hawaii 24–*Schiedea diffusa* ssp. *macraei*-g-Section 8, and Hawaii 24–*Stenogyne cranwelliae*-g-Section 8 (see paragraphs (k)(119), (k)(122), and (k)(124), respectively, of this section).

(ii) Map 78a follows:

Figure 83 to paragraph (k)

MAP 78A

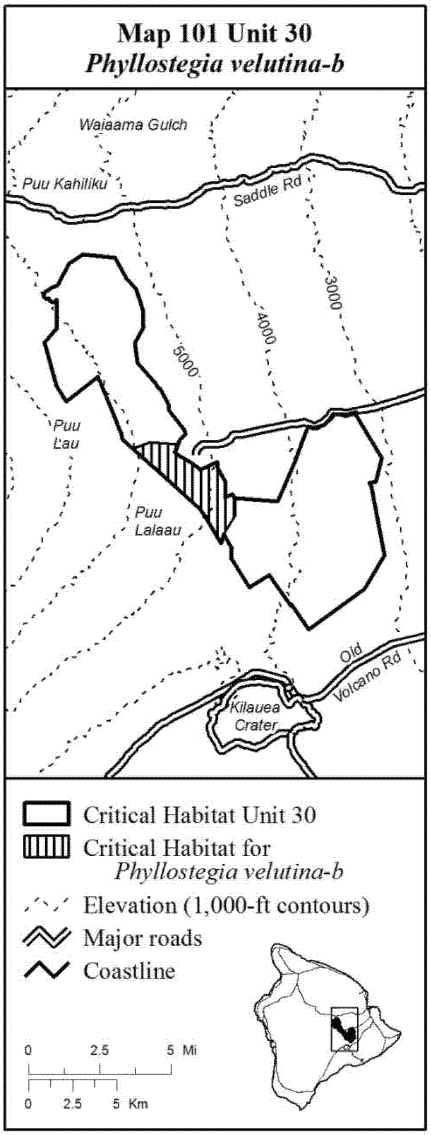
Hawaii 24–*Cyanea tritomantha*-d-Section 8, Hawaii 24–*Pittosporum hawaiiense*-h-Section 8, Hawaii 24–*Pittosporum hawaiiense*-i-Section 9, Hawaii 24–*Schiedea diffusa* ssp. *macraei*-g-Section 8, Hawaii 24–*Schiedea diffusa* ssp. *macraei*-h-Section 9, Hawaii 24–*Stenogyne cranwelliae*-g-Section 8, Hawaii 24–*Stenogyne cranwelliae*-h-Section 9



(117) Hawaii 30—*Phyllostegia velutina*—b (1,180 ha, 2,916 ac).

(i) [Reserved]

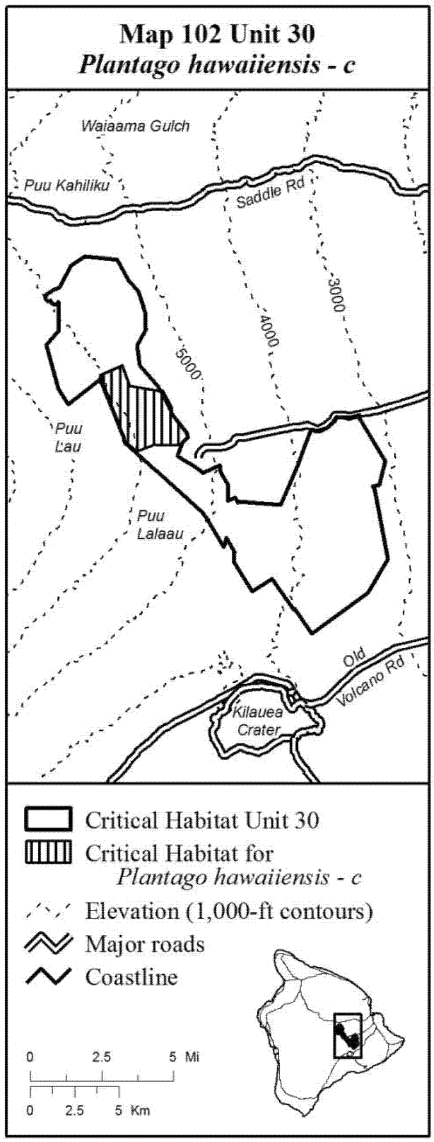
(ii) *Note:* Map 101 follows:



(118) Hawaii 30—*Plantago hawaiensis*—c (1,219 ha, 3,012 ac).

(i) [Reserved]

(ii) *Note:* Map 102 follows:



(119) Hawaii 24–*Pittosporum hawaiiense*-h-Section 8 (1,956 ac; 792 ha). See paragraph (k)(116)(ii) of this section for the map of this unit.

(120) Hawaii 24–*Pittosporum hawaiiense*-i-Section 9 (101 ac; 41 ha).

(i) This unit is also critical habitat for Hawaii 24–*Schiedea diffusa* ssp. *macraei*-h-Section 9 and Hawaii 24–*Stenogyne cranwelliae*-h-Section 9 (see paragraphs (k)(123) and (k)(125), respectively, of this section).

(ii) See paragraph (k)(116)(ii) of this section for the map of this unit.

(121) Hawaii 31—*Isodendrion pyrifolium*—b (2,860 ha; 7,066 ac). See paragraph (k)(104)(ii) of this section for the map of this unit.

(122) Hawaii 24–*Schiedea diffusa* ssp. *macraei*-g-Section 8 (1,956 ac; 792 ha). See paragraph (k)(116)(ii) of this section for the map of this unit.

(123) Hawaii 24–*Schiedea diffusa* ssp. *macraei*-h-Section 9 (101 ac; 41 ha). See paragraph (k)(116)(ii) of this section for the map of this unit.

(124) Hawaii 24–*Stenogyne cranwelliae*-g-Section 8 (1,956 ac; 792 ha). See paragraph (k)(116)(ii) of this section for the map of this unit.

(125) Hawaii 24–*Stenogyne cranwelliae*-h-Section 9 (101 ac; 41 ha). See paragraph (k)(116)(ii) of this section for the map of this unit.

(126) Hawaii 34—*Bidens micrantha* ssp. *ctenophylla*—e (371 ha; 917 ac).

(i) This unit is also critical habitat for Hawaii 34—*Isodendrion pyrifolium*—e and Hawaii 34—*Mezoneuron kavaiense*—e (see paragraphs (k)(111) and (112), respectively, of this section).

(ii) See paragraph (k)(107)(ii) of this section for the map of this unit.

(127) Hawaii 34—*Isodendrion pyrifolium*—e (371 ha; 917 ac). See paragraph (k)(107)(ii) of this section for the map of this unit.

(128) Hawaii 34—*Mezoneuron kavaiense*—e (371 ha; 917 ac). See paragraph (k)(107)(ii) of this section for the map of this unit.

(129) Hawaii 36—*Bidens micrantha* ssp. *ctenophylla*—g (163 ha; 402 ac).

(i) This unit is also critical habitat for Hawaii 36—*Isodendrion pyrifolium*—g (see paragraph (k)(114) of this section).

(ii) See paragraph (k)(107)(ii) of this section for the map of this unit.

(130) Hawaii 36—*Isodendrion pyrifolium*—g (163 ha; 402 ac). See paragraph (k)(107)(ii) of this section for the map of this unit.

(131) - (133) [Reserved]

(134) Hawaii 28–*Cyrtandra nanawaleensis*-a (155 ac; 63 ha).

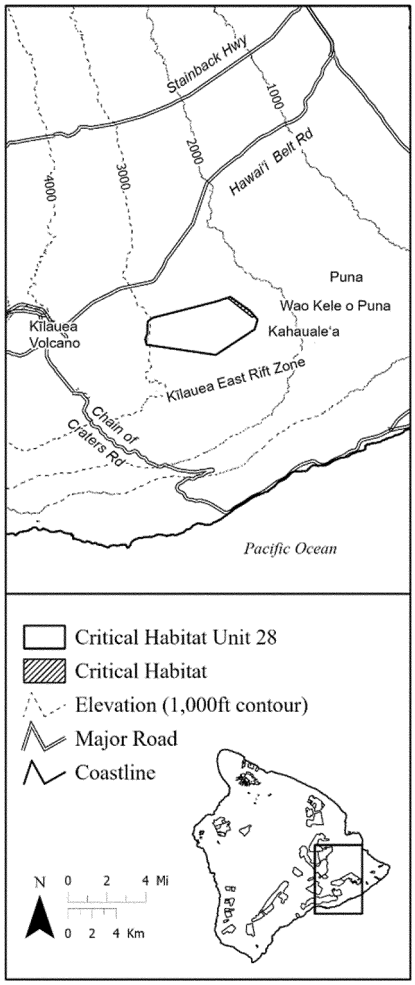
(i) This unit is also critical habitat for Hawaii 28–*Phyllostegia floribunda*-h (see paragraph (k)(135) of this section).

(ii) Map 89a follows:

Figure 95 to paragraph (k)

MAP 89A

Hawaii 28–*Cyrtandra nanawaleensis*-a, Hawaii 28–*Phyllostegia floribunda*-h



(135) Hawaii 28–*Phyllostegia floribunda*-h (155 ac; 63 ha). See paragraph (k)(134)(ii) of this section for the map of this unit.

(136)-(137) [Reserved]

(138) Hawaii 29–*Cyanea tritomantha*-e (494 ac; 200 ha).

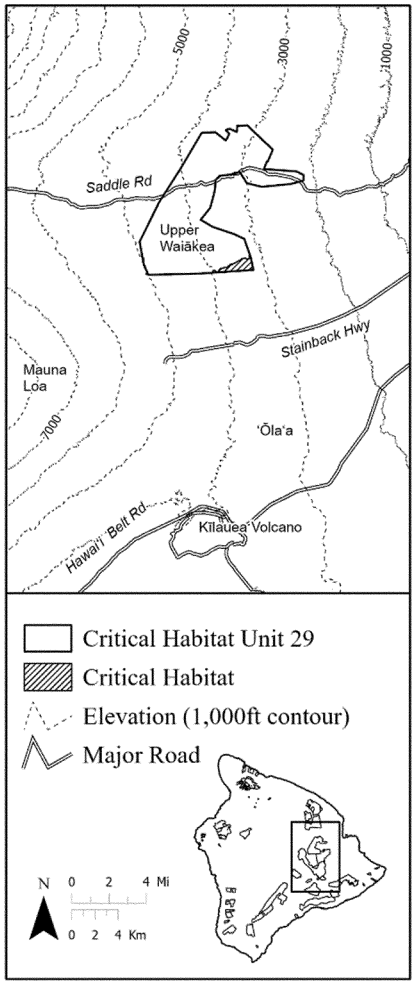
(i) This unit is also critical habitat for Hawaii 29–*Phyllostegia floribunda*-i, Hawaii 29–*Pittosporum hawaiiense*-j, Hawaii 29–*Schiedea diffusa* ssp. *macraei*-i, and Hawaii 29–*Stenogyne cranwelliae*-i (see paragraphs (k)(141), (k)(142), (k)(143), and (k)(144), respectively, of this section).

(ii) Map 91a follows:

Figure 98 to paragraph (k)

MAP 91A

Hawaii 29–*Cyanea tritomantha*-e, Hawaii 29–*Phyllostegia floribunda*-i, Hawaii 29–*Pittosporum hawaiiense*-j, Hawaii 29–*Schiedea diffusa* ssp. *macraei*-i, Hawaii 29–*Stenogyne cranwelliae*-I



(139)-(140) [Reserved]

(141) Hawaii 29–*Phyllostegia floribunda*-i (494 ac; 200 ha). See paragraph (k)(138)(ii) of this section for the map of this unit.

(142) Hawaii 29–*Pittosporum hawaiiense*-j (494 ac; 200 ha). See paragraph (k)(138)(ii) of this section for the map of this unit.

(143) Hawaii 29–*Schiedea diffusa* ssp. *macraei*-i (494 ac; 200 ha). See paragraph (k)(138)(ii) of this section for the map of this unit.

(144) Hawaii 29–*Stenogyne cranwelliae*-i (494 ac; 200 ha). See paragraph (k)(138)(ii) of this section for the map of this unit.

(144)-(149) [Reserved]

(150) Hawaii 30–*Cyanea tritomantha*-f (13,730 ac; 5,556 ha).

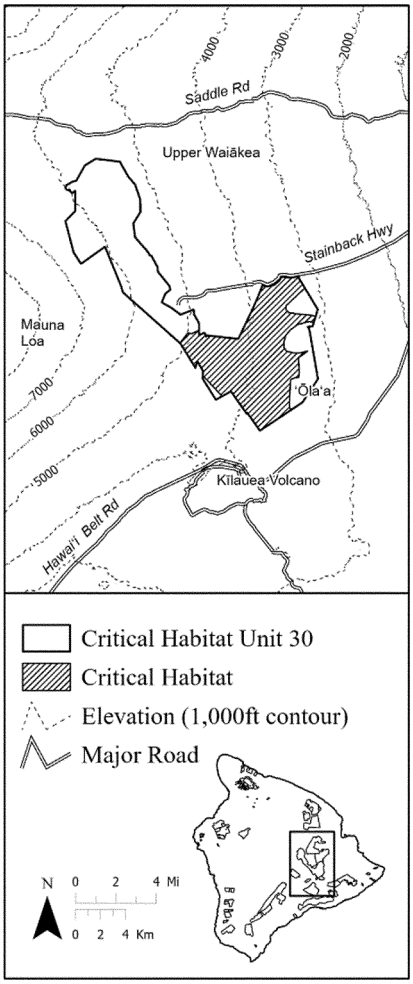
(i) This unit is also critical habitat for Hawaii 30–*Phyllostegia floribunda*-j, Hawaii 30–*Pittosporum hawaiiense*-k, Hawaii 30–*Schiedea diffusa* ssp. *macraei*-j, and Hawaii 30–*Stenogyne cranwelliae*-j (see paragraphs (k)(152), (k)(155), (k)(157), and (k)(159), respectively, of this section).

(ii) Map 98a follows:

Figure 106 to paragraph (k)

MAP 98A

Hawaii 30–*Cyanea tritomantha*-f, Hawaii 30–*Phyllostegia floribunda*-j, Hawaii 30–*Pittosporum hawaiiense*-k, Hawaii 30–*Schiedea diffusa* ssp. *macraei*-j, Hawaii 30–*Stenogyne cranwelliae*-j



(151)-(154) [Reserved]

(155) Hawaii 30–*Pittosporum hawaiiense*-k (13,730 ac; 5,556 ha). See paragraph (k)(150)(ii) of this section for the map of this unit.

(156) [Reserved]

(157) Hawaii 30–*Schiedea diffusa* ssp. *macraei*-j (13,730 ac; 5,556 ha). See paragraph (k)(150)(ii) of this section for the map of this unit.

(158) [Reserved]

(159) Hawaii 30–*Stenogyne cranwelliae*-j (13,730 ac; 5,556 ha). See paragraph (k)(150)(ii) of this section for the map of this unit.

(160) - (170) [Reserved]

(171) Hawaii 37–*Cyanea marksii*-d (1,906 ac; 771 ha)

(i) This unit is also critical habitat for Hawaii 37–*Phyllostegia floribunda*-k,

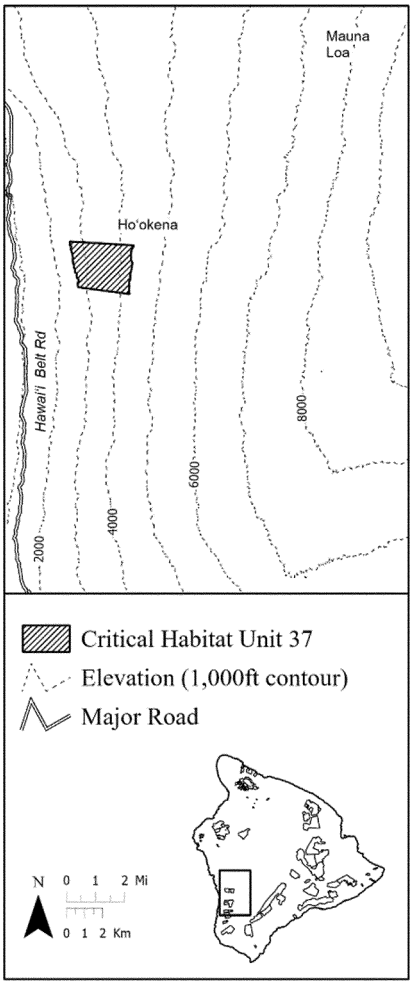
Hawaii 37–*Pittosporum hawaiiense*-l, Hawaii 37–*Schiedea diffusa* ssp. *macraei*-k, and Hawaii 37–*Stenogyne cranwelliae*-k (see paragraphs (k)(172), (k)(173), (k)(174), and (k)(175), respectively, of this section).

(ii) Map 106 follows:

Figure 114 to paragraph (k)

MAP 106

Hawaii 37–*Cyanea marksii*-d, Hawaii 37–*Phyllostegia floribunda*-k, Hawaii 37–*Pittosporum hawaiiense*-l, Hawaii 37–*Schiedea diffusa* ssp. *macraei*-k, Hawaii 37–*Stenogyne cranwelliae*-k



(172) Hawaii 37–*Phyllostegia floribunda*-k (1,906 ac; 771 ha). See paragraph (k)(171)(ii) of this section for the map of this unit.

(173) Hawaii 37–*Pittosporum hawaiiense*-l (1,906 ac; 771 ha). See paragraph (k)(171)(ii) of this section for the map of this unit.

(174) Hawaii 37–*Schiedea diffusa* ssp. *macraei*-k (1,906 ac; 771 ha). See paragraph (k)(171)(ii) of this section for the map of this unit.

(175) Hawaii 37–*Stenogyne cranwelliae*-k (1,906 ac; 771 ha). See paragraph (k)(171)(ii) of this section for the map of this unit.

(176) Hawaii 38–*Cyanea marksii*-e (534 ac; 216 ha).

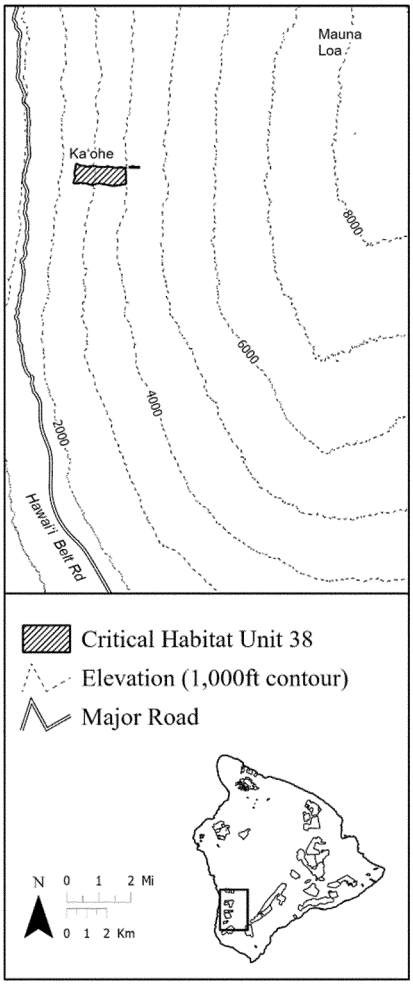
(i) This unit is also critical habitat for Hawaii 38–*Phyllostegia floribunda*-l, Hawaii 38–*Pittosporum hawaiiense*-m, Hawaii 38–*Schiedea diffusa* ssp. *macraei*-l, and Hawaii 38–*Stenogyne cranwelliae*-l (see paragraphs (k)(177), (k)(178), (k)(179), and (k)(180), respectively, of this section).

(ii) Map 107 follows:

Figure 115 to paragraph (k)

MAP 107

Hawaii 38–*Cyanea marksii*-e, Hawaii 38–*Phyllostegia floribunda*-l, Hawaii 38–*Pittosporum hawaiiense*-m, Hawaii 38–*Schiedea diffusa* ssp. *macraei*-l, Hawaii 38–*Stenogyne cranwelliae*-l



(177) Hawaii 38–*Phyllostegia floribunda*-l (534 ac; 216 ha). See paragraph (k)(176)(ii) of this section for the map of this unit.

(178) Hawaii 38–*Pittosporum hawaiiense*-m (534 ac; 216 ha). See paragraph (k)(176)(ii) of this section for the map of this unit.

(179) Hawaii 38–*Schiedea diffusa* ssp. *macraei*-l (534 ac; 216 ha). See paragraph (k)(176)(ii) of this section for the map of this unit.

(180) Hawaii 38–*Stenogyne cranwelliae*-l (534 ac; 216 ha). See paragraph (k)(176)(ii) of this section for the map of this unit.

(181) Hawaii 39–*Cyanea marksii*-f (1,164 ac; 471 ha)

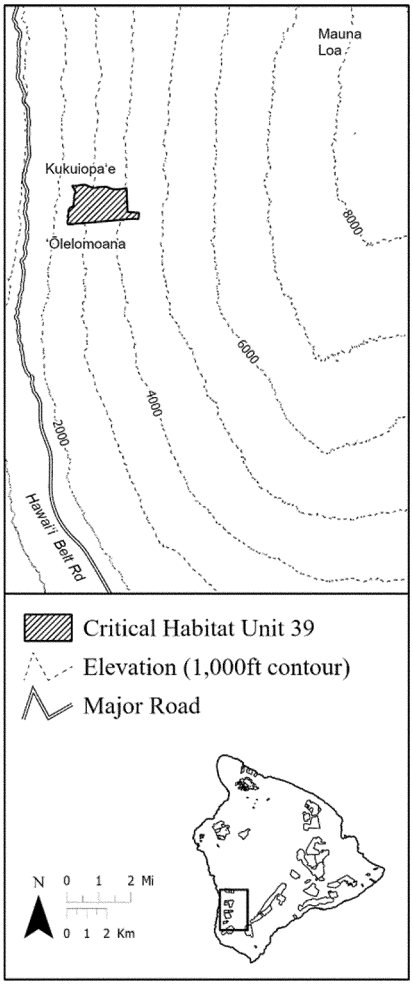
(i) This unit is also critical habitat for Hawaii 39–*Phyllostegia floribunda*-m, Hawaii 39–*Pittosporum hawaiiense*-n, Hawaii 39–*Schiedea diffusa* ssp. *macraei*-m, and Hawaii 39–*Stenogyne cranwelliae*-m (see paragraphs (k)(182), (k)(183), (k)(184), and (k)(185), respectively, of this section).

(ii) Map 108 follows:

Figure 116 to paragraph (k)

MAP 108

Hawaii 39–*Cyanea marksii*-f, Hawaii 39–*Phyllostegia floribunda*-m, Hawaii 39–*Pittosporum hawaiiense*-n, Hawaii 39–*Schiedea diffusa* ssp. *macraei*-m, Hawaii 39–*Stenogyne cranwelliae*-m



(182) Hawaii 39–*Phyllostegia floribunda*-m (1,164 ac; 471 ha). See paragraph (k)(181)(ii) of this section for the map of this unit.

(183) Hawaii 39–*Pittosporum hawaiiense*-n (1,164 ac; 471 ha). See paragraph (k)(181)(ii) of this section for the map of this unit.

(184) Hawaii 39–*Schiedea diffusa* ssp. *macraei*-m (1,164 ac; 471 ha). See paragraph (k)(181)(ii) of this section for the map of this unit.

(185) Hawaii 39–*Stenogyne cranwelliae*-m (1,164 ac; 471 ha). See paragraph (k)(181)(ii) of this section for the map of this unit.

(186) Hawaii 40–*Cyanea marksii*-g (1,243 ac; 503 ha)

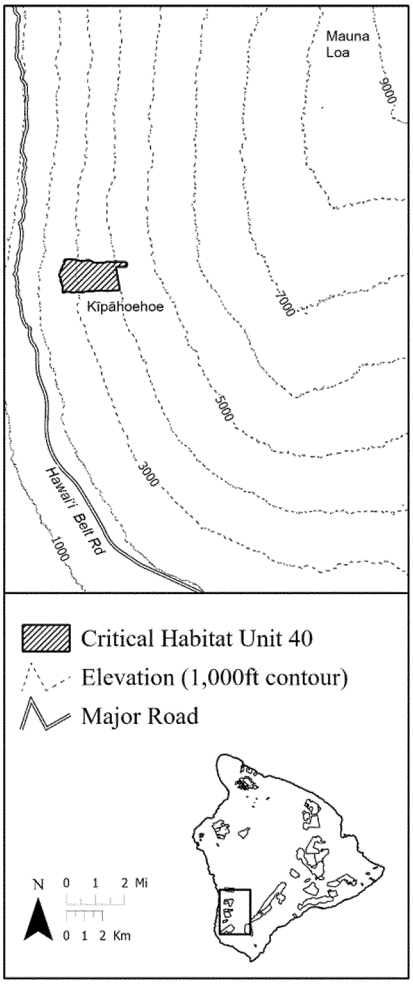
(i) This unit is also critical habitat for Hawaii 40–*Phyllostegia floribunda*-n, Hawaii 40–*Pittosporum hawaiiense*-o, Hawaii 40–*Schiedea diffusa* ssp. *macraei*-n, and Hawaii 40–*Stenogyne cranwelliae*-n (see paragraphs (k)(187), (k)(188), (k)(189), and (k)(190), respectively, of this section).

(ii) Map 109 follows:

Figure 117 to paragraph (k)

MAP 109

Hawaii 40–*Cyanea marksii*-g, Hawaii 40–*Phyllostegia floribunda*-n, Hawaii 40–*Pittosporum hawaiiense*-o, Hawaii 40–*Schiedea diffusa ssp. macraei*-n, Hawaii 40–*Stenogyne cranwelliae*-n



(187) Hawaii 40–*Phyllostegia floribunda*-n (1,243 ac; 503 ha). See paragraph (k)(186)(ii) of this section for the map of this unit.

(188) Hawaii 40–*Pittosporum hawaiiense*-o (1,243 ac; 503 ha). See paragraph (k)(186)(ii) of this section for the map of this unit.

(189) Hawaii 40–*Schiedea diffusa* ssp. *macraei*-n (1,243 ac; 503 ha). See paragraph (k)(186)(ii) of this section for the map of this unit.

(190) Hawaii 40–*Stenogyne cranwelliae*-n (1,243 ac; 503 ha). See paragraph (k)(186)(ii) of this section for the map of this unit.

(191) Hawaii 41–*Cyanea marksii*-h (3,412 ac; 1,381 ha)

(i) This unit is also critical habitat for Hawaii 41–*Phyllostegia floribunda*-o,

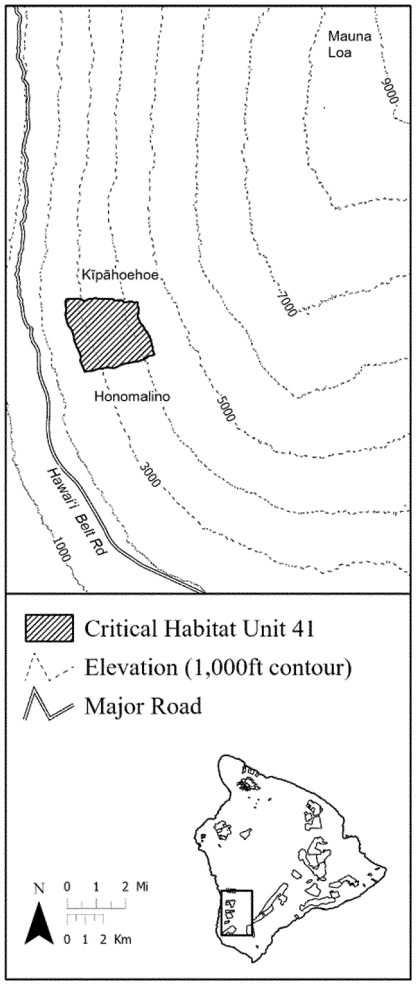
Hawaii 41–*Pittosporum hawaiiense*-p, Hawaii 41–*Schiedea diffusa* ssp. *macraei*-o, and Hawaii 41–*Stenogyne cranwelliae*-o (see paragraphs (k)(192), (k)(193), (k)(194), and (k)(195), respectively, of this section).

(ii) Map 110 follows:

Figure 118 to paragraph (k)

MAP 110

Hawaii 41–*Cyanea marksii*-h, Hawaii 41–*Phyllostegia floribunda*-o, Hawaii 41–*Pittosporum hawaiiense*-p, Hawaii 41–*Schiedea diffusa* ssp. *macraei*-o, Hawaii 41–*Stenogyne cranwelliae*-o



(192) Hawaii 41–*Phyllostegia floribunda*-o (3,412 ac; 1,381 ha). See paragraph (k)(191)(ii) of this section for the map of this unit.

(193) Hawaii 41–*Pittosporum hawaiiense*-p (3,412 ac; 1,381 ha). See paragraph (k)(191)(ii) of this section for the map of this unit.

(194) Hawaii 41–*Schiedea diffusa* ssp. *macraei*-o (3,412 ac; 1,381 ha). See paragraph (k)(191)(ii) of this section for the map of this unit.

(195) Hawaii 41–*Stenogyne cranwelliae*-o (3,412 ac; 1,381 ha). See paragraph (k)(191)(ii) of this section for the map of this unit.

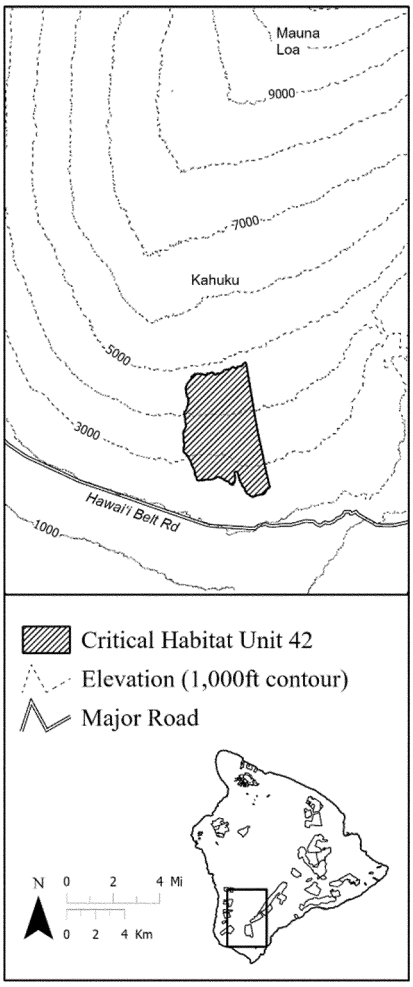
(196) Hawaii 42–*Cyanea tritomantha*-g (8,781 ac; 3,554 ha).

(i) This unit is also critical habitat for Hawaii 42–*Phyllostegia floribunda*-p, Hawaii 42–*Pittosporum hawaiiense*-q, Hawaii 42–*Schiedea diffusa* ssp. *macraei*-p, and Hawaii 42–*Stenogyne cranwelliae*-p (see paragraphs (k)(197), (k)(198), (k)(199), and (k)(200), respectively, of this section).

(ii) Map 111 follows:

Figure 119 to paragraph (k)

MAP 111 HAWAII 42–CYANEA TRITOMANTHA-G, HAWAII 42–PHYLLOSTEGIA FLORIBUNDA-P, HAWAII 42–PITTOSPORUM HAWAIIENSE-Q, HAWAII 42–SCHIEDEA DIFFUSA SSP. MACRAEI-P, HAWAII 42–STENOGYNE CRANWELLIAE-P



(197) Hawaii 42–*Phyllostegia floribunda*-p (8,781 ac; 3,554 ha). See paragraph (k)(196)(ii) of this section for the map of this unit.

(198) Hawaii 42–*Pittosporum hawaiiense*-q (8,781 ac; 3,554 ha). See paragraph (k)(196)(ii) of this section for the map of this unit.

(199) Hawaii 42–*Schiedea diffusa* ssp. *macraei*-p (8,781 ac; 3,554 ha). See paragraph (k)(196)(ii) of this section for the map of this unit.

(200) Hawaii 42–*Stenogyne cranwelliae*-p (8,781 ac; 3,554 ha). See paragraph (k)(196)(ii) of this section for the map of this unit.

(201) Hawaii 43–*Pittosporum hawaiiense*-r (5,872 ac; 2,376 ha).

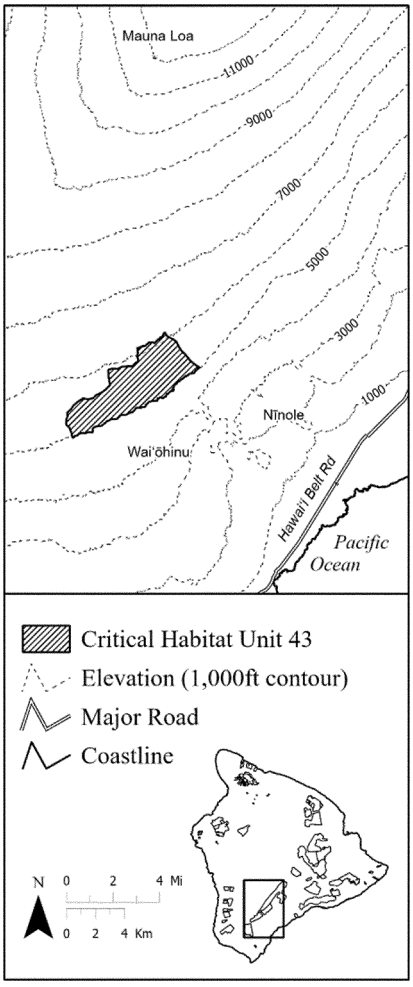
(i) This unit is also critical habitat for Hawaii 43–*Schiedea diffusa* ssp. *macraei*-q and Hawaii 43–*Stenogyne cranwelliae*-q (see paragraphs (k)(202) and (k)(203), respectively, of this section).

(ii) Map 112 follows:

Figure 120 to paragraph (k)

MAP 112

Hawaii 43–*Pittosporum hawaiiense*-r, Hawaii 43–*Schiedea diffusa* ssp. *macraei*-q, Hawaii 43–*Stenogyne cranwelliae*-q



(202) Hawaii 43–*Schiedea diffusa* ssp. *macraei*-q (5,872 ac; 2,376 ha). See paragraph (k)(201)(ii) of this section for the map of this unit.

(203) Hawaii 43–*Stenogyne cranwelliae*-q (5,872 ac; 2,376 ha). See paragraph (k)(201)(ii) of this section for the map of this unit.

(204) Hawaii 44–*Cyanea tritomantha*-h (5,884 ac; 2,381 ha).

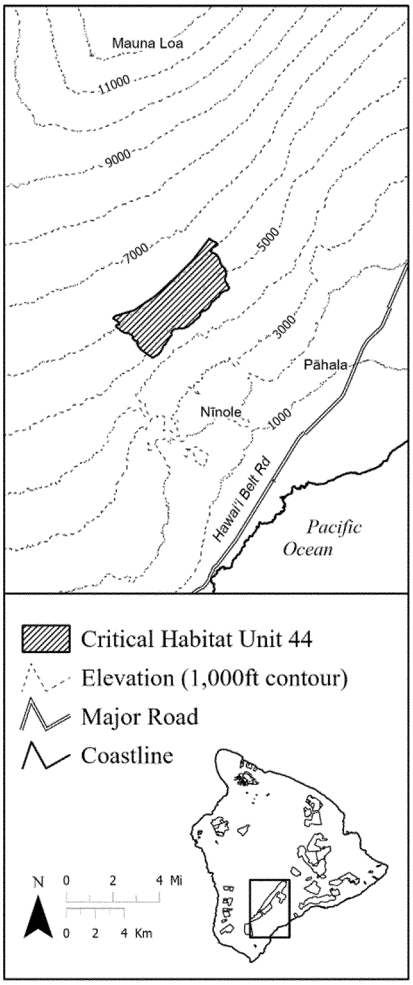
(i) This unit is also critical habitat for Hawaii 44–*Pittosporum hawaiiense*-s, Hawaii 44–*Schiedea diffusa* ssp. *macraei*-r, and Hawaii 44–*Stenogyne cranwelliae*-r (see paragraphs (k)(205), (k)(206), and (k)(207), respectively, of this section).

(ii) Map 113 follows:

Figure 121 to paragraph (k)

MAP 113

Hawaii 44–*Cyanea tritomantha*-h, Hawaii 44–*Pittosporum hawaiiense*-s, Hawaii 44–*Schiedea diffusa* ssp. *macraei*-r, Hawaii 44–*Stenogyne cranwelliae*-r



(205) Hawaii 44–*Pittosporum hawaiiense*-s (5,884 ac; 2,381 ha). See paragraph (k)(204)(ii) of this section for the map of this unit.

(206) Hawaii 44–*Schiedea diffusa* ssp. *macraei*-r (5,884 ac; 2,381 ha). See paragraph (k)(204)(ii) of this section for the map of this unit.

(207) Hawaii 44–*Stenogyne cranwelliae*-r (5,884 ac; 2,381 ha). See paragraph (k)(204)(ii) of this section for the map of this unit.

(208) Hawaii 45–*Phyllostegia floribunda*-q (5,494 ac; 2,223 ha).

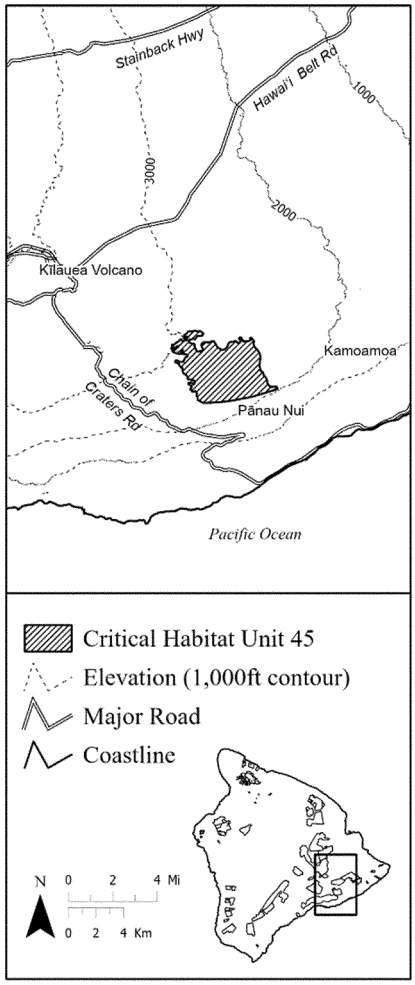
(i) This unit is also critical habitat for Hawaii 45–*Pittosporum hawaiiense*-t (see paragraph (k)(209) of this section).

(ii) Map 114 follows:

Figure 122 to paragraph (k)

MAP 114

Hawaii 45–*Phyllostegia floribunda*-q, Hawaii 45–*Pittosporum hawaiiense*-t



(209) Hawaii 45–*Pittosporum hawaiiense*-t (5,494 ac; 2,223 ha). See paragraph (k)(208)(ii) of this section for the map of this unit.

(210) Hawaii 46–*Cyrtandra nanawaleensis*-b (12,219 ac; 4,945 ha)

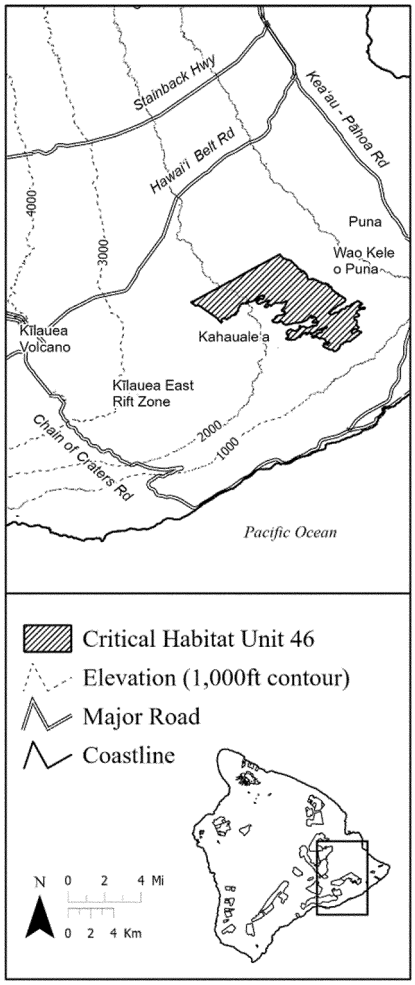
(i) This unit is also critical habitat for Hawaii 46–*Phyllostegia floribunda*-r (see paragraph (k)(211) of this section).

(ii) Map 115 follows:

Figure 123 to paragraph (k)

MAP 115

Hawaii 46–*Cyrtandra nanawaleensis*-b, Hawaii 46–*Phyllostegia floribunda*-r



(211) Hawaii 46–*Phyllostegia floribunda*-r (12,219 ac; 4,945 ha). See paragraph (k)(210)(ii) of this section for the map of this unit.

(212) Hawaii 47–*Cyrtandra nanawaleensis*-c (274 ac; 111 ha)

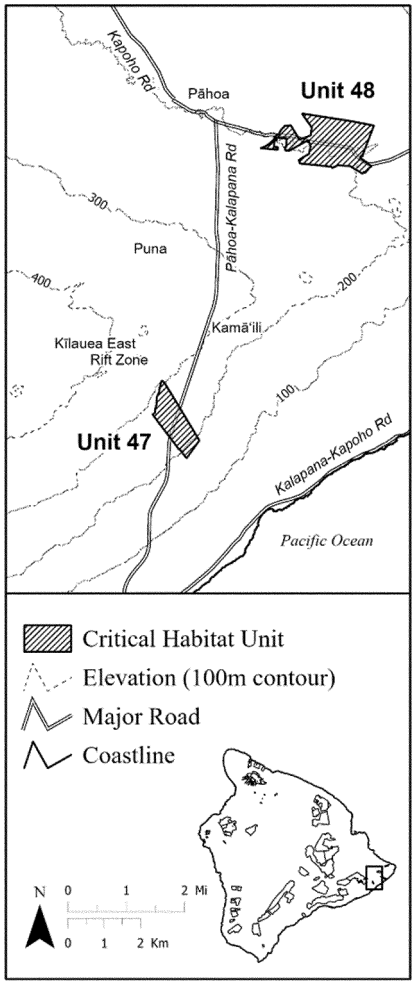
(i) [Reserved]

(ii) Map 116 follows:

Figure 124 to paragraph (k)

MAP 116

Hawaii 47–*Cyrtandra nanawaleensis*-c, Hawaii 48–*Cyrtandra nanawaleensis*-d



(213) Hawaii 48–*Cyrtandra nanawaleensis*-d (589 ac; 238 ha). See paragraph (k)(212)(ii) of this section for the map of this unit.

(214) Hawaii 49–*Cyrtandra nanawaleensis*-e (875 ac; 354 ha)

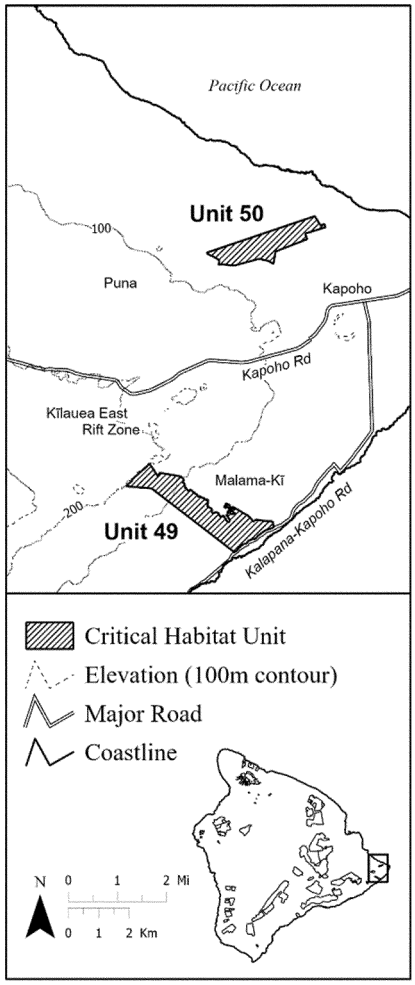
(i) [Reserved].

(ii) Map 117 follows:

Figure 125 to paragraph (k)

MAP 117

Hawaii 49–*Cyrtandra nanawaleensis*-e, Hawaii 50–*Cyrtandra nanawaleensis*-f



(215) Hawaii 50–*Cyrtandra nanawaleensis*-f (562 ac; 227 ha). See paragraph (k)(214)(ii) of this section for the map of this unit.

(216) Hawaii 51–*Cyanea tritomantha*-i (17,774 ac; 7,193 ha).

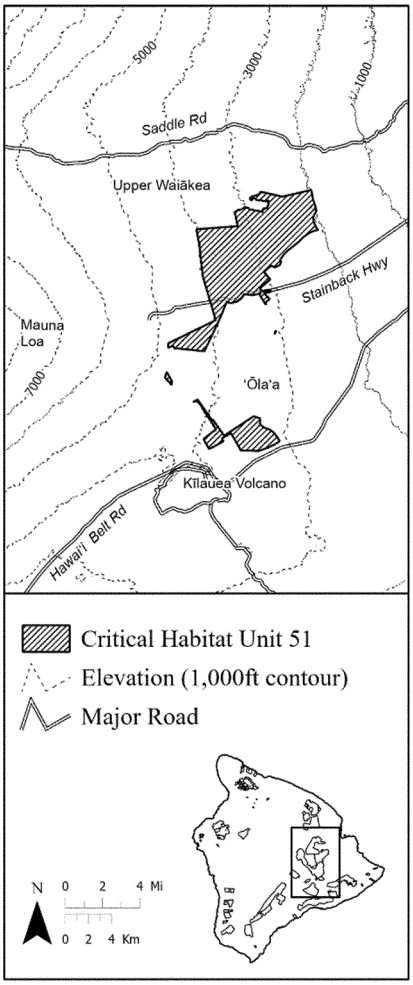
(i) This unit is also critical habitat for Hawaii 51–*Phyllostegia floribunda*-s, Hawaii 51–*Pittosporum hawaiiense*-u, Hawaii 51–*Schiedea diffusa* ssp. *macraei*-s, and Hawaii 51–*Stenogyne cranwelliae*-s (see paragraphs (k)(217), (k)(218), (k)(219), and (k)(220), respectively, of this section).

(ii) Map 118 follows:

Figure 126 to paragraph (k)

MAP 118

Hawaii 51–*Cyanea tritomantha*-i, Hawaii 51–*Phyllostegia floribunda*-s, Hawaii 51–*Pittosporum hawaiiense*-u, Hawaii 51–*Schiedea diffusa* ssp. *macraei*-s, Hawaii 51–*Stenogyne cranwelliae*-s



(217) Hawaii 51–*Phyllostegia floribunda*-s (17,774 ac; 7,193 ha). See paragraph (k)(216)(ii) of this section for the map of this unit.

(218) Hawaii 51–*Pittosporum hawaiiense*-u (17,774 ac; 7,193 ha). See paragraph (k)(216)(ii) of this section for the map of this unit.

(219) Hawaii 51–*Schiedea diffusa* ssp. *macraei*-s (17,774 ac; 7,193 ha). See paragraph (k)(216)(ii) of this section for the map of this unit.

(220) Hawaii 51–*Stenogyne cranwelliae*-s (17,774 ac; 7,193 ha). See paragraph (k)(216)(ii) of this section for the map of this unit.

(221) Hawaii 52–*Cyanea tritomantha*-j (3,656 ac; 1,479 ha).

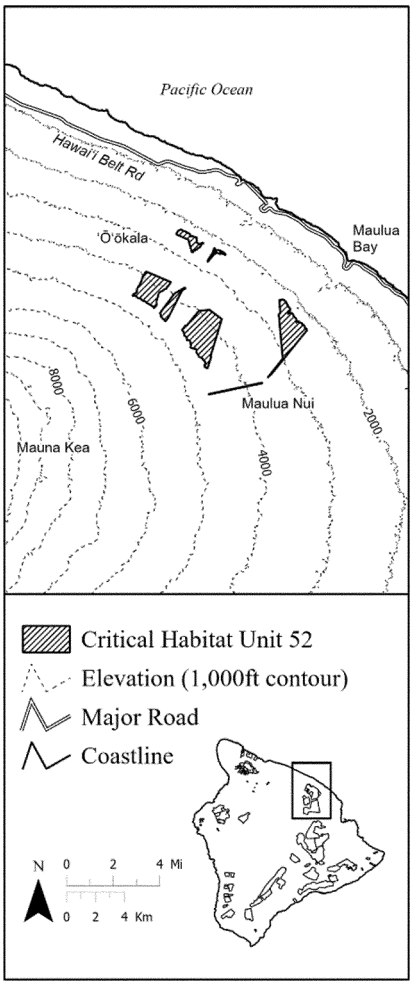
(i) This unit is also critical habitat for Hawaii 52–*Cyrtandra wagneri*-b, Hawaii 52–*Melicope remyi*-d, Hawaii 52–*Phyllostegia floribunda*-t, Hawaii 52–*Pittosporum hawaiiense*-v, Hawaii 52–*Schiedea diffusa* ssp. *macraei*-t, and Hawaii 52–*Stenogyne cranwelliae*-t (see paragraphs (k)(222), (k)(223), (k)(224), (k)(225), (k)(226), and (k)(227), respectively, of this section).

(ii) Map 119 follows:

Figure 127 to paragraph (k)

MAP 119

Hawaii 52–*Cyanea tritomantha*-j, Hawaii 52–*Cyrtandra wagneri*-b, Hawaii 52–*Melicope remyi*-d, Hawaii 52–*Phyllostegia floribunda*-t, Hawaii 52–*Pittosporum hawaiiense*-v, Hawaii 52–*Schiedea diffusa* ssp. *macraei*-t, Hawaii 52–*Stenogyne cranwelliae*-t



(222) Hawaii 52–*Cyrtandra wagneri*-b (3,656 ac; 1,479 ha). See paragraph (k)(221)(ii) of this section for the map of this unit.

(223) Hawaii 52–*Melicope remyi*-d (3,656 ac; 1,479 ha). See paragraph (k)(221)(ii) of this section for the map of this unit.

(224) Hawaii 52–*Phyllostegia floribunda*-t (3,656 ac; 1,479 ha). See paragraph (k)(221)(ii) of this section for the map of this unit.

(225) Hawaii 52–*Pittosporum hawaiiense*-v (3,656 ac; 1,479 ha). See paragraph (k)(221)(ii) of this section for the map of this unit.

(226) Hawaii 52–*Schiedea diffusa* ssp. *macraei*-t (3,656 ac; 1,479 ha). See paragraph (k)(221)(ii) of this section for the map of this unit.

(227) Hawaii 52–*Stenogyne cranwelliae*-t (3,656 ac; 1,479 ha). See paragraph (k)(221)(ii) of this section for the map of this unit.

(228) Hawaii 53–*Bidens hillebrandiana* ssp. *hillebrandiana*-b (154 ac; 62 ha)

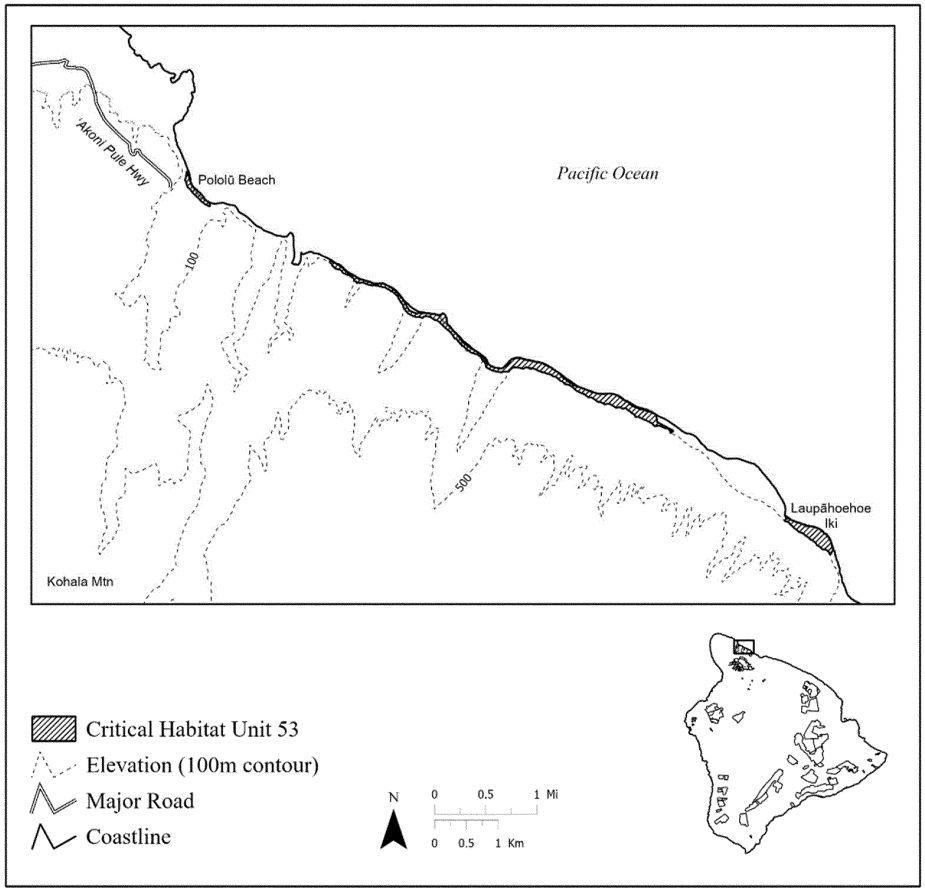
(i) [Reserved].

(ii) Map 120 follows:

Figure 128 to paragraph (k)

MAP 120

Hawaii 53–*Bidens hillebrandiana* ssp. *hillebrandiana*-b



(229) Hawaii 54–*Cyanea tritomantha*-k (5,945 ac; 2,406 ha).

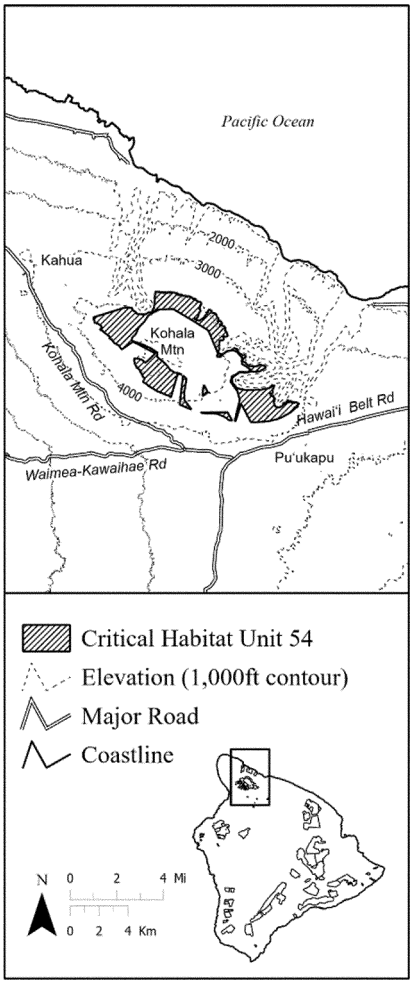
(i) This unit is also critical habitat for Hawaii 54–*Melicope remyi*-e, Hawaii 54–*Phyllostegia floribunda*-u, Hawaii 54–*Pittosporum hawaiiense*-w, Hawaii 54–*Schiedea diffusa* ssp. *macraei*-u, and Hawaii 54–*Stenogyne cranwelliae*-u (see paragraphs (k)(230), (k)(231), (k)(232), (k)(233), and (k)(234), respectively, of this section).

(ii) Map 121 follows:

Figure 129 to paragraph (k)

MAP 121

Hawaii 54–*Cyanea tritomantha*-k, Hawaii 54–*Melicope remyi*-e, Hawaii 54–*Phyllostegia floribunda*-u, Hawaii 54–*Pittosporum hawaiiense*-w, Hawaii 54–*Schiedea diffusa* ssp. *macraei*-u, Hawaii 54–*Stenogyne cranwelliae*-u



(230) Hawaii 54–*Melicope remyi*-e (5,945 ac; 2,406 ha). See paragraph (k)(229)(ii) of this section for the map of this unit.

(231) Hawaii 54–*Phyllostegia floribunda*-u (5,945 ac; 2,406 ha). See paragraph (k)(229)(ii) of this section for the map of this unit.

(232) Hawaii 54–*Pittosporum hawaiiense*-w (5,945 ac; 2,406 ha). See paragraph (k)(229)(ii) of this section for the map of this unit.

(233) Hawaii 54–*Schiedea diffusa* ssp. *macraei*-u (5,945 ac; 2,406 ha). See paragraph (k)(229)(ii) of this section for the map of this unit.

(234) Hawaii 54–*Stenogyne cranwelliae*-u (5,945 ac; 2,406 ha). See paragraph

(k)(229)(ii) of this section for the map of this unit.

(235) Hawaii 55–*Schiedea hawaiiensis*-a (6,822 ac; 2,761 ha)

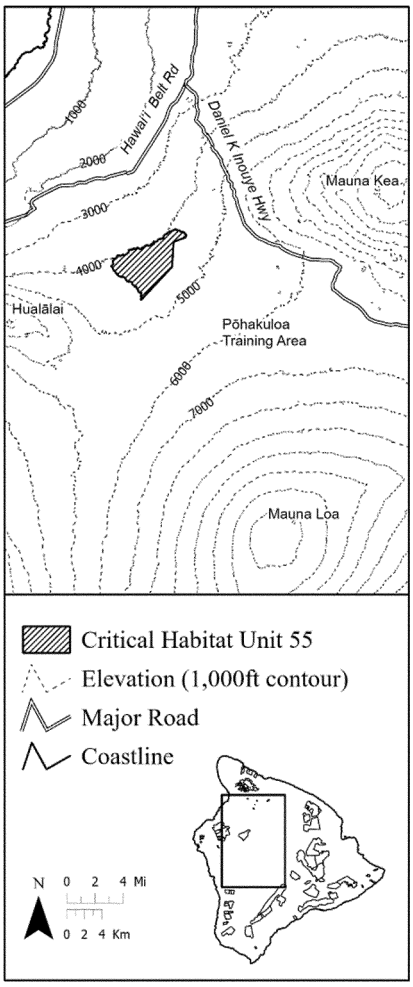
(i) [Reserved].

(ii) Map 122 follows:

Figure 130 to paragraph (k)

MAP 122

Hawaii 55–*Schiedea hawaiiensis*-a



(236) Hawaii 56–*Cyanea marksii*-i (224 ac; 91 ha)

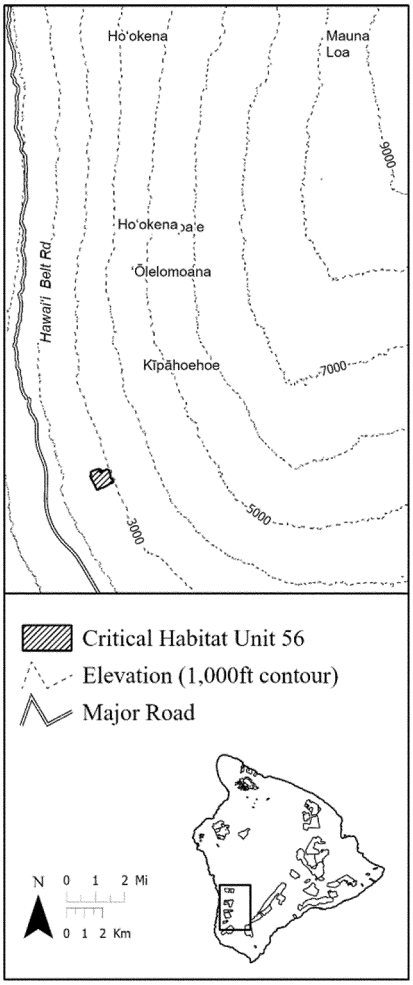
(i) This unit is also critical habitat for Hawaii 56–*Schiedea diffusa* ssp. *macraei*-v (see paragraph (k)(237) of this section).

(ii) Map 123 follows:

Figure 131 to paragraph (k)

MAP 123

Hawaii 56–*Cyanea marksii*-i, Hawaii 56–*Schiedea diffusa* ssp. *macraei*-v



(237) Hawaii 56–*Schiedea diffusa* ssp. *macraei*-v (224 ac; 91 ha). See paragraph (k)(236)(ii) of this section for the map of this unit.

(238) Table of Listed Species Within Each Critical Habitat Unit for the Island of Hawaii.

Unit name	Species occupied	Species unoccupied
Hawaii 1—*Clermontia lindseyana*-a	*Clermontia lindseyana*	*Clermontia lindseyana.*
Hawaii 1—*Clermontia peleana*-a	*Clermontia peleana*	*Clermontia peleana.*
Hawaii 1—*Clermontia pyrularia*-a		*Clermontia pyrularia.*
Hawaii 1—*Cyanea shipmanii*-a	*Cyanea shipmanii*	*Cyanea shipmanii.*
Hawaii 1—*Phyllostegia racemosa*-a	*Phyllostegia racemosa*	*Phyllostegia racemosa.*
Hawaii 2—*Clermontia lindseyana*-b	*Clermontia lindseyana*	*Clermontia lindseyana.*
Hawaii 2—*Clermontia pyrularia*-b	*Clermontia pyrularia*	*Clermontia pyrularia.*
Hawaii 2—*Phyllostegia racemosa*-b	*Phyllostegia racemosa*	*Phyllostegia racemosa.*
Hawaii 3—*Clermontia peleana*-b	*Clermontia peleana*	*Clermontia peleana.*
Hawaii 3—*Cyanea platyphylla*-a	*Cyanea platyphylla*	*Cyanea platyphylla.*
Hawaii 3—*Cyanea tritomantha*-a	*Cyanea tritomantha*	*Cyanea tritomantha.*
Hawaii 3—*Cyrtandra giffardii*-a	*Cyrtandra giffardii*	*Cyrtandra giffardii.*

Unit name	Species occupied	Species unoccupied
Hawaii 3—*Cyrtandra tintinnabula*-a	*Cyrtandra tintinnabula*	*Cyrtandra tintinnabula.*
Hawaii 3—*Cyrtandra wagneri*-a	*Cyrtandra wagneri*	*Cyrtandra wagneri.*
Hawaii 3—*Melicope remyi*-a	*Melicope remyi*	*Melicope remyi.*
Hawaii 3—*Phyllostegia floribunda*-a	*Phyllostegia floribunda*	*Phyllostegia floribunda.*
Hawaii 3—*Phyllostegia warshaueri*-a	*Phyllostegia warshaueri*	*Phyllostegia warshaueri.*
Hawaii 3—*Pittosporum hawaiiense*-a		*Pittosporum hawaiiense.*
Hawaii 3—*Schiedea diffusa* ssp. *macraei*-a.		*Schiedea diffusa* ssp. *macraei.*
Hawaii 3—*Stenogyne cranwelliae*-a	*Stenogyne cranwelliae*	*Stenogyne cranwelliae.*
Hawaii 4—*Isodendrion hosakae*-a		*Isodendrion hosakae.*
Hawaii 4—*Isodendrion hosakae*-b		*Isodendrion hosakae.*
Hawaii 4—*Isodendrion hosakae*-c		*Isodendrion hosakae.*
Hawaii 4—*Isodendrion hosakae*-d		*Isodendrion hosakae.*
Hawaii 4—*Isodendrion hosakae*-e		*Isodendrion hosakae.*
Hawaii 4—*Isodendrion hosakae*-f	*Isodendrion hosakae*	*Isodendrion hosakae.*
Hawaii 4—*Vigna o-wahuensis*-a		*Vigna o-wahuensi..*
Hawaii 4—*Vigna o-wahuensis*-b		*Vigna o-wahuensis.*
Hawaii 4—*Vigna o-wahuensis*-c		*Vigna o-wahuensis.*
Hawaii 5—*Nothocestrum breviflorum*-a		*Nothocestrum breviflorum.*
Hawaii 6—*Bidens hillebrandiana* ssp. *hillebrandiana*-a.	*Bidens hillebrandiana* ssp. *hillebrandiana*	*Bidens hillebrandiana* ssp. *hillebrandiana.*
Hawaii 6—*Nothocestrum breviflorum*-b	*Nothocestrum breviflorum*	*Nothocestrum breviflorum.*
Hawaii 7—*Dracaena konaensis*-a	*Dracaena konaensis*	*Dracaena konaensis.*
Hawaii 8—*Clermontia drepanomorpha*-a	*Clermontia drepanomorpha*	*Clermontia drepanomorpha.*
Hawaii 8—*Cyanea tritomantha*-b	*Cyanea tritomantha*	*Cyanea tritomantha.*
Hawaii 8—*Melicope remyi*-b		*Melicope remyi.*
Hawaii 8—*Phyllostegia floribunda*-b		*Phyllostegia floribunda.*
Hawaii 8—*Phyllostegia warshaueri*-b	*Phyllostegia warshaueri*	*Phyllostegia warshaueri.*
Hawaii 8—*Pittosporum hawaiiense*-b	*Pittosporum hawaiiense*	*Pittosporum hawaiiense.*
Hawaii 8—*Schiedea diffusa* ssp. *macraei*-b.	*Schiedea diffusa* ssp. *macraei*	*Schiedea diffusa* ssp. *macraei.*
Hawaii 8—*Stenogyne cranwelliae*-b	*Stenogyne cranwelliae*	*Stenogyne cranwelliae.*
Hawaii 9—*Achyranthes mutica*-a		*Achyranthes mutica.*
Hawaii 9—*Achyranthes mutica*-b	*Achyranthes mutica*	*Achyranthes mutica.*
Hawaii 9—*Achyranthes mutica*-c		*Achyranthes mutica.*
Hawaii 9—*Achyranthes mutica*-d		*Achyranthes mutica.*
Hawaii 9—*Achyranthes mutica*-e		*Achyranthes mutica.*
Hawaii 9—*Achyranthes mutica*-f		*Achyranthes mutica.*
Hawaii 9—*Achyranthes mutica*-g		*Achyranthes mutica.*
Hawaii 9—*Achyranthes mutica*-h		*Achyranthes mutica.*
Hawaii 9—*Achyranthes mutica*-i		*Achyranthes mutica.*
Hawaii 9—*Achyranthes mutica*-j		*Achyranthes mutica.*
Hawaii 9—*Cyanea tritomantha*-c	*Cyanea tritomantha*	*Cyanea tritomantha.*
Hawaii 9—*Melicope remyi*-c		*Melicope remyi.*
Hawaii 9—*Phyllostegia floribunda*-c		*Phyllostegia floribunda.*
Hawaii 9—*Pittosporum hawaiiense*-c	*Pittosporum hawaiiense*	*Pittosporum hawaiiense.*
Hawaii 9—*Schiedea diffusa* ssp. *macraei*-c.	*Schiedea diffusa* ssp. *macraei*	*Schiedea diffusa* ssp. *macraei.*
Hawaii 9—*Stenogyne cranwelliae*-c	*Stenogyne cranwelliae*	*Stenogyne cranwelliae.*
Hawaii 10—*Argyroxiphium kauense*-a		*Argyroxiphium kauense.*
Hawaii 10—*Bidens micrantha* ssp. *ctenophylla*-a.		*Bidens micrantha* ssp. *ctenophylla.*
Hawaii 10—*Bonamia menziesii*-a		*Bonamia menziesii.*
Hawaii 10—*Colubrina oppositifolia*-a	*Colubrina oppositifolia*	*Colubrina oppositifolia.*
Hawaii 10—*Delissea undulata*-a		*Delissea undulata.*
Hawaii 10—*Delissea undulata*-b	*Delissea undulata*	*Delissea undulata.*
Hawaii 10—*Dracaena konaensis*-b	*Dracaena konaensis*	*Dracaena konaensis.*
Hawaii 10—*Hibiscadelphus hualalaiensis*-a.	*Hibiscadelphus hualalaiensis*	*Hibiscadelphus hualalaiensis.*
Hawaii 10—*Hibiscus brackenridgei*-a	*Hibiscus brackenridgei*	*Hibiscus brackenridgei.*
Hawaii 10—*Isodendrion pyrifolium*-a		*Isodendrion pyrifolium.*
Hawaii 10—*Mezoneuron kavaiense*-a	*Mezoneuron kavaiense*	*Mezoneuron kavaiense.*
Hawaii 10—*Neraudia ovata*-a		*Neraudia ovata.*
Hawaii 10—*Nothocestrum breviflorum*-c	*Nothocestrum breviflorum*	*Nothocestrum breviflorum.*
Hawaii 10—*Solanum incompletum*-a		*Solanum incompletum.*
Hawaii 10—*Zanthoxylum dipetalum* ssp. *tomentosum*-a.	*Zanthoxylum dipetalum* ssp. *tomentosum*	*Zanthoxylum dipetalum* ssp. *tomentosum.*
Hawaii 11—*Cyanea hamatiflora* ssp. *carlsonii*-a.	*Cyanea hamatiflora* ssp. *carlsonii*	*Cyanea hamatiflora* ssp. *carlsonii.*
Hawaii 11—*Solanum incompletum*-b		*Solanum incompletum.*
Hawaii 14—*Cyanea hamatiflora* ssp. *carlsonii*-b.		*Cyanea hamatiflora* ssp. *carlsonii.*
Hawaii 15—*Cyanea hamatiflora* ssp. *carlsonii*-c.		*Cyanea hamatiflora* ssp. *carlsonii.*

Unit name	Species occupied	Species unoccupied
Hawaii 15—*Cyanea marksii*-a Section 4	*Cyanea marksii*	*Cyanea marksii.*
Hawaii 15—*Cyanea marksii*-b—Section 5	*Cyanea marksii*	*Cyanea marksii.*
Hawaii 15—*Cyanea stictophylla*-a	*Cyanea stictophylla*	*Cyanea stictophylla.*
Hawaii 15—*Phyllostegia floribunda*-d—Section 4.	*Phyllostegia floribunda*	*Phyllostegia floribunda.*
Hawaii 15—*Phyllostegia floribunda*-e—Section 5.		*Phyllostegia floribunda.*
Hawaii 15—*Pittosporum hawaiiense*-d—Section 4.	*Pittosporum hawaiiense*	*Pittosporum hawaiiense.*
Hawaii 15—*Pittosporum hawaiiense*-e—Section 5.		*Pittosporum hawaiiense.*
Hawaii 15—*Schiedea diffusa* ssp. *macraei*-d—Section 4.		*Schiedea diffusa* ssp. *macraei.*
Hawaii 15—*Schiedea diffusa* ssp. *macraei*-e—Section 5.		*Schiedea diffusa* ssp. *macraei.*
Hawaii 15—*Stenogyne cranwelliae*-d—Section 4.		*Stenogyne cranwelliae.*
Hawaii 15—*Stenogyne cranwelliae*-e—Section 5.		*Stenogyne cranwelliae.*
Hawaii 16—*Cyanea hamatiflora* ssp. *carlsonii*-d.	*Cyanea hamatiflora* ssp. *carlsonii*	*Cyanea hamatiflora* ssp. *carlsonii.*
Hawaii 16—*Cyanea marksii*-c	*Cyanea marksii*	*Cyanea marksii.*
Hawaii 16—*Cyanea stictophylla*-b	*Cyanea stictophylla*	*Cyanea stictophylla.*
Hawaii 16—*Phyllostegia floribunda*-f	*Phyllostegia floribunda*	*Phyllostegia floribunda.*
Hawaii 16—*Pittosporum hawaiiense*-f		*Pittosporum hawaiiense.*
Hawaii 16—*Schiedea diffusa* ssp. *macraei*-f.		*Schiedea diffusa* ssp. *macraei.*
Hawaii 16—*Stenogyne cranwelliae*-f		*Stenogyne cranwelliae.*
Hawaii 17—*Asplenium dielerectum*-a	*Asplenium dielerectum*	*Asplenium dielerectum.*
Hawaii 17—*Flueggea neowawraea*-a	*Flueggea neowawraea*	*Flueggea neowawraea.*
Hawaii 18—*Asplenium dielerectum*-b	*Asplenium dielerectum*	*Asplenium dielerectum.*
Hawaii 18—*Colubrina oppositifolia*-b	*Colubrina oppositifolia*	*Colubrina oppositifolia.*
Hawaii 18—*Dracaena konaensis*-c	*Dracaena konaensis*	*Dracaena konaensis.*
Hawaii 18—*Flueggea neowawraea*-b	*Flueggea neowawraea*	*Flueggea neowawraea.*
Hawaii 18—*Gouania vitifolia*-a	*Gouania vitifolia*	*Gouania vitifolia.*
Hawaii 18—*Neraudia ovata*-d	*Neraudia ovata*	*Neraudia ovata.*
Hawaii 19—*Mariscus fauriei*-a	*Mariscus fauriei*	*Mariscus fauriei.*
Hawaii 20—*Sesbania tomentosa*-a	*Sesbania tomentosa*	*Sesbania tomentosa.*
Hawaii 21—*Ischaemum byrone*-a		*Ischaemum byrone.*
Hawaii 22—*Ischaemum byrone*-b	*Ischaemum byrone*	*Ischaemum byrone.*
Hawaii 23—*Dracaena konaensis*-d	*Dracaena konaensis*	*Dracaena konaensis.*
Hawaii 23—*Phyllostegia floribunda*-g	*Phyllostegia floribunda*	*Phyllostegia floribunda.*
Hawaii 23—*Pittosporum hawaiiense*-g	*Pittosporum hawaiiense*	*Pittosporum hawaiiense.*
Hawaii 23—*Sesbania tomentosa*-b	*Sesbania tomentosa*	*Sesbania tomentosa.*
Hawaii 24—*Argyroxiphium kauense*-b	*Argyroxiphium kauense*	*Argyroxiphium kauense.*
Hawaii 24—*Asplenium fragile* var. *insulare*-a.	*Asplenium fragile* var. *insulare*	*Asplenium fragile* var. *insulare*..
Hawaii 24—*Cyanea stictophylla*-c		*Cyanea stictophylla.*
Hawaii 24—*Cyanea tritomantha*-d—Section 8.	*Cyanea tritomantha*	*Cyanea tritomantha.*
Hawaii 24—*Melicope zahlbruckneri*-a		*Melicope zahlbruckneri.*
Hawaii 24—*Phyllostegia velutina*-a	*Phyllostegia velutina*	*Phyllostegia velutina.*
Hawaii 24—*Pittosporum hawaiiense*-h—Section 8.	*Pittosporum hawaiiense*	*Pittosporum hawaiiense.*
Hawaii 24—*Pittosporum hawaiiense*-i—Section 9.	*Pittosporum hawaiiense*	*Pittosporum hawaiiense.*
Hawaii 24—*Plantago hawaiensis*-a	*Plantago hawaiensis*	*Plantago hawaiensis.*
Hawaii 24—*Schiedea diffusa* ssp. *macraei*-g—Section 8.	*Schiedea diffusa* ssp. *macraei*	*Schiedea diffusa* ssp. *macraei.*
Hawaii 24—*Schiedea diffusa* ssp. *macraei*-h—Section 9.	*Schiedea diffusa* ssp. *macraei*	*Schiedea diffusa* ssp. *macraei.*
Hawaii 24—*Stenogyne cranwelliae*-g—Section 8.		*Stenogyne cranwelliae.*
Hawaii 24—*Stenogyne cranwelliae*-h—Section 9.		*Stenogyne cranwelliae.*
Hawaii 25—*Argyroxiphium kauense*-c	*Argyroxiphium kauense*	*Argyroxiphium kauense.*
Hawaii 25—*Plantago hawaiensis*-b	*Plantago hawaiensis*	*Plantago hawaiensis.*
Hawaii 25—*Silene hawaiiensis*-a	*Silene hawaiiensis*	*Silene hawaiiensis.*
Hawaii 26—*Hibiscadelphus giffardianus*-a	*Hibiscadelphus giffardianus*	*Hibiscadelphus giffardianus.*
Hawaii 26—*Melicope zahlbruckneri*-b	*Melicope zahlbruckneri*	*Melicope zahlbruckneri.*
Hawaii 27—*Portulaca sclerocarpa*-a	*Portulaca sclerocarpa*	*Portulaca sclerocarpa.*
Hawaii 27—*Silene hawaiiensis*-b	*Silene hawaiiensis*	*Silene hawaiiensis.*
Hawaii 28—*Adenophorus periens*-a	*Adenophorus periens*	*Adenophorus periens.*
Hawaii 28—*Cyrtandra nanawaleensis*-a	*Cyrtandra nanawaleensis*	*Cyrtandra nanawaleensis.*

Unit name	Species occupied	Species unoccupied
Hawaii 28—*Phyllostegia floribunda*-h	*Phyllostegia floribunda*	*Phyllostegia floribunda.*
Hawaii 29—*Clermontia peleana*-c	*Clermontia peleana*	*Clermontia peleana.*
Hawaii 29—*Cyanea platyphylla*-b	*Cyanea platyphylla*	*Cyanea platyphylla.*
Hawaii 29—*Cyanea tritomantha*-e	*Cyanea tritomantha*	*Cyanea tritomantha.*
Hawaii 29—*Cyrtandra giffardii*-b		*Cyrtandra giffardii.*
Hawaii 29—*Cyrtandra tintinnabula*-b		*Cyrtandra tintinnabula.*
Hawaii 29—*Phyllostegia floribunda*-i	*Phyllostegia floribunda*	*Phyllostegia floribunda.*
Hawaii 29—*Pittosporum hawaiiense*-j	*Pittosporum hawaiiense*	*Pittosporum hawaiiense.*
Hawaii 29—*Schiedea diffusa* ssp. *macraei*-i.	*Schiedea diffusa* ssp. *macraei*	*Schiedea diffusa* ssp. *macraei.*
Hawaii 29—*Stenogyne cranwelliae*-i		*Stenogyne cranwelliae.*
Hawaii 30—*Argyroxiphium kauense*-d	*Argyroxiphium kauense*	*Argyroxiphium kauense.*
Hawaii 30—*Clermontia lindseyana*-c	*Clermontia lindseyana*	*Clermontia lindseyana.*
Hawaii 30—*Cyanea shipmanii*-b	*Cyanea shipmanii*	*Cyanea shipmanii.*
Hawaii 30—*Cyanea shipmanii*-c		*Cyanea shipmanii.*
Hawaii 30—*Cyanea stictophylla*-d		*Cyanea stictophylla.*
Hawaii 30—*Cyanea tritomantha*-f	*Cyanea tritomantha*	*Cyanea tritomantha.*
Hawaii 30—*Cyrtandra giffardii*-c	*Cyrtandra giffardii*	*Cyrtandra giffardii.*
Hawaii 30—*Phyllostegia floribunda*-j	*Phyllostegia floribunda*	*Phyllostegia floribunda.*
Hawaii 30—*Phyllostegia racemosa*-c		*Phyllostegia racemosa.*
Hawaii 30—*Phyllostegia velutina*-b	*Phyllostegia velutina*	*Phyllostegia velutina.*
Hawaii 30—*Pittosporum hawaiiense*-k	*Pittosporum hawaiiense*	*Pittosporum hawaiiense.*
Hawaii 30—*Plantago hawaiensis*-c	*Plantago hawaiensis*	*Plantago hawaiensis.*
Hawaii 30—*Schiedea diffusa* ssp. *macraei*-j.	*Schiedea diffusa* ssp. *macraei*	*Schiedea diffusa* ssp. *macraei.*
Hawaii 30—*Sicyos alba*-a	*Sicyos alba*	*Sicyos alba.*
Hawaii 30—*Stenogyne cranwelliae*-j		*Stenogyne cranwelliae.*
Hawaii 31—*Bidens micrantha* ssp. *ctenophylla*-b.		*Bidens micrantha* ssp. *ctenophylla.*
Hawaii 31—*Isodendrion pyrifolium*-b		*Isodendrion pyrifolium.*
Hawaii 31—*Mezoneuron kavaiense*-b	*Mezoneuron kavaiense*	*Mezoneuron kavaiense.*
Hawaii 33—*Bidens micrantha* ssp. *ctenophylla*-d.		*Bidens micrantha* ssp. *ctenophylla.*
Hawaii 33—*Isodendrion pyrifolium*-d		*Isodendrion pyrifolium.*
Hawaii 33—*Mezoneuron kavaiense*-d		*Mezoneuron kavaiense.*
Hawaii 34—*Bidens micrantha* ssp. *ctenophylla*-e.		*Bidens micrantha* ssp. *ctenophylla.*
Hawaii 34—*Isodendrion pyrifolium*-e		*Isodendrion pyrifolium.*
Hawaii 34—*Mezoneuron kavaiense*-e		*Mezoneuron kavaiense.*
Hawaii 36—*Bidens micrantha* ssp. *ctenophylla*-g.	*Bidens micrantha* ssp. *ctenophylla*	*Bidens micrantha* ssp. *ctenophylla.*
Hawaii 36—*Isodendrion pyrifolium*-g		*Isodendrion pyrifolium.*
Hawaii 37—*Cyanea marksii*-d	*Cyanea marksii*	*Cyanea marksii.*
Hawaii 37—*Phyllostegia floribunda*-k		*Phyllostegia floribunda.*
Hawaii 37—*Pittosporum hawaiiense*-l		*Pittosporum hawaiiense.*
Hawaii 37—*Schiedea diffusa* ssp. *macraei*-k.		*Schiedea diffusa* ssp. *macraei.*
Hawaii 37—*Stenogyne cranwelliae*-k		*Stenogyne cranwelliae.*
Hawaii 38—*Cyanea marksii*-e	*Cyanea marksii*	*Cyanea marksii.*
Hawaii 38—*Phyllostegia floribunda*-l		*Phyllostegia floribunda.*
Hawaii 38—*Pittosporum hawaiiense*-m		*Pittosporum hawaiiense.*
Hawaii 38—*Schiedea diffusa* ssp. *macraei*-l.		*Schiedea diffusa* ssp. *macraei.*
Hawaii 38—*Stenogyne cranwelliae*-l		*Stenogyne cranwelliae.*
Hawaii 39—*Cyanea marksii*-f	*Cyanea marksii*	*Cyanea marksii.*
Hawaii 39—*Phyllostegia floribunda*-m	*Phyllostegia floribunda*	*Phyllostegia floribunda.*
Hawaii 39—*Pittosporum hawaiiense*-n	*Pittosporum hawaiiense*	*Pittosporum hawaiiense.*
Hawaii 39—*Schiedea diffusa* ssp. *macraei*-m.		*Schiedea diffusa* ssp. *macrae.*
Hawaii 39—*Stenogyne cranwelliae*-m		*Stenogyne cranwelliae.*
Hawaii 40—*Cyanea marksii*-g	*Cyanea marksii*	*Cyanea marksii.*
Hawaii 40—*Phyllostegia floribunda*-n	*Phyllostegia floribunda*	*Phyllostegia floribunda.*
Hawaii 40—*Pittosporum hawaiiense*-o		*Pittosporum hawaiiense.*
Hawaii 40—*Schiedea diffusa* ssp. *macraei*-n.		*Schiedea diffusa* ssp. *macraei.*
Hawaii 40—*Stenogyne cranwelliae*-n		*Stenogyne cranwelliae.*
Hawaii 41—*Cyanea marksii*-h	*Cyanea marksii*	*Cyanea marksii.*
Hawaii 41—*Phyllostegia floribunda*-o	*Phyllostegia floribunda*	*Phyllostegia floribunda.*
Hawaii 41—*Pittosporum hawaiiense*-p	*Pittosporum hawaiiense*	*Pittosporum hawaiiense.*
Hawaii 41—*Schiedea diffusa* ssp. *macraei*-o.		*Schiedea diffusa* ssp. *macraei.*
Hawaii 41—*Stenogyne cranwelliae*-o		*Stenogyne cranwelliae.*
Hawaii 42—*Cyanea tritomantha*-g		*Cyanea tritomantha.*
Hawaii 42—*Phyllostegia floribunda*-p		*Phyllostegia floribunda.*

Unit name	Species occupied	Species unoccupied
Hawaii 42—*Pittosporum hawaiiense*-q	*Pittosporum hawaiiense*	*Pittosporum hawaiiense.*
Hawaii 42—*Schiedea diffusa* ssp. *macraei*-p.	*Schiedea diffusa* ssp. *macraei*	*Schiedea diffusa* ssp. *macrae..*
Hawaii 42—*Stenogyne cranwelliae*-p		*Stenogyne cranwelliae.*
Hawaii 43—*Pittosporum hawaiiense*-r	*Pittosporum hawaiiense*	*Pittosporum hawaiiense.*
Hawaii 43—*Schiedea diffusa* ssp. *macraei*-q.	*Schiedea diffusa* ssp. *macraei*	*Schiedea diffusa* ssp. *macrae..*
Hawaii 43—*Stenogyne cranwelliae*-q		*Stenogyne cranwelliae.*
Hawaii 44—*Cyanea tritomantha*-h	*Cyanea tritomantha*	*Cyanea tritomantha.*
Hawaii 44—*Pittosporum hawaiiense*-s	*Pittosporum hawaiiense*	*Pittosporum hawaiiense.*
Hawaii 44—*Schiedea diffusa* ssp. *macraei*-r.	*Schiedea diffusa* ssp. *macraei*	*Schiedea diffusa* ssp. *macraei.*
Hawaii 44—*Stenogyne cranwelliae*-r		*Stenogyne cranwelliae.*
Hawaii 45—*Phyllostegia floribunda*-q	*Phyllostegia floribunda*	*Phyllostegia floribunda.*
Hawaii 45—*Pittosporum hawaiiense*-t	*Pittosporum hawaiiense*	*Pittosporum hawaiiense.*
Hawaii 46—*Cyrtandra nanawaleensis*-b	*Cyrtandra nanawaleensis*	*Cyrtandra nanawaleensis.*
Hawaii 46—*Phyllostegia floribunda*-r	*Phyllostegia floribunda*	*Phyllostegia floribunda.*
Hawaii 47—*Cyrtandra nanawaleensis*-c	*Cyrtandra nanawaleensis*	*Cyrtandra nanawaleensis.*
Hawaii 48—*Cyrtandra nanawaleensis*-d	*Cyrtandra nanawaleensis*	*Cyrtandra nanawaleensis.*
Hawaii 49—*Cyrtandra nanawaleensis*-e	*Cyrtandra nanawaleensis*	*Cyrtandra nanawaleensis.*
Hawaii 50—*Cyrtandra nanawaleensis*-f	*Cyrtandra nanawaleensis*	*Cyrtandra nanawaleensis..*
Hawaii 51—*Cyanea tritomantha*-i	*Cyanea tritomantha*	*Cyanea tritomantha.*
Hawaii 51—*Phyllostegia floribunda*-s	*Phyllostegia floribunda*	*Phyllostegia floribunda.*
Hawaii 51—*Pittosporum hawaiiense*-u	*Pittosporum hawaiiense*	*Pittosporum hawaiiense.*
Hawaii 51—*Schiedea diffusa* ssp. *macraei*-s.	*Schiedea diffusa* ssp. *macraei*	*Schiedea diffusa* ssp. *macraei.*
Hawaii 51—*Stenogyne cranwelliae*-s		*Stenogyne cranwelliae.*
Hawaii 52—*Cyanea tritomantha*-j	*Cyanea tritomantha*	*Cyanea tritomantha.*
Hawaii 52—*Cyrtandra wagneri*-b	*Cyrtandra wagneri*	*Cyrtandra wagneri.*
Hawaii 52—*Melicope remyi*-d	*Melicope remyi*	*Melicope remyi.*
Hawaii 52—*Phyllostegia floribunda*-t	*Phyllostegia floribunda*	*Phyllostegia floribunda.*
Hawaii 52—*Pittosporum hawaiiense*-v		*Pittosporum hawaiiense.*
Hawaii 52—*Schiedea diffusa* ssp. *macraei*-t.		*Schiedea diffusa* ssp. *macraei.*
Hawaii 52—*Stenogyne cranwelliae*-t	*Stenogyne cranwelliae*	*Stenogyne cranwelliae.*
Hawaii 53—*Bidens hillebrandiana* ssp. *hillebrandiana*-b.	*Bidens hillebrandiana* ssp. *hillebrandiana*	*Bidens hillebrandiana* ssp. *hillebrandiana.*
Hawaii 54—*Cyanea tritomantha*-k	*Cyanea tritomantha*	*Cyanea tritomantha.*
Hawaii 54—*Melicope remyi*-e		*Melicope remyi.*
Hawaii 54—*Phyllostegia floribunda*-u		*Phyllostegia floribunda.*
Hawaii 54—*Pittosporum hawaiiense*-w	*Pittosporum hawaiiense*	*Pittosporum hawaiiense.*
Hawaii 54—*Schiedea diffusa* ssp. *macraei*-u.	*Schiedea diffusa* ssp. *macraei*	*Schiedea diffusa* ssp. *macraei.*
Hawaii 54—*Stenogyne cranwelliae*-u	*Stenogyne cranwelliae*	*Stenogyne cranwelliae.*
Hawaii 55—*Schiedea hawaiiensis*-a		*Schiedea hawaiiensis.*
Hawaii 56—*Cyanea marksii*-i		*Cyanea marksii.*
Hawaii 56—*Schiedea diffusa* ssp. *macraei*-v.		*Schiedea diffusa* ssp. *macraei*

(239) Critical habitat unit descriptions and maps, and a description of primary constituent elements, for Family Malvaceae: *Kokia drynariodes* on the island of Hawaii is provided in 50 CFR 17.96(a).

(1) Plants on the island of Hawaii; Constituent elements—(1) Flowering plants.

FAMILY AMARANTHACEAE: ***Achyranthes mutica*** (NCN)

Hawaii 9—*Achyranthes mutica*—a, Hawaii 9—*Achyranthes mutica*—b, Hawaii 9—*Achyranthes mutica*—c, Hawaii 9—*Achyranthes mutica*—d, Hawaii 9—*Achyranthes mutica*—e, Hawaii 9—*Achyranthes mutica*—f, Hawaii 9—*Achyranthes mutica*—g, Hawaii 9—*Achyranthes mutica*—h, Hawaii 9—*Achyranthes mutica*—i, Hawaii 9—*Achyranthes mutica*—j, identified in the legal descriptions in paragraph (k) of this section, constitute critical habitat for Achyranthes mutica on Hawaii. 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 koaia* lowland dry forest, primarily in gulches but also in remnant stands of forest, and containing

one or more of the following associated native plant species: *Dodonaea viscosa*, *Erythrina sandwicensis*, *Metrosideros polymorpha*, *Myoporum sandwicense*, *Osteomeles anthyllidifolia*, *Nestegis sandwicensis*, *Santalum ellipticum*, or *Sophora chrysophylla;* and

(ii) Elevations between 646 and 1,509 m (2,120 and 4,949 ft).

FAMILY ASTERACEAE: ***Argyroxiphium kauense*** (MAUNA LOA SILVERSWORD)

Hawaii 10—*Argyroxiphium kauense*—a, Hawaii 24—*Argyroxiphium kauense*—b, Hawaii 25—*Argyroxiphium kauense*—c, and Hawaii 30—*Argyroxiphium kauense*—d, identified in the legal descriptions in paragraph (k) of this section, constitute critical habitat for *Argyroxiphium kauense* on Hawaii. 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, open forest; subalpine mesic shrubland; bogs; and weathered, old pahoehoe (smooth) or aa (rough) lava with well-developed pockets of soil, and containing one or more of the following associated native plant species: *Asplenium peruvianum* var. *insulare*, *Carex alligata*, *Carex* sp., *Coprosma ernodeoides*, *Coprosma montana*, *Deschampsia nubigena*, *Dodonaea viscosa*, *Dubautia ciliolata*, *Gahnia gahniiformis*, *Geranium cuneatum*, *Leptecophylla tameiameiae*, *Metrosideros polymorpha*, *Plantago hawaiensis*, *Rhynchospora chinensis*, *Silene hawaiiensis*, or *Vaccinium reticulatum;* and

(ii) Elevations between 1,583 and 2,246 m (5,193 and 8,024 ft).

Family Asteraceae: Bidens hillebrandiana ssp. hillebrandiana (KOOKOOLAU)

Hawaii 6—*Bidens hillebrandiana* ssp. *hillebrandiana*-a and Hawaii 53—*Bidens hillebrandiana* ssp. *hillebrandiana*-b, identified in the legal descriptions in paragraph (k) of this section, constitute critical habitat for *Bidens hillebrandiana* ssp. *hillebrandiana* on Hawaii Island. In units Hawaii 6—*Bidens hillebrandiana* ssp. *hillebrandiana*-a and Hawaii 53—*Bidens hillebrandiana* ssp. *hillebrandiana*-b, the physical and biological features of critical habitat in coastal ecosystem are:

(i) Elevation: Less than 984feet (ft) (300 meters (m)).

(ii) Annual precipitation: Less than 47 inches (in) (120 centimeters (cm)) to greater than 98 in (250 cm).

(iii) Substrate: Well-drained talus, calcareous slopes, dunes.

(iv) Canopy contains one or more of the following native plant genera: *Diospyros*, *Metrosideros*, *Myoporum*, *Pritchardia*.

(v) Subcanopy contains one or more of the following native plant genera: *Chenopodium*, *Gossypium*, *Heliotropium*, *Santalum*, *Scaevola*.

(vi) Understory contains one or more of the following native plant genera: *Eragrostis*, *Sesuvium*, *Sida*, *Sporobolus*.

FAMILY CAMPANULACEAE: ***Clermontia drepanomorpha*** (OHA WAI)

Hawaii 8—*Clermontia drepanomorpha*—a, identified in the legal description in paragraph (k) of this section, constitutes critical habitat for *Clermontia drepanomorpha* on Hawaii. 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*, *Cheirodendron trigynum*, and *Cibotium glaucum* dominated montane wet forests, containing one or more of the following native plant species: *Astelia menziesiana*, *Carex alligata*, *Coprosma* sp., *Cyanea pilosa*, *Leptecophylla tameiameiae*, *Melicope clusiifolia*, and *Rubus hawaiiensis*, or *sphagnum moss;* and

(ii) Elevations between 1,106 and 1,676 m (3,627 and 5,459 ft).

FAMILY CAMPANULACEAE: ***Clermontia lindseyana*** (OHA WAI)

Hawaii 1—*Clermontia lindseyana*—a, Hawaii 2—*Clermontia lindseyana*—b, and Hawaii 30—*Clermontia lindseyana*—c, identified in the legal descriptions in paragraph (k) of this section, constitute critical habitat for *Clermontia lindseyana* on Hawaii. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Slightly open forest cover in wet and mesic *Metrosideros polymorpha-Acacia koa* forest, *M. polymorpha* forest, and mixed montane mesic *M. polymorpha-Acacia koa* forest and containing one or more of the following associated native plant species: *Athyrium* sp., *Cheirodendron trigynum*, *Coprosma* sp., *Leptecophylla tameiameiae*, *Peperomia* sp., or *Rubus hawaiiensis;* and

(ii) Elevations between 1,495 and 1,953 m (4,906 and 6,407 ft).

FAMILY CAMPANULACEAE: ***Clermontia peleana*** (OHA WAI)

Hawaii 1—*Clermontia peleana*—a, Hawaii 3—*Clermontia peleana*—b, and Hawaii 29—*Clermontia peleana*—c, identified in the legal descriptions in paragraph (k) of this section, constitute critical habitat for *Clermontia peleana* on Hawaii. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Montane, wet *Metrosideros-Cibotium* forest containing one or more of the following associated native plant species: *Cheirodendron trigynum*, *Cibotium chamissoi*, *Cibotium menziesii*, *Clermontia hawaiiensis*, *Coprosma pubens*, *Cyrtandra platyphylla*, *Ilex anomala*, or *Sadleria* spp.; and

(ii) Elevations between 663 and 1,622 m (2,175 and 5,321 ft).

FAMILY CAMPANULACEAE: ***Clermontia pyrularia*** (OHA WAI)

Hawaii 1—*Clermontia pyrularia*—a and Hawaii 2—*Clermontia pyrularia*—b, identified in the legal descriptions in paragraph (k) of this section, constitute critical habitat for *Clermontia pyrularia* on Hawaii. 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 and mesic montane forest dominated by *Acacia koa* or *Metrosideros polymorpha*, and subalpine dry forest dominated by *M. polymorpha*, and containing one or more of the following associated native plant species: *Coprosma* sp., *Dryopteris wallichiana*, *Hedyotis* sp., or *Rubus hawaiensis;* and

(ii) Elevations between 1,652 and 2,026 m (5,416 to 6,646 ft).

FAMILY CAMPANULACEAE: ***Cyanea hamatiflora*** SSP. ***carlsonii*** (HAHA)

Hawaii 11—*Cyanea hamatiflora* ssp. *carlsonii*—a, Hawaii 14—*Cyanea hamatiflora* ssp. *carlsonii*—b, Hawaii 15—*Cyanea hamatiflora* ssp. *carlsonii*—c, and Hawaii 16—*Cyanea hamatiflora* ssp. *carlsonii*—d, identified in the legal descriptions in paragraph (k) of this section, constitute critical habitat for *Cyanea hamatiflora* ssp. *carlsonii* on Hawaii. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Mesic montane forest dominated by *Acacia koa* or *Metrosideros polymorpha*, and containing one or more of the following associated native plant species: *Athyrium* sp., *Cibotium* spp., *Clermontia clermontioides*, *Coprosma* sp., *Dryopteris* sp., *Hedyotis* sp., *Ilex anomala*, *Myoporum sandwicense*, or *Sophora chrysophylla;* and

(ii) Elevations between 1,366 and 1,755 m (4,482 and 5,759 ft).

Family Campanulaceae: Cyanea marksii (HAHA)

Hawaii 15—*Cyanea marksii*-a-Section 4, Hawaii 15—*Cyanea marksii*-b-Section 5, Hawaii 16—*Cyanea marksii*-c, Hawaii 37—*Cyanea marksii*-d, Hawaii 38—*Cyanea marksii*-e, Hawaii 39—*Cyanea marksii*-f, Hawaii 40—*Cyanea marksii*-g, Hawaii 41—*Cyanea marksii*-h, and Hawaii 56—*Cyanea marksii*-i, identified in the legal descriptions in paragraph (k) of this section, constitute critical habitat for *Cyanea marksii* on Hawaii Island. In units Hawaii 15—*Cyanea marksii*-a-Section 4, Hawaii 15—*Cyanea marksii*-b-Section 5, Hawaii 16—*Cyanea marksii*-c, Hawaii 37—*Cyanea marksii*-d, Hawaii 38—*Cyanea marksii*-e, Hawaii 39—*Cyanea marksii*-f, Hawaii 40—*Cyanea marksii*-g, Hawaii 41—*Cyanea marksii*-h, and Hawaii 56—*Cyanea marksii*-i, the physical and biological features of critical habitat in wet forest ecosystem are:

(i) Elevation: Less than 7,218 ft (2,200 m).

(ii) Annual precipitation: Greater than 98 in (250 cm).

(iii) Substrate: Very weathered soils to rocky substrate, basaltic lava, undeveloped soils, developed soils.

(iv) Canopy contains one or more of the following native plant genera: *Acacia*, *Antidesma*, *Cheirodendron*, *Ilex*, *Melicope*, *Metrosideros*, *Myrsine*, *Pittosporum*, *Psychotria*.

(v) Subcanopy contains one or more of the following native plant genera: *Cibotium*, *Clermontia*, *Coprosma*, *Cyanea*, *Freycinetia*, *Hydrangea*, *Vaccinium*.

(vi) Understory contains one or more of the following native plant genera: *Adenophorus*, *Cibotium*, *Cyrtandra*, *Dicranopteris*, *Huperzia*, *Peperomia*, *Stenogyne*.

FAMILY CAMPANULACEAE: *Cyanea platyphylla* (AKUAKU)

Hawaii 3—*Cyanea platyphylla*—a and Hawaii 29—*Cyanea platyphylla*—b, identified in the legal descriptions in paragraph (k) of this section, constitute critical habitat for *Cyanea platyphylla* on Hawaii. 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-Acacia koa* lowland and montane wet forests, containing one or more of the following associated native plant species: *Antidesma platyphyllum*, *Cibotium* sp., *Clermontia* spp., *Coprosma* sp., *Cyrtandra* spp., *Hedyotis* sp., *Perrottetia sandwicensis*, *Psychotria hawaiiensis*, or *Scaevola* spp.; and

(ii) Elevations between 615 and 1,082 m (2,017 and 3,551 ft).

FAMILY CAMPANULACEAE: ***Cyanea shipmanii*** (HAHA)

Hawaii 1—*Cyanea shipmanii*—a, Hawaii 30—*Cyanea shipmanii*—b, and Hawaii 30—*Cyanea shipmanii*—c, identified in the legal descriptions in paragraph (k) of this section, constitute critical habitat for *Cyanea shipmanii* on Hawaii. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Montane mesic forest dominated by *Acacia koa-Metrosideros polymorpha* and containing one or more of the following associated native plant species: *Cheirodendron trigynum*, *Ilex anomala*, or *Myrsine lessertiana;* and

(ii) Elevations between 1,629 and 2,025 m (5,345 and 6,645 ft).

FAMILY CAMPANULACEAE: ***Cyanea stictophylla*** (HAHA)

Hawaii 15—*Cyanea stictophylla*—a, Hawaii 16—*Cyanea stictophylla*—b, Hawaii 24—*Cyanea stictophylla*—c, and Hawaii 30—*Cyanea stictophylla*—d, identified in the legal descriptions in paragraph (k) of this section, constitute critical habitat for *Cyanea stictophylla* on Hawaii. 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* or wet *Metrosideros polymorpha* forests, containing one or more of the following associated native plant species: *Cibotium* sp., *Melicope* spp., or *Urera glabra;* and

(ii) Between elevations of 1,056 and 1,917 m (3,466 and 6,288 ft).

FAMILY CAMPANULACEAE: ***Delissea undulata*** (NCN)

Hawaii 10—*Delissea undulata*—a and Hawaii 10—*Delissea undulata*—b, identified in the legal descriptions in paragraph (k) of this section, constitute critical habitat for *Delissea undulata* on Hawaii. 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 cinder cones and open *Metrosideros polymorpha* and *Sophora chrysophylla* forest, and containing one or more of the following associated native plant species: *Acacia koa*, *Diospyros sandwicensis*, *Dodonaea viscosa*, *Nothocestrum breviflorum*, *Psychotria* spp., *Santalum paniculatum*, or *Sophora chrysophylla;* and

(ii) Elevations between 893 to 1,734 m (2,928 to 5,690 ft).

FAMILY CARYOPHYLLACEAE: ***Silene hawaiiensis*** (NCN)

Hawaii 25—*Silene hawaiiensis*—a and Hawaii 27—*Silene hawaiiensis*—b, identified in the legal descriptions in paragraph (k) of this section, constitute critical habitat for *Silene hawaiiensis*

on Hawaii. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Weathered lava or variously aged lava flows and cinder substrates in montane and subalpine dry shrubland containing one or more of the following associated native plant species: *Dodonaea viscosa*, *Leptecophylla tameiameiae*, *Metrosideros polymorpha*, *Rumex giganteus*, *Sophora chrysophylla*, or *Vaccinium reticulatum;* and

(ii) Elevations between 1,022 and 2,413 m (3,352 and 7,915 ft).

FAMILY CONVOLVULACEAE: ***Bonamia menziesii*** (NCN)

Hawaii 10—*Bonamia menziesii*—a, identified in the legal description in paragraph (k) of this section, constitutes critical habitat for *Bonamia menziesii* on Hawaii. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Dry forest, containing one or more of the following associated native plant species: *Argemone glauca*, *Canavalia hawaiiensis*, *Chenopodium oahuense*, *Diospyros sandwicensis*, *Dodonaea viscosa*, *Erythrina sandwicensis*, *Metrosideros polymorpha*, *Myrsine lanaiensis*, *Nototrichium sandwicense*, *Osteomeles anthyllidifolia*, *Peperomia blanda* var. *floribunda*, *Pouteria sandwicensis*, *Psilotum nudum*, *Santalum paniculatum*, *Sapindus saponaria*, *Senna gaudichaudii*, *Sida fallax*, *Sophora chrysophylla*, or *Xylosma hawaiiense;* and

(ii) Elevations between 492 and 697 m (1,614 and 2,285 ft).

FAMILY CUCURBITACEAE: ***Sicyos alba*** (ANUNU)

Hawaii 30—*Sicyos alba*—a, identified in the legal description in paragraph (k) of this section, constitutes critical habitat for *Sicyos alba* on Hawaii. 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-Cibotium glaucum* dominated montane wet forests, containing one or more of the following associated native plant species: *Astelia menziesiana*, *Athyrium microphyllum* and other ferns, *Broussaisia arguta*, *Cheirodendron trigynum*, *Coprosma* sp., *Cyanea tritomantha*, *Cyrtandra lysiosepala*, *Perrottetia sandwicensis*, *Platydesma spathulata*, *Pritchardia beccariana*, *Psychotria* sp., or *Stenogyne* sp.; and

(ii) Elevations between 966 and 1,546 m (3,170 and 5,072 ft).

Family Campanulaceae: Cyanea tritomantha (AKU)

Hawaii 3—*Cyanea tritomantha*-a, Hawaii 8—*Cyanea tritomantha*-b, Hawaii 9—*Cyanea tritomantha*-c, Hawaii 24—*Cyanea tritomantha*-d-Section 8, Hawaii 29—*Cyanea tritomantha*-e, Hawaii 30—*Cyanea tritomantha*-f, Hawaii 42—*Cyanea tritomantha*-g, Hawaii 44—*Cyanea tritomantha*-h, Hawaii 51—*Cyanea tritomantha*-i, Hawaii 52—*Cyanea tritomantha*-j, and Hawaii 54—*Cyanea tritomantha*-k, identified in the legal descriptions in paragraph (k) of this section, constitute critical habitat for *Cyanea tritomantha* on Hawaii Island.

(i) In units Hawaii 3—*Cyanea tritomantha*-a, Hawaii 24—*Cyanea tritomantha*-d-Section 8, Hawaii 29—*Cyanea tritomantha*-e, Hawaii 30—*Cyanea tritomantha*-f, Hawaii 42—*Cyanea tritomantha*-g, Hawaii 44—*Cyanea tritomantha*-h, Hawaii 51—*Cyanea tritomantha*-i, and Hawaii 52—*Cyanea tritomantha*-j, the physical and biological features of critical habitat in wet forest ecosystem are:

(A) Elevation: Less than 7,218 ft (2,200 m).

(B) Annual precipitation: Greater than 98 in (250 cm).

(C) Substrate: Very weathered soils to rocky substrate, basaltic lava, undeveloped soils, developed soils.

(D) Canopy contains one or more of the following native plant genera: *Acacia*, *Antidesma*, *Cheirodendron*, *Ilex*, *Melicope*, *Metrosideros*, *Myrsine*, *Pittosporum*, *Psychotria*.

(E) Subcanopy contains one or more of the following native plant genera: *Cibotium*, *Clermontia*, *Coprosma*, *Cyanea*, *Freycinetia*, *Hydrangea*, *Vaccinium*.

(F) Understory contains one or more of the following native plant genera: *Adenophorus*, *Cibotium*, *Cyrtandra*,

Dicranopteris, *Huperzia*, *Peperomia*, *Stenogyne*.

(ii) In units Hawaii 8—*Cyanea tritomantha*-b, Hawaii 9—*Cyanea tritomantha*-c, and Hawaii 54—*Cyanea tritomantha*-k, the physical and biological features of critical habitat in wet forest ecosystem are those provided above in paragraphs (i)(A) through (F) of this entry, and in wet grassland and shrubland ecosystem are:

(A) Elevation: 656 to 2,953 ft (200 to 900 m).

(B) Annual precipitation: 98 to 197 in (250 to 500 cm).

(C) Substrate: Older, weathered soils to younger, rocky substrates.

(D) Canopy contains one or more of the following native plant genera: *Ilex*, *Kadua*, *Melicope*, *Metrosideros*, *Myrsine*.

(E) Subcanopy contains one or more of the following native plant genera: *Cibotium*, *Clermontia*, *Dubautia*, *Freycinetia*, *Hydrangea*, *Lobelia*, *Pipturus*, *Touchardia*, *Urera*, *Vaccinium*.

(F) Understory contains one or more of the following native plant genera: *Carex*, *Cladium*, *Deschampsia*, *Dicranopteris*, *Eragrostis*, *Peperomia*, *Phyllostegia*, *Scaevola*.

Family Caryophyllaceae: Schiedea diffusa ssp. macraei (no common name)

Hawaii 3—*Schiedea diffusa* ssp. *macraei*-a, Hawaii 8—*Schiedea diffusa* ssp. *macraei*-b, Hawaii 9—*Schiedea diffusa* ssp. *macraei*-c, Hawaii 15—*Schiedea diffusa* ssp. *macraei*-d-Section 4, Hawaii 15—*Schiedea diffusa* ssp. *macraei*-e-Section 5, Hawaii 16—*Schiedea diffusa* ssp. *macraei*-f, Hawaii 24—*Schiedea diffusa* ssp. *macraei*-g-Section 8, Hawaii 24—*Schiedea diffusa* ssp. *macraei*-h-Section 9, Hawaii 29—*Schiedea diffusa* ssp. *macraei*-i, Hawaii 30—*Schiedea diffusa* ssp. *macraei*-j, Hawaii 37—*Schiedea diffusa* ssp. *macraei*-k, Hawaii 38—*Schiedea diffusa* ssp. *macraei*-l, Hawaii 39—*Schiedea diffusa* ssp. *macraei*-m, Hawaii 40—*Schiedea diffusa* ssp. *macraei*-n, Hawaii 41—*Schiedea diffusa* ssp. *macraei*-o, Hawaii 42—*Schiedea diffusa* ssp. *macraei*-p, Hawaii 43—*Schiedea diffusa* ssp. *macraei*-q, Hawaii 44—*Schiedea diffusa* ssp. *macraei*-r, Hawaii 51—*Schiedea diffusa* ssp. *macraei*-s, Hawaii 52—*Schiedea diffusa* ssp. *macraei*-t, Hawaii 54—*Schiedea diffusa* ssp. *macraei*-u, and Hawaii 56—*Schiedea diffusa* ssp. *macraei*-v, identified in the legal descriptions in paragraph (k) of this section, constitute critical habitat for *Schiedea diffusa* ssp. *macraei* on Hawaii Island. In units Hawaii 3—*Schiedea diffusa* ssp. *macraei*-a, Hawaii 8—*Schiedea diffusa* ssp. *macraei*-b, Hawaii 9—*Schiedea diffusa* ssp. *macraei*-c, Hawaii 15—*Schiedea diffusa* ssp. *macraei*-d-Section 4, Hawaii 15—*Schiedea diffusa* ssp. *macraei*-e-Section 5, Hawaii 16—*Schiedea diffusa* ssp. *macraei*-f, Hawaii 24—*Schiedea diffusa* ssp. *macraei*-g-Section 8, Hawaii 24—*Schiedea diffusa* ssp. *macraei*-h-Section 9, Hawaii 29—*Schiedea diffusa* ssp. *macraei*-i, Hawaii 30—*Schiedea diffusa* ssp. *macraei*-j, Hawaii 37—*Schiedea diffusa* ssp. *macraei*-k, Hawaii 38—*Schiedea diffusa* ssp. *macraei*-l, Hawaii 39—*Schiedea diffusa* ssp. *macraei*-m, Hawaii 40—*Schiedea diffusa* ssp. *macraei*-n, Hawaii 41—*Schiedea diffusa* ssp. *macraei*-o, Hawaii 42—*Schiedea diffusa* ssp. *macraei*-p, Hawaii 43—*Schiedea diffusa* ssp. *macraei*-q, Hawaii 44—*Schiedea diffusa* ssp. *macraei*-r, Hawaii 51—*Schiedea diffusa* ssp. *macraei*-s, Hawaii 52—*Schiedea diffusa* ssp. *macraei*-t, Hawaii 54—*Schiedea diffusa* ssp. *macraei*-u, and Hawaii 56—*Schiedea diffusa* ssp. *macraei*-v, the physical and biological features of critical habitat in wet forest ecosystem are:

(i) Elevation: Less than 7,218 ft (2,200 m).

(ii) Annual precipitation: Greater than 98 in (250 cm).

(iii) Substrate: Very weathered soils to rocky substrate, basaltic lava, undeveloped soils, developed soils.

(iv) Canopy contains one or more of the following native plant genera: *Acacia*, *Antidesma*, *Cheirodendron*, *Ilex*, *Melicope*, *Metrosideros*, *Myrsine*, *Pittosporum*, *Psychotria*.

(v) Subcanopy contains one or more of the following native plant genera: *Cibotium*, *Clermontia*, *Coprosma*, *Cyanea*, *Freycinetia*, *Hydrangea*, *Vaccinium*.

(vi) Understory contains one or more of the following native plant genera: *Adenophorus*, *Cibotium*, *Cyrtandra*, *Dicranopteris*, *Huperzia*, *Peperomia*, *Stenogyne*.

Family Caryophyllaceae: Schiedea hawaiiensis (MAOLIOLI)

Hawaii 55—*Schiedea hawaiiensis*-a, identified in the legal descriptions in paragraph (k) of this section, constitutes critical habitat for *Schiedea hawaiiensis* on Hawaii Island. In unit Hawaii 55—*Schiedea hawaiiensis*-a, the physical and biological features of critical habitat in dry forest ecosystem are:

(i) Elevation: Less than 9,500 ft (2,900 m).

(ii) Annual precipitation: Less than 79 in (200 cm).

(iii) Substrate: Well-drained, sandy loams or loams from volcanic ash or cinder; weathered basaltic lava.

(iv) Canopy contains one or more of the following native plant genera: *Acacia*, *Colubrina*, *Diospyros*, *Erythrina*, *Melicope*, *Metrosideros*, *Myoporum*, *Myrsine*, *Sophora*.

(v) Subcanopy contains one or more of the following native plant genera: *Achyranthes*, *Euphorbia*, *Leptecophylla*, *Nototrichium*.

(vi) Understory contains one or more of the following native plant genera: *Dodonaea*, *Doryopteris*, *Heteropogon*, *Pellaea*.

FAMILY CYPERACEAE: ***Cyperaceae fauriei*** (NCN)

Hawaii 19—*Cyperus fauriei*—a, identified in the legal description in paragraph (k) of this section, constitutes critical habitat for *Mariscus fauriei* on Hawaii. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) *Diospyros sandwicensis-Metrosideros polymorpha-Sapindus saponaria* dominated lowland dry forests, often on a lava substrate, and containing one or more of the following associated native plant species: *Myoporum sandwicense*, *Osteomeles anthyllidifolia*, *Peperomia blanda* var. *floribunda*, *Psydrax odorata*, *Rauvolfia sandwicensis*, or *Sophora chrysophylla;* and

(ii) Elevations between 278 and 342 m (913 and 1,123 ft).

FAMILY EUPHORBIACEAE: ***Flueggea neowawraea*** (MEHAMEHAME)

Hawaii 17—*Flueggea neowawraea*—a and Hawaii 18—*Flueggea neowawraea*—b, identified in the legal descriptions in paragraph (k) of this section, constitute critical habitat for *Flueggea neowawraea* on Hawaii. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Mesic *Metrosideros polymorpha* forest, containing one or more of the following associated native plant species: *Antidesma platyphyllum*, *Antidesma pulvinatum*, *Diospyros sandwicensis*, *Nephrolepis* spp., *Nestegis sandwicensis*, *Pipturus albidus*, *Pisonia* spp., *Pittosporum hosmeri*, *Psychotria hawaiiensis*, or *Psydrax odorata;* and

(ii) Elevations between 499 and 818 m (1,637 and 2,684 ft).

FAMILY FABACEAE: ***Mezoneuron kavaiense*** (UHIUHI)

Hawaii 10—*Mezoneuron kavaiense*—a, Hawaii 31—*Mezoneuron kavaiense*—b, Hawaii 33—*Mezoneuron kavaiense*—d, and Hawaii 34—*Mezoneuron kavaiense*—e, identified in the legal descriptions in paragraph (k) of this section, constitute critical habitat for *Mezoneuron kavaiense* on Hawaii Island. In units Hawaii 10—*Mezoneuron kavaiense*—a, Hawaii 31—*Mezoneuron kavaiense*—b, Hawaii 33—*Mezoneuron kavaiense*—d, and Hawaii 34—*Mezoneuron kavaiense*—e, 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*, *Erythrina*, *Metrosideros*, *Myoporum*, *Pleomele*, *Santalum*, *Sapindus*.

(v) Subcanopy: *Chamaesyce*, *Dodonaea*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(vi) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Capparis*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

FAMILY FABACEAE: ***Sesbania tomentosa*** (OHAI)

Hawaii 20—*Sesbania tomentosa*—a and Hawaii 23—*Sesbania tomentosa*—b, identified in the legal descriptions in paragraph (k) of this section, constitute critical habitat for *Sesbania tomentosa* on Hawaii. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Open, dry *Metrosideros polymorpha* forest with mixed native grasses, *Scaevola taccada* coastal dry shrubland on windswept slopes, and weathered basaltic slopes, and containing one or more of the following associated native plant species: *Dodonaea viscosa*, *Fimbristylis hawaiiensis*, *Ipomoea pes-caprae*, *Jacquemontia ovalifolia* ssp. *sandwicensis*, *Leptecophylla tameiameiae*, *Melanthera integrifolia*, *Myoporum sandwicense*, *Sida fallax*, *Sporobolus virginicus*, or *Waltheria indica;* and

(ii) Elevations between sea level and 922 m (0 and 3,025 ft).

FAMILY FABACEAE: ***Vigna o-wahuensis*** (NCN)

Hawaii 4—*Vigna o-wahuensis*—a, Hawaii 4—*Vigna o-wahuensis*—b, and Hawaii 4—*Vigna o-wahuensis*—c, identified in the legal descriptions in paragraph (k) of this section, constitute critical habitat for *Vigna o-wahuensis* on Hawaii. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) *Dodonaea viscosa* lowland dry shrubland, containing one or more of the following associated native plant species: *Chenopodium oahuense*, *Dodonaea viscosa*, *Osteomeles anthyllidifolia*, *Sida fallax*, or *Wikstroemia* sp.; and

(ii) Elevations between 717 and 993 m (2,352 and 3,259 ft).

FAMILY GESNERIACEAE: ***Cyrtandra giffardii*** (HAIWALE)

Hawaii 3—*Cyrtandra giffardii*—a, Hawaii 29—*Cyrtandra giffardii*—b, and Hawaii 30—*Cyrtandra giffardii*—c, identified in the legal descriptions in paragraph (k) of this section, constitute critical habitat for *Cyrtandra giffardii* on Hawaii. 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 montane forest dominated by *Cibotium* sp. or *Metrosideros polymorpha*, and *Metrosideros polymorpha-Acacia koa* lowland wet forests, and containing one or more of the following associated native plant species: *Astelia menziesiana*, *Diplazium sandwichianum*, *Hedyotis terminalis*, *Perrottetia sandwicensis*, or other species of *Cyrtandra;* and

(ii) Between elevations of 654 and 1,440 m (2,146 and 4,723 ft).

FAMILY GESNERIACEAE: ***Cyrtandra tintinnabula*** (HAIWALE)

Hawaii 3—*Cyrtandra tintinnabula*—a and Hawaii 29—*Cyrtandra tintinnabula*—b, identified in the legal descriptions in paragraph (k) of this section, constitute critical habitat for *Cyrtandra tintinnabula* on Hawaii. 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 wet forest dominated by dense *Acacia koa*, *Metrosideros polymorpha*, and *Cibotium* spp. and containing one or more of the following associated native plant species: *Cyrtandra* spp. or *Hedyotis* spp.; and

(ii) Between elevations 641 and 1,391 m (2,102 and 4,565 ft).

FAMILY LAMIACEAE: ***Phyllostegia racemosa*** (KIPONAPONA)

Hawaii 1—*Phyllostegia racemosa*—a, Hawaii 2—*Phyllostegia racemosa*—b, and Hawaii 30—*Phyllostegia racemosa*—c, identified in the legal descriptions in paragraph (k) of this section, constitute critical habitat for *Phyllostegia racemosa* on Hawaii. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Tree trunks in *Acacia koa*, *Metrosideros polymorpha*, and *Cibotium* sp. dominated montane mesic or wet forests and containing one or more of the following associated native plant species: *Dryopteris wallichiana*, *Rubus*

hawaiiensis, or *Vaccinium calycinum;* and

(ii) Elevations between 1,371 and 1,935 m (4,498 and 6,349 ft).

FAMILY LAMIACEAE: ***Phyllostegia velutina*** (NCN)

Hawaii 24—*Phyllostegia velutina*—a and Hawaii 30—*Phyllostegia velutina*—b, identified in the legal descriptions in paragraph (k) of this section, constitute critical habitat for *Phyllostegia velutina* on Hawaii. 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-Acacia koa* dominated montane mesic and wet forests containing one or more of the following native plant species: *Athyrium microphyllum* and other native wet forest terrestrial ferns, *Cheirodendron trigynum, Cibotium* spp., *Coprosma* sp., *Dryopteris wallichiana*, *Ilex anomala*, *Myrsine lessertiana*, *Pipturus albidus, Rubus hawaiiensis*, or *Vaccinium calycinum;* and

(ii) Elevations between 966 and 1,881 m (3,168 and 6,170 ft).

FAMILY LAMIACEAE: ***Phyllostegia warshaueri*** (NCN)

Hawaii 3—*Phyllostegia warshaueri*—a and Hawaii 8—*Phyllostegia warshaueri*—b, identified in the legal descriptions in paragraph (k) of this section, constitute critical habitat for *Phyllostegia warshaueri* on Hawaii. 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* and *Cibotium* montane and lowland wet forest, in which *Acacia koa* or *Cheirodendron trigynum* may co-dominate, and containing one or more of the following associated native plant species: *Antidesma platyphyllum, Athyrium sandwicensis, Broussaisia arguta, Clermontia parviflora, Coprosma* sp., *Cyanea pilosa, Cyanea* spp., *Hedyotis* sp., *Machaerina angustifolia, Pipturus albidus, Psychotria hawaiiensis*, or *Sadleria pallida;* and

(ii) Elevations between 681 and 1,411 m (2,234 and 4,629 ft).

Family Gesneriaceae: Cyrtandra nanawaleensis (HAIWALE)

Hawaii 28—*Cyrtandra nanawaleensis*-a, Hawaii 46—*Cyrtandra nanawaleensis*-b, Hawaii 47—*Cyrtandra nanawaleensis*-c, Hawaii 48—*Cyrtandra nanawaleensis*-d, Hawaii 49—*Cyrtandra nanawaleensis*-e, and Hawaii 50—*Cyrtandra nanawaleensis*-f, identified in the legal descriptions in paragraph (k) of this section, constitute critical habitat for *Cyrtandra nanawaleensis* on Hawaii Island.

(i) In units Hawaii 28—*Cyrtandra nanawaleensis*-a, Hawaii 46—*Cyrtandra nanawaleensis*-b, Hawaii 47—*Cyrtandra nanawaleensis*-c, and Hawaii 48—*Cyrtandra nanawaleensis*-d, the physical and biological features of critical habitat in wet forest ecosystem are:

(A) Elevation: Less than 7,218 ft (2,200 m).

(B) Annual precipitation: Greater than 98 in (250 cm).

(C) Substrate: Very weathered soils to rocky substrate, basaltic lava, undeveloped soils, developed soils.

(D) Canopy contains one or more of the following native plant genera: *Acacia*, *Antidesma*, *Cheirodendron*, *Ilex*, *Melicope*, *Metrosideros*, *Myrsine*, *Pittosporum*, *Psychotria*.

(E) Subcanopy contains one or more of the following native plant genera: *Cibotium*, *Clermontia*, *Coprosma*, *Cyanea*, *Freycinetia*, *Hydrangea*, *Vaccinium*.

(F) Understory contains one or more of the following native plant genera: *Adenophorus*, *Cibotium*, *Cyrtandra*, *Dicranopteris*, *Huperzia*, *Peperomia*, *Stenogyne*.

(ii) In units Hawaii 49—*Cyrtandra nanawaleensis*-e and Hawaii 50—*Cyrtandra nanawaleensis*-f, the physical and biological features of critical habitat in wet forest ecosystem are those provided above in paragraphs (i)(A) through (F) of this entry, and in the mesic forest ecosystem and mesic grassland and shrubland ecosystem are:

(A) Elevation: Less than 6,562 ft (2,000 m) in mesic forest ecosystem, and 98 to 7,546ft (30 to 2,300 m) in mesic grassland and shrubland ecosystem.

(B) Annual precipitation: 39 to 150 in (100 to 380 cm) in mesic forest ecosystem, and 39 to 98 in (100 to 250 cm) in mesic grassland and shrubland ecosystem.

(C) Substrate: Rocky, shallow, organic muck soils; rocky talus soils; shallow soils over weathered rock; deep soils over soft weathered rock; and gravelly alluvium in mesic forest ecosystem; and shallow soils that frequently dry with rocky outcrops in mesic grassland and shrubland ecosystem.

(D) Canopy contains one or more of the following native plant genera: *Acacia*, *Antidesma*, *Charpentiera*, *Chrysodracon*, *Metrosideros*, *Myrsine*, *Nestegis*, *Pisonia*, *Santalum* in mesic forest ecosystem; and *Coprosma*, *Metrosideros*, *Wilkesia* in mesic grassland and shrubland ecosystem.

(E) Subcanopy contains one or more of the following native plant genera: *Coprosma*, *Freycinetia*, *Leptecophylla*, *Myoporum*, *Pipturus*, *Rubus*, *Sadleria*, *Sophora* in mesic forest ecosystem; and *Dodonaea*, *Dubautia*, *Leptecophylla*, *Osteomeles*, *Sadleria*, *Vaccinium* in mesic grassland and shrubland ecosystem.

(F) Understory contains one or more of the following native plant genera: *Ctenitis*, *Doodia*, *Dryopteris*, *Pelea*, *Sadleria* in mesic forest ecosystem; and *Bidens*, *Carex*, *Deschampsia*, *Dicranopteris*, *Dryopteris*, *Eragrostis*, *Euphorbia*, *Lipochaeta* in mesic grassland and shrubland ecosystem.

Family Gesneriaceae: Cyrtandra wagneri (HAIWALE)

Hawaii 3—*Cyrtandra wagneri*-a and Hawaii 52—*Cyrtandra wagneri*-b, identified in the legal descriptions in paragraph (k) of this section, constitute critical habitat for *Cyrtandra wagneri* on Hawaii Island. In units Hawaii 3—*Cyrtandra wagneri*-a and Hawaii 52—*Cyrtandra wagneri*-b, the physical and biological features of critical habitat in wet forest ecosystem are:

(i) Elevation: Less than 7,218 ft (2,200 m).

(ii) Annual precipitation: Greater than 98 in (250 cm).

(iii) Substrate: Very weathered soils to rocky substrate, basaltic lava, undeveloped soils, developed soils.

(iv) Canopy contains one or more of the following native plant genera: *Acacia*, *Antidesma*, *Cheirodendron*, *Ilex*, *Melicope*, *Metrosideros*, *Myrsine*, *Pittosporum*, *Psychotria*.

(v) Subcanopy contains one or more of the following native plant genera: *Cibotium*, *Clermontia*, *Coprosma*, *Cyanea*, *Freycinetia*, *Hydrangea*, *Vaccinium*.

(vi) Understory contains one or more of the following native plant genera: *Adenophorus*, *Cibotium*, *Cyrtandra*, *Dicranopteris*, *Huperzia*, *Peperomia*, *Stenogyne*.

Family Lamiaceae: Phyllostegia floribunda (no common name)

Hawaii 3—*Phyllostegia floribunda*-a, Hawaii 8—*Phyllostegia floribunda*-b, Hawaii 9—*Phyllostegia floribunda*-c, Hawaii 15—*Phyllostegia floribunda*-d-Section 4, Hawaii 15—*Phyllostegia floribunda*-e-Section 5, Hawaii 16—*Phyllostegia floribunda*-f, Hawaii 23—*Phyllostegia floribunda*-g, Hawaii 28—*Phyllostegia floribunda*-h, Hawaii 29—*Phyllostegia floribunda*-i, Hawaii 30—*Phyllostegia floribunda*-j, Hawaii 37—*Phyllostegia floribunda*-k, Hawaii 38—*Phyllostegia floribunda*-l, Hawaii 39—*Phyllostegia floribunda*-m, Hawaii 40—*Phyllostegia floribunda*-n, Hawaii 41—*Phyllostegia floribunda*-o, Hawaii 42—*Phyllostegia floribunda*-p, Hawaii 45—*Phyllostegia floribunda*-q, Hawaii 46—*Phyllostegia floribunda*-r, Hawaii 51—*Phyllostegia floribunda*-s, Hawaii 52—*Phyllostegia floribunda*-t, and Hawaii 54—*Phyllostegia floribunda*-u, identified in the legal descriptions in paragraph (k) of this section, constitute critical habitat for *Phyllostegia floribunda* on Hawaii Island.

(i) In units Hawaii 3—*Phyllostegia floribunda*-a, Hawaii 15—*Phyllostegia floribunda*-d-Section 4, Hawaii 15—*Phyllostegia floribunda*-e-Section 5, Hawaii 16—*Phyllostegia floribunda*-f, Hawaii 29—*Phyllostegia floribunda*-i, Hawaii 30—*Phyllostegia floribunda*-j, Hawaii 37—*Phyllostegia floribunda*-k, Hawaii 38—*Phyllostegia floribunda*-l, Hawaii 39—*Phyllostegia floribunda*-m, Hawaii 40—*Phyllostegia floribunda*-n, Hawaii 41—*Phyllostegia floribunda*-o, Hawaii 51—*Phyllostegia floribunda*-s, and Hawaii 52—*Phyllostegia floribunda*-t, the physical and biological features of critical habitat in wet forest ecosystem are:

(A) Elevation: Less than 7,218 ft (2,200 m).

(B) Annual precipitation: Greater than 98 in (250 cm).

(C) Substrate: Very weathered soils to rocky substrate, basaltic lava, undeveloped soils, developed soils.

(D) Canopy contains one or more of the following native plant genera: *Acacia*, *Antidesma*, *Cheirodendron*, *Ilex*, *Melicope*, *Metrosideros*, *Myrsine*, *Pittosporum*, *Psychotria*.

(E) Subcanopy contains one or more of the following native plant genera: *Cibotium*, *Clermontia*, *Coprosma*, *Cyanea*, *Freycinetia*, *Hydrangea*, *Vaccinium*.

(F) Understory contains one or more of the following native plant genera: *Adenophorus*, *Cibotium*, *Cyrtandra*, *Dicranopteris*, *Huperzia*, *Peperomia*, *Stenogyne*.

(ii) In units Hawaii 8—*Phyllostegia floribunda*-b, Hawaii 9—*Phyllostegia floribunda*-c, Hawaii 23—*Phyllostegia floribunda*-g, Hawaii 28—*Phyllostegia floribunda*-h, Hawaii 45—*Phyllostegia floribunda*-q, Hawaii 46—*Phyllostegia floribunda*-r, and Hawaii 54—*Phyllostegia floribunda*-u, the physical and biological features of critical habitat in wet forest ecosystem are those provided above in paragraphs (i)(A) through (F) of this entry, and in wet grassland and shrubland ecosystem are:

(A) Elevation: 656 to 2,953 ft (200 to 900 m).

(B) Annual precipitation: 98 to 197 in (250 to 500 cm).

(C) Substrate: Older, weathered soils to younger, rocky substrates.

(D) Canopy contains one or more of the following native plant genera: *Ilex*, *Kadua*, *Melicope*, *Metrosideros*, *Myrsine*.

(E) Subcanopy contains one or more of the following native plant genera: *Cibotium*, *Clermontia*, *Dubautia*, *Freycinetia*, *Hydrangea*, *Lobelia*, *Pipturus*, *Touchardia*, *Urera*, *Vaccinium*.

(F) Understory contains one or more of the following native plant genera: *Carex*, *Cladium*, *Deschampsia*, *Dicranopteris*, *Eragrostis*, *Peperomia*, *Phyllostegia*, *Scaevola*.

(iii) In unit Hawaii 42—*Phyllostegia floribunda*-p, the physical and biological features of critical habitat in wet forest ecosystem are those provided above in paragraphs (i)(A) through (F) of this entry, and in mesic forest ecosystem are:

(A) Elevation of less than 6,562 ft (2,000 m).

(B) Annual precipitation of 39 to 150 in (100 to 380 cm).

(C) Substrate of rocky, shallow, organic muck soils; rocky talus soils; shallow soils over weathered rock; deep soils over soft weathered rock; or gravelly alluvium.

(D) Canopy contains one or more of the following native plant genera: *Acacia*, *Antidesma*, *Charpentiera*, *Chrysodracon*, *Metrosideros*, *Myrsine*, *Nestegis*, *Pisonia*, *Santalum*.

(E) Subcanopy contains one or more of the following native plant genera: *Coprosma*, *Freycinetia*, *Leptecophylla*, *Myoporum*, *Pipturus*, *Rubus*, *Sadleria*, *Sophora*.

(F) Understory contains one or more of the following native plant genera: *Ctenitis*, *Doodia*, *Dryopteris*, *Pelea*, *Sadleria*.

Family Lamiaceae: Stenogyne cranwelliae (no common name)

Hawaii 3—*Stenogyne cranwelliae*-a, Hawaii 8—*Stenogyne cranwelliae*-b, Hawaii 9—*Stenogyne cranwelliae*-c, Hawaii 15—*Stenogyne cranwelliae*-d-Section 4, Hawaii 15—*Stenogyne cranwelliae*-e-Section 5, Hawaii 16—*Stenogyne cranwelliae*-f, Hawaii 24—*Stenogyne cranwelliae*-g-Section 8, Hawaii 24—*Stenogyne cranwelliae*-h-Section 9, Hawaii 29—*Stenogyne cranwelliae*-i, Hawaii 30—*Stenogyne cranwelliae*-j, Hawaii 37—*Stenogyne cranwelliae*-k, Hawaii 38—*Stenogyne cranwelliae*-l, Hawaii 39—*Stenogyne cranwelliae*-m, Hawaii 40—*Stenogyne cranwelliae*-n, Hawaii 41—*Stenogyne cranwelliae*-o, Hawaii 42—*Stenogyne cranwelliae*-p, Hawaii 43—*Stenogyne cranwelliae*-q, Hawaii 44—*Stenogyne cranwelliae*-r, Hawaii 51—*Stenogyne cranwelliae*-s, Hawaii 52—*Stenogyne cranwelliae*-t, and Hawaii 54—*Stenogyne cranwelliae*-u, identified in the legal descriptions in paragraph (k) of this section, constitute critical habitat for *Stenogyne cranwelliae* on Hawaii Island. In units Hawaii 3—*Stenogyne cranwelliae*-a, Hawaii 8—*Stenogyne cranwelliae*-b, Hawaii 9—*Stenogyne cranwelliae*-c, Hawaii 15—*Stenogyne cranwelliae*-d-Section 4, Hawaii 15—*Stenogyne cranwelliae*-e-Section 5, Hawaii 16—*Stenogyne cranwelliae*-f, Hawaii 24—*Stenogyne cranwelliae*-g-Section 8, Hawaii 24—*Stenogyne cranwelliae*-h-Section 9, Hawaii 29—*Stenogyne*

cranwelliae-i, Hawaii 30—*Stenogyne cranwelliae*-j, Hawaii 37—*Stenogyne cranwelliae*-k, Hawaii 38—*Stenogyne cranwelliae*-l, Hawaii 39—*Stenogyne cranwelliae*-m, Hawaii 40—*Stenogyne cranwelliae*-n, Hawaii 41—*Stenogyne cranwelliae*-o, Hawaii 42—*Stenogyne cranwelliae*-p, Hawaii 43—*Stenogyne cranwelliae*-q, Hawaii 44—*Stenogyne cranwelliae*-r, Hawaii 51—*Stenogyne cranwelliae*-s, Hawaii 52—*Stenogyne cranwelliae*-t, and Hawaii 54—*Stenogyne cranwelliae*-u, the physical and biological features of critical habitat in wet forest ecosystem are:

(i) Elevation: Less than 7,218 ft (2,200 m).

(ii) Annual precipitation: Greater than 98 in (250 cm).

(iii) Substrate: Very weathered soils to rocky substrate, basaltic lava, undeveloped soils, developed soils.

(iv) Canopy contains one or more of the following native plant genera: *Acacia*, *Antidesma*, *Cheirodendron*, *Ilex*, *Melicope*, *Metrosideros*, *Myrsine*, *Pittosporum*, *Psychotria*.

(v) Subcanopy contains one or more of the following native plant genera: *Cibotium*, *Clermontia*, *Coprosma*, *Cyanea*, *Freycinetia*, *Hydrangea*, *Vaccinium*.

(vi) Understory contains one or more of the following native plant genera: *Adenophorus*, *Cibotium*, *Cyrtandra*, *Dicranopteris*, *Huperzia*, *Peperomia*, *Stenogyne*.

FAMILY LILIACEAE: DRACAENA KONAENSIS (HALA PEPE)

Hawaii 7—*Dracaena konaensis*—a, Hawaii 10—*Dracaena konaensis*—b, Hawaii 18—*Dracaena konaensis*—c, and Hawaii 23—*Dracaena konaensis*—d, identified in the legal descriptions in paragraph (k) of this section, constitute critical habitat for *Dracaena konaensis* on Hawaii. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Open aa lava in diverse lowland dry forests and *Metrosideros-Diospyros* lowland dry forest, and containing one or more of the following associated native plant species: *Bidens micrantha* ssp. *ctenophylla*, *Bobea timonioides*, *Caesalpinia kavaiensis*, *Cocculus trilobus*, *Colubrina oppositifolia*, *Diospyros sandwicensis*, *Dodonaea viscosa*, *Erythrina sandwicensis*, *Kokia drynarioides*, *Metrosideros polymorpha*, *Myoporum sandwicense*, *Neraudia ovata*, *Nestegis sandwicensis*, *Nothocestrum breviflorum*, *Nototrichium sandwicense*, *Osteomeles anthyllidifolia*, *Psydrax odorata*, *Reynoldsia sandwicensis*, *Santalum paniculatum*, *Sida fallax*, or *Sophora chrysophylla;* and

(ii) Elevations between 86 and 892 m (281 and 2,925 ft).

FAMILY MALVACEAE: ***Hibiscadelphus giffardianus*** (HAU KUAHIWI)

Hawaii 26—*Hibiscadelphus giffardianus*—a, identified in the legal description in paragraph (k) of this section, constitutes critical habitat for *Hibiscadelphus giffardianus* on Hawaii. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Mixed montane mesic forest containing one or more of the following native plant species: *Acacia koa*, *Coprosma rhynchocarpa*, *Dodonaea viscosa*, *Melicope* spp., *Metrosideros polymorpha*, *Myoporum sandwicense*, *Nestegis sandwicensis*, *Pipturus albidus*, *Psychotria* sp., or *Sapindus saponaria*; and

(ii) Elevations between 1,193 and 1,274 m (3,914 and 4,181 ft).

FAMILY MALVACEAE: ***Hibiscadelphus hualalaiensis*** (HAU KUAHIWI)

Hawaii 10—*Hibiscadelphus hualalaiensis*—a, identified in the legal description in paragraph (k) of this section, constitutes critical habitat for *Hibiscadelphus hualalaiensis* on Hawaii. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Dry-mesic to dry *Metrosideros* forest on rocky substrate in deep soils and containing one or more of the following native plant species: *Acacia koa*, *Coprosma rhynchocarpa*, *Dodonaea viscosa*, *Melicope* spp., *Metrosideros polymorpha*, *Myoporum sandwicense*, *Nestegis sandwicensis*, *Pipturus albidus*, *Psychotria* sp., or *Sapindus saponaria*; and

(ii) Between elevations 512 and 1,223 m (1,679 and 4,012 ft).

FAMILY MALVACEAE: ***Hibiscus brackenridgei*** (MAO HAU HELE)

Hawaii 10—*Hibiscus brackenridgei*—a, identified in the legal description in paragraph (k) of this section, constitutes critical habitat for *Hibiscus brackenridgei* on Hawaii. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) *Acacia koa* lowland mesic forest containing one or more of the following native plants species: *Reynoldsia sandwicensis* or *Sida fallax;* and

(ii) Elevations between 649 and 847 (2,130 and 2,779 ft).

FAMILY PLANTAGINACEAE: ***Plantago hawaiensis*** (LAUKAHI KUAHIWI)

Hawaii 24—*Plantago hawaiensis*—a, Hawaii 25—*Plantago hawaiensis*—b, and Hawaii 30—*Plantago hawaiensis*—c, identified in the legal descriptions in paragraph (k) of this section, constitute critical habitat for *Plantago hawaiensis* on Hawaii. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Montane wet sedge land (often in damp cracks of pahoehoe lava) with mixed sedges and grasses, montane mesic forest, dry subalpine woodland, or *Metrosideros polymorpha* and native shrub, and containing one or more of the following associated native plant species: *Acacia koa*, *Coprosma ernodeoides*, *Coprosma montana*, *Dodonaea viscosa*, *Leptecophylla tameiameiae*, *Metrosideros polymorpha*, or *Vaccinium reticulatum*; and

(ii) Elevations between 1,584 and 2,513 m (5,198 and 8,243 ft).

FAMILY POACEAE: ***Ischaemum byrone*** (HILO ISCHAEMUM)

Hawaii 21—*Ischaemum byrone*—a and Hawaii 22—*Ischaemum byrone*—b, identified in the legal descriptions in paragraph (k) of this section, constitute critical habitat for *Ischaemum byrone* on Hawaii. 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 wet to dry shrubland, near the ocean, rocks or pahoehoe lava in cracks and holes, and containing one or more of the following associated native plant species: *Fimbristylis cymosa*, or *Scaevola taccada*; and

(ii) Elevations between sea level and 28 m (0 and 91 ft).

FAMILY PORTULACACEAE: ***Portulaca sclerocarpa*** (POE)

Hawaii 27—*Portulaca sclerocarpa*—a, identified in the legal description in paragraph (k) of this section, constitutes critical habitat for *Portulaca sclerocarpa* on Hawaii. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Weathered Mauna Kea soils, cinder cones, or geologically young lavas, in montane dry shrubland, often on bare cinder, near steam vents, or in open *Metrosideros polymorpha* dominated woodlands, and containing one or more of the following associated native plant species: *Dodonaea viscosa*, *Melanthera venosa*, or *Sophora chrysophylla*; and

(ii) Elevations between 941 and 1,634 m (3,087 to 5,360 ft).

FAMILY RHAMNACEAE: ***Colubrina oppositifolia*** (KAUILA)

Hawaii 10—*Colubrina oppositifolia*—a and Hawaii 18—*Colubrina oppositifolia*—b, identified in the legal descriptions in paragraph (k) of this section, constitute critical habitat for *Colubrina oppositifolia* on Hawaii. 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 dry and mesic forests dominated by *Diospyros sandwicensis* or *Metrosideros polymorpha* and containing one or more of the following associated native plant species: *Bobea timonioides*, *Erythrina sandwicensis*, *Leptecophylla tameiameiae*, *Nestegis sandwicensis*, *Nothocestrum breviflorum*, *Nototrichium sandwicense*, *Peperomia* sp., *Pleomele hawaiiensis*, *Psydrax odorata*, *Rauvolfia*

sandwicensis, *Reynoldsia sandwicensis*, or *Sophora chrysophylla*; and

(ii) Elevations between 177 and 927 m (580 and 3,042 ft).

FAMILY RHAMNACEAE: ***Gouania vitifolia*** (NCN)

Hawaii 18—*Gouania vitifolia*—a, identified in the legal description in paragraph (k) of this section, constitutes critical habitat for *Gouania vitifolia* on Hawaii. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Dry, rocky ridges and slopes in dry shrubland or dry to mesic *Nestegis-Metrosideros* forests on old substrate kipuka and containing one or more of the following associated native plant species: *Nephrolepis* spp., *Nestegis sandwicensis*, *Pipturus albidus*, *Wikstroemia phillyreifolia*, or *W. sandwicensis*; and

(ii) Elevations between 536 and 1,020 m (1,757 and 3,346 ft).

FAMILY RUBIACEAE: ***Melicope zahlbruckneri*** (ALANI)

Hawaii 24—*Melicope zahlbruckneri*—a and Hawaii 26—*Melicope zahlbruckneri*—b, identified in the legal descriptions in paragraph (k) of this section, constitute critical habitat for *Melicope zahlbruckneri* on Hawaii. 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 montane mesic forest containing one or more of the following associated native plant species: *Coprosma rhynchocarpa*, *Melicope* spp., *Myoporum sandwicense*, *Nestegis sandwicensis*, *Pipturus albidus*, *Pisonia brunoniana*, *Psychotria hawaiiensis*, *Sapindus saponaria*, or *Zanthoxylum dipetalum;* and

(ii) Elevations between 1,060 and 1,336 m (3,476 and 4,383 ft).

FAMILY RUTACEAE: ***Zanthoxylum dipetalum*** VAR. ***tomentosum*** (AE)

Hawaii 10—*Zanthoxylum dipetalum* ssp. *tomentosum*—a, identified in the legal description in paragraph (k) of this section, constitutes critical habitat for *Zanthoxylum dipetalum* var. *tomentosum* on Hawaii. 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* dominated montane mesic forest, often on aa lava, and containing one or more of the following associated native plant species: *Diospyros sandwicensis*, *Myrsine* sp., *Pouteria sandwicensis*, *Psychotria* sp., *Reynoldsia sandwicensis*, *Santalum paniculatum*, or *Sophora chrysophylla;* and

(ii) Elevations between 874 and 1,208 m (2,867 and 3,964 ft).

FAMILY SOLANACEAE: ***Nothocestrum breviflorum*** (AIEA)

Hawaii 5—*Nothocestrum breviflorum*—a, Hawaii 6—*Nothocestrum breviflorum*—b, and Hawaii 10—*Nothocestrum breviflorum*—c, identified in the legal descriptions in paragraph (k) of this section, constitute critical habitat for *Nothocestrum breviflorum* on Hawaii. 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 dry forest, montane dry forest, or montane mesic forest dominated by *Acacia koa*, *Diospyros sandwicensis*, or *Metrosideros polymorpha* on aa lava substrates, and containing one or more of the following associated native plant species: *Bidens micrantha* ssp. *ctenophylla*, *Caesalpinia kavaiensis*, *Colubrina oppositifolia*, *Delissea undulata*, *Dodonaea viscosa*, *Erythrina sandwicensis*, *Hibiscadelphus hualalaiensis*, *Kokia drynarioides*, *Myoporum sandwicense*, *Osteomeles anthyllidifolia*, *Psydrax odorata*, *Reynoldsia sandwicensis*, *Santalum ellipticum*, *Santalum paniculatum*, or *Sophora chrysophylla;* and

(ii) Elevations between 45 and 1,236 m (146 and 4,055 ft).

FAMILY SOLANACEAE: ***Solanum incompletum*** (POPOLO KU MAI)

Hawaii 10—*Solanum incompletum*—a and Hawaii 11—*Solanum incompletum*—b, identified in the legal descriptions in

paragraph (k) of this section, constitute critical habitat for *Solanum incompletum* on Hawaii. 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 to mesic forest, diverse mesic forest, or subalpine forest, and containing one or more of the following associated native plant species: *Myoporum sandwicense*, *Myrsine lanaiensis*, or *Sophora chrysophylla;* and

(ii) Elevations between 1,185 and 2,169 m (3,887 and 7,115 ft).

FAMILY URTICACEAE: ***Neraudia ovata*** (NCN)

Hawaii 10—*Neraudia ovata*—a and Hawaii 18—*Neraudia ovata*—d, identified in the legal descriptions in paragraph (k) of this section, constitute critical habitat for *Neraudia ovata* on Hawaii. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Open *Metrosideros polymorpha-Sophora chrysophylla* dominated lowlands, montane dry forests, or *Metrosideros*-shrub woodland, and containing one or more of the following associated native plant species: *Bidens micrantha* ssp. *ctenophylla*, *Capparis sandwichiana*, *Cocculus orbiculatus*, *Fimbristylis hawaiiensis*, *Myoporum sandwicense*, *Myrsine lanaiensis*, *Myrsine lessertiana*, *Nothocestrum breviflorum*, *Pleomele hawaiiensis*, *or Reynoldsia sandwicensis;* and

(ii) Elevations between 28 and 1,526 m (93 to 5,005 ft).

FAMILY VIOLACEAE: ***Isodendrion hosakae*** (AUPAKA)

Hawaii 4—*Isodendrion hosakae*—a, Hawaii 4—*Isodendrion hosakae*—b, Hawaii 4—*Isodendrion hosakae*—c, Hawaii 4—*Isodendrion hosakae*—d, Hawaii 4—*Isodendrion hosakae*—e, and Hawaii 4—*Isodendrion hosakae*—f, identified in the legal descriptions in paragraph (k) of this section, constitute critical habitat for *Isodendrion hosakae* on Hawaii. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Cinder cones with montane dry shrubland and containing one or more of the following associated native plant species: *Bidens menziesii*, *Dodonaea viscosa*, *Dubautia linearis*, *Leptecophylla tameiameiae*, *Melanthera venosa*, *Osteomeles anthyllidifolia*, *Santalum ellipticum*, *Sophora chrysophylla*, or *Wikstroemia pulcherrima;* and

(ii) Elevations between 717 and 1,242 m (2,352 and 4,074 ft).

FAMILY VIOLACEAE: *Isodendrion pyrifolium* (WAHINE NOHO KULA)

Hawaii 10—*Isodendrion pyrifolium*—a, Hawaii 31—*Isodendrion pyrifolium*—b, Hawaii 33—-*Isodendrion pyrifolium*—d, Hawaii 34—*Isodendrion pyrifolium*—e, and Hawaii 36—*Isodendrion pyrifolium*—g, identified in the legal descriptions in paragraph (k) of this section, constitute critical habitat for *Isodendrion pyrfolium* on Hawaii Island. In units Hawaii 10—*Isodendrion pyrifolium*—a, Hawaii 31—*Isodendrion pyrifolium*—b, Hawaii 33—-*Isodendrion pyrifolium*—d, Hawaii 34—*Isodendrion pyrifolium*—e, and Hawaii 36—*Isodendrion pyrifolium*—g, 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*, *Erythrina*, *Metrosideros*, *Myoporum*, *Pleomele*, *Santalum*, *Sapindus*.

(v) Subcanopy: *Chamaesyce*, *Dodonaea*, *Osteomeles*, *Psydrax*, *Scaevola*, *Wikstroemia*.

(vi) Understory: *Alyxia*, *Artemisia*, *Bidens*, *Capparis*, *Chenopodium*, *Nephrolepis*, *Peperomia*, *Sicyos*.

Family Pittosporaceae: Pittosporum hawaiiense (HOAWA, HAAWA)

Hawaii 3—*Pittosporum hawaiiense*-a, Hawaii 8—*Pittosporum hawaiiense*-b, Hawaii 9—*Pittosporum hawaiiense*-c, Hawaii 15—*Pittosporum hawaiiense*-d-Section 4, Hawaii 15—*Pittosporum hawaiiense*-e-Section 5, Hawaii 16—*Pittosporum hawaiiense*-f, Hawaii 23—*Pittosporum hawaiiense*-g, Hawaii 24—

Pittosporum hawaiiense-h-Section 8, Hawaii 24—*Pittosporum hawaiiense*-i-Section 9, Hawaii 29—*Pittosporum hawaiiense*-j, Hawaii 30—*Pittosporum hawaiiense*-k, Hawaii 37—*Pittosporum hawaiiense*-l, Hawaii 38—*Pittosporum hawaiiense*-m, Hawaii 39—*Pittosporum hawaiiense*-n, Hawaii 40—*Pittosporum hawaiiense*-o, Hawaii 41—*Pittosporum hawaiiense*-p, Hawaii 42—*Pittosporum hawaiiense*-q, Hawaii 43—*Pittosporum hawaiiense*-r, Hawaii 44—*Pittosporum hawaiiense*-s, Hawaii 45—*Pittosporum hawaiiense*-t, Hawaii 51—*Pittosporum hawaiiense*-u, Hawaii 52—*Pittosporum hawaiiense*-v, and Hawaii 54—*Pittosporum hawaiiense*-w, identified in the legal descriptions in paragraph (k) of this section, constitute critical habitat for *Pittosporum hawaiiense* on Hawaii Island.

(i) In units Hawaii 3—*Pittosporum hawaiiense*-a, Hawaii 8—*Pittosporum hawaiiense*-b, Hawaii 9—*Pittosporum hawaiiense*-c, Hawaii 15—*Pittosporum hawaiiense*-d-Section 4, Hawaii 15—*Pittosporum hawaiiense*-e-Section 5, Hawaii 16—*Pittosporum hawaiiense*-f, Hawaii 23—*Pittosporum hawaiiense*-g, Hawaii 29—*Pittosporum hawaiiense*-j, Hawaii 30—*Pittosporum hawaiiense*-k, Hawaii 37—*Pittosporum hawaiiense*-l, Hawaii 38—*Pittosporum hawaiiense*-m, Hawaii 39—*Pittosporum hawaiiense*-n, Hawaii 40—*Pittosporum hawaiiense*-o, Hawaii 41—*Pittosporum hawaiiense*-p, Hawaii 45—*Pittosporum hawaiiense*-t, Hawaii 51—*Pittosporum hawaiiense*-u, Hawaii 52—*Pittosporum hawaiiense*-v, and Hawaii 54—*Pittosporum hawaiiense*-w, the physical and biological features of critical habitat in wet forest ecosystem are:

(A) Elevation: Less than 7,218 ft (2,200 m).

(B) Annual precipitation: Greater than 98 in (250 cm).

(C) Substrate: Very weathered soils to rocky substrate, basaltic lava, undeveloped soils, developed soils.

(D) Canopy contains one or more of the following native plant genera: *Acacia, Antidesma, Cheirodendron, Ilex, Melicope, Metrosideros, Myrsine, Pittosporum, Psychotria.*

(E) Subcanopy contains one or more of the following native plant genera: *Cibotium, Clermontia, Coprosma, Cyanea, Freycinetia, Hydrangea, Vaccinium.*

(F) Understory contains one or more of the following native plant genera: *Adenophorus, Cibotium, Cyrtandra, Dicranopteris, Huperzia, Peperomia, Stenogyne.*

(ii) In units Hawaii 24—*Pittosporum hawaiiense*-h-Section 8, Hawaii 24—*Pittosporum hawaiiense*-i-Section 9, Hawaii 42—*Pittosporum hawaiiense*-q, Hawaii 43—*Pittosporum hawaiiense*-r, and Hawaii 44—*Pittosporum hawaiiense*-s, the physical and biological features of critical habitat in wet forest ecosystem are those provided above in paragraphs (i)(A) through (F) of this entry, and in mesic forest ecosystem are:

(A) Elevation: Less than 6,562 ft (2,000 m).

(B) Annual precipitation: 39 to 150 in (100 to 380 cm).

(C) Substrate: Rocky, shallow, organic muck soils; rocky talus soils; shallow soils over weathered rock; deep soils over soft weathered rock; gravelly alluvium.

(D) Canopy contains one or more of the following native plant genera: *Acacia, Antidesma, Charpentiera, Chrysodracon, Metrosideros, Myrsine, Nestegis, Pisonia, Santalum.*

(E) Subcanopy contains one or more of the following native plant genera: *Coprosma, Freycinetia, Leptecophylla, Myoporum, Pipturus, Rubus, Sadleria, Sophora.*

(F) Understory contains one or more of the following native plant genera: *Ctenitis, Doodia, Dryopteris, Pelea, Sadleria.*

Family Rutaceae: Melicope remyi (no common name)

Hawaii 3—*Melicope remyi*-a, Hawaii 8—*Melicope remyi*-b, Hawaii 9—*Melicope remyi*-c, Hawaii 52—*Melicope remyi*-d, and Hawaii 54—*Melicope remyi*-e, identified in the legal descriptions in paragraph (k) of this section, constitute critical habitat for *Melicope remyi* on Hawaii Island. In units Hawaii 3—*Melicope remyi*-a, Hawaii 8—*Melicope remyi*-b, Hawaii 9—*Melicope remyi*-c, Hawaii 52—*Melicope remyi*-d, and Hawaii 54—*Melicope remyi*-e, the physical and biological features of critical habitat in wet forest ecosystem are:

(i) Elevation: Less than 7,218 ft (2,200 m).

(ii) Annual precipitation: Greater than 98 in (250 cm).

(iii) Substrate: Very weathered soils to rocky substrate, basaltic lava, undeveloped soils, developed soils.

(iv) Canopy contains one or more of the following native plant genera: *Acacia*, *Antidesma*, *Cheirodendron*, *Ilex*, *Melicope*, *Metrosideros*, *Myrsine*, *Pittosporum*, *Psychotria*.

(v) Subcanopy contains one or more of the following native plant genera: *Cibotium*, *Clermontia*, *Coprosma*, *Cyanea*, *Freycinetia*, *Hydrangea*, *Vaccinium*.

(vi) Understory contains one or more of the following native plant genera: *Adenophorus*, *Cibotium*, *Cyrtandra*, *Dicranopteris*, *Huperzia*, *Peperomia*, *Stenogyne*.

(2) *Fern and allies*.

FAMILY ASPLENIACEAE: ***Asplenium peruvianum*** VAR. ***insulare*** (NCN)

Hawaii 24—*Asplenium peruvianum* var. *insulare*—a, identified in the legal description in paragraph (k) of this section, constitutes critical habitat for *Asplenium peruvianum* var. *insulare* on Hawaii. 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* dry montane forest; *Dodonaea viscosa* dry montane shrubland; *Myoporum sandwicense-Sophora chrysophylla* dry montane forest; *Metrosideros polymorpha-Acacia koa* forest; or subalpine dry forest and shrubland with large, moist lava tubes (3.05 to 4.6 m (10 to 15 ft) in diameter), pits, deep cracks, and lava tree molds that have at least a moderate soil or ash accumulation or that are at the interface between younger aa lava flows and much older pahoehoe lava or ash deposits with a fairly consistent microhabitat (areas that are moist and dark); and containing one or more of the following associated native plant species: *Leptecophylla tameiameiae*, *Phyllostegia ambigua*, *Vaccinium reticulatum*, mosses, or liverworts; and

(ii) Elevations between 1,313 and 2,194 m (4,306 and 7,198 ft).

FAMILY ASPLENIACEAE: *Asplenium dielerectum* (NCN)

Hawaii 17—*Asplenium dielerectum—a* and Hawaii 18—*Asplenium dielerectum—b*, identified in the legal descriptions in paragraph (k) of this section, constitute critical habitat for *Asplenium dielerectum* on Hawaii. 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-Nestegis sandwicensis* lowland mesic forest containing one or more of the following associated native plant species: *Antidesma platyphyllum*, *A. pulvinatum*, *Diospyros sandwicensis*, *Microlepia* sp., *Nephrolepis* spp. *Nestegis sandwicensis*, *Psydrax odorata*, *Wikstroemia phillyreifolia*, or *Wikstroemia sandwicensis;* and

(ii) Elevations between 510 and 981 m (1,672 and 3,217 ft).

FAMILY GRAMMITIDACEAE: *Adenophorus periens* (PALAI LAAU)

Hawaii 28—*Adenophorus periens*—a, identified in the legal description in paragraph (k) of this section, constitutes critical habitat for *Adenophorus periens* on Hawaii. Within this unit, the currently known primary constituent elements of critical habitat include but are not limited to, the habitat components provided by:

(i) Epiphytic on *Metrosideros polymorpha* or *Ilex anomala*, or possibly other native tree trunks, in *Metrosideros polymorpha-Cibotium glaucum* lowland wet forest containing one or more of the following associated native plant species: *Broussasia arguta*, *Cheirodendron trigynum*, *Cyanea* sp., *Cyrtandra* sp., *Dicranopteris linearis*, *Freycinetia arborea*, *Hedyotis terminalis*, *Labordia hirtella*, *Machaerina angustifolia*, *Psychotria hawaiiensis*, or *Psychotria* sp.; and

(ii) Elevations between 675 and 921 m (2,215 and 3,021 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; 77 FR 57767, Sept. 18, 2012; 83 FR 42424, Aug. 21, 2018. Redesignated at 85 FR 82388, Dec. 18, 2020; 88 FR 7147, Feb. 2, 2023; 88 FR 17959, Mar. 12, 2024]

Subpart J—Manatee Protection Areas

SOURCE: 44 FR 60964, Oct. 22, 1979. Redesignated at 85 FR 82388, Dec. 18, 2020.

§ 17.100 Purpose.

This subpart provides a means for establishing manatee protection areas without waters under the jurisdiction of the United States, including coastal waters adjacent to and inland waters within the several States, within which certain waterborne activities will be restricted or prohibited for the purpose of preventing the taking of manatees.

§ 17.101 Scope.

This subpart applies to the West Indian manatee (*Trichechus manatus*), also known as the Florida manatee and as the sea cow. The provisions of this subpart are in addition to, and not in lieu of, other regulations contained in this chapter I which may require a permit or prescribe additional restrictions on the importation, exportation, transportation, or taking of wildlife, and the regulations contained in title 33, CFR, which regulate the use of navigable waters.

§ 17.102 Definitions.

In addition to definitions contained in the Acts, part 10 of this subchapter, and § 17.3 of this part, and unless the context otherwise requires, in this subpart:

Acts means the Endangered Species Act of 1973, as amended (87 Stat. 884, 16 U.S.C. 1531–1543) and the Marine Mammal Protection Act of 1972, as amended (86 Stat. 1027, 16 U.S.C. 1361–1407);

Authorized officer means any commissioned, warrant, or petty officer of the U.S. Coast Guard, or any officer or agent designated by the Director of the U.S. Fish and Wildlife Service, the Secretary of the Interior, the Secretary of Commerce, or the Secretary of the Treasury, or any officer designated by the head of a Federal or State agency which has entered into an agreement with the Secretary of the Interior, Secretary of Commerce, Secretary of the Treasury, or Secretary of Transportation to enforce the Acts, or any Coast Guard personnel accompanying and acting under the direction of a person included above in this definition;

Idle speed is defined as the minimum speed needed to maintain steerage (direction) of the vessel;

Manatee protection area means a manatee refuge or a manatee sanctuary;

Manatee refuge means an area in which the Director has determined that certain waterborne activity would result in the taking of one or more manatees, or that certain waterborne activity must be restricted to prevent the taking of one or more manatees, including but not limited to a taking by harassment;

Manatee sanctuary means an area in which the Director has determined that any waterborne activity would result in a taking of one or more manatees, including but not limited to a taking by harassment;

Planing means riding on or near the water's surface as a result of the hydrodynamic forces on a water vehicle's hull, sponsons, foils, or other surfaces. A water vehicle is considered on plane when it is being operated at or above the speed necessary to keep the vessel planing;

Slow speed is defined as the speed at which a water vehicle proceeds when it is fully off plane and completely settled in the water. Due to the different speeds at which water vehicles of different sizes and configurations may travel while in compliance with this definition, no specific speed is assigned to slow speed. A water vehicle is *not* proceeding at slow speed if it is: on a plane; in the process of coming up on or coming off of plane; or creating an excessive wake. A water vehicle *is* proceeding at slow speed if it is fully off plane and completely settled in the water, not creating an excessive wake;

Slow speed (channel exempt) means that the slow-speed designation does not apply to those waters within the maintained, marked channel;

Slow speed (channel included) means that the slow-speed designation applies both within and outside the designated channel;

Wake means all changes in the vertical height of the water's surface caused by the passage of a water vehicle, including a vessel's bow wave,

stern wave, and propeller wash, or a combination thereof;

Waterborne activity includes, but is not limited to, swimming, diving (including skin and scuba diving), snorkeling, water skiing, surfing, fishing, the use of water vehicles, and dredging and filling operations;

Water vehicle, *watercraft*, and *vessel* include, but are not limited to, boats (whether powered by engine, wind, or other means), ships (whether powered by engine, wind, or other means), barges, surfboards, personal watercraft, water skis, or any other device or mechanism the primary or an incidental purpose of which is locomotion on, or across, or underneath the surface of the water.

[44 FR 60964, Oct. 22, 1979, as amended at 67 FR 693, Jan. 7, 2002]

§ 17.103 Establishment of protection areas.

The Director may, by regulation issued in accordance with 5 U.S.C. 553 and 43 CFR part 14, establish manatee protection areas whenever there is substantial evidence showing such establishment is necessary to prevent the taking of one or more manatees. Any regulation establishing a manatee protection area shall state the following information:

(a) Whether the area is to be a manatee sanctuary or refuge.

(1) If the area is to be a manatee sanctuary, the regulation shall state that all waterborne activities are prohibited.

(2) If the area is to be a manatee refuge, the regulation shall state which, if any, waterborne activities are prohibited, and it shall state the applicable restrictions, if any, on permitted waterborne activities.

(b) A description of the area sufficient enough so that its location and dimensions can be readily ascertained without resort to means other than published maps, natural or man-made physical reference points, and posted signs.

(c) Whether the designation is to remain in effect year-round, and if not, the time of year it is to remain in effect.

§ 17.104 Prohibitions.

Except as provided in § 17.105,

(a) *Manatee sanctuary.* It is unlawful for any person to engage in any waterborne activity within a manatee sanctuary.

(b) *Manatee refuge.* It is unlawful for any person within a particular manatee refuge to engage in any waterborne activity which has been specifically prohibited within that refuge, or to engage in any waterborne activity in a manner contrary to that permitted by regulation within that area. Any take of manatees under the Acts (see § 18.3 of this chapter for a definition of ''take'' in regard to marine mammals), including take by harassment, is prohibited wherever it may occur.

(c) *State law.* It is unlawful for any person to engage in any waterborne activity prohibited by, or to engage in any waterborne activity in a manner contrary to that permitted by, any State law or regulation the primary purpose of which is the protection of manatees: *Provided:* that such State law or regulation has been issued as part of a program which is determined to be in accordance with the Endangered Species Act of 1973, pursuant to section 6(c) of that Act (16 U.S.C. 1535(c)) or has been approved as consistent with the Marine Mammal Protection Act of 1972 in accordance with section 109 of that Act (16 U.S.C. 1379) and 50 CFR 18.53.[1]

[44 FR 60964, Oct. 22, 1979, as amended at 77 FR 15631, Mar. 16, 2012]

§ 17.105 Permits and exceptions.

(a) The Director may issue permits allowing the permittee to engage in any activity otherwise prohibited by this subpart. Such permits shall be issued in accordance with the provisions of § 17.22 of this part. Such permits shall be issued only for scientific purposes or for the enhancement of propagation or survival. All of the provisions of § 17.22 shall apply to the issuance of such permits, including those provisions which incorporate

[1] EDITORIAL NOTE: Section 18.53 was removed at 48 FR 22456, May 18, 1983. See the note at part 18, subpart F.

other sections by reference. Compliance with this paragraph does not by itself constitute compliance with any applicable requirements of part 18.

(b) Any authorized officer may engage in any activity otherwise prohibited by this subpart if:

(1) The officer is acting in the performance of his or her official duties; and

(2) The activity is being conducted to directly protect any manatees, to enhance the propagation or survival of manatees, or is reasonably required to enforce the other provisions of this subpart.

(c) Any person may engage in any activity otherwise prohibited by this subpart if such activity is reasonably necessary to prevent the loss of life or property due to weather conditions or other reasonably unforeseen circumstances, or to render necessary assistance to persons or property.

(d) Any waterborne activity which would otherwise be prohibited by this subpart may be engaged in if it is conducted by or under a contract with a Federal agency and if the Secretary of Defense, in accordance with section 7(j) of the Endangered Species Act of 1973 (16 U.S.C. 1536(j)) makes a finding that such activity is necessary for reasons of national security. Such a finding must be made prior to the beginning of the activity or the designation of the protection area, whichever occurs later; except that in the case of an emergency establishment of a protection area under §17.106, the finding must be made within 10 days after the beginning of the activity or the designation of the protection area, whichever occurs later.

§17.106 Emergency establishment of protection areas.

(a) The Director may establish a manatee protection area under the provisions of paragraphs (b) and (c) of this section at any time he determines there is substantial evidence that there is imminent danger of a taking of one or more manatees, and that such establishment is necessary to prevent such a taking.

(b) The establishment of a manatee protection area under this section shall become effective immediately upon completion of the following requirements:

(1) Publication of a notice containing the information required by §17.103 of this section in a newspaper of general circulation in each county, if any, in which the protection area lies; and

(2) Posting of the protection area with signs clearly marking its boundaries.

(c) Simultaneously with the publication required by paragraph (b) of this section, the Director shall publish the same notice in the FEDERAL REGISTER. If simultaneous publication is impractical, because of the time involved or the nature of a particular emergency situation, failure to publish notice in the FEDERAL REGISTER simultaneously shall not delay the effective date of the emergency establishment. In such a case, notice shall be published in the FEDERAL REGISTER as soon as possible.

(d) No emergency establishment of a protection area shall be effective for more than 120 days. Termination of an emergency establishment of a protection area shall be accomplished by publishing notice of the termination in the FEDERAL REGISTER and in a newspaper of general circulation in each county, if any, in which the protection area lies.

(e) Within 10 days after establishing a protection area in accordance with this section, the Director shall commence proceedings to establish the area in accordance with §17.103.

§17.107 Facilitating enforcement.

Water vehicles operating in manatee sanctuary or refuge waters are subject to boarding and inspection for the purpose of enforcing the Acts and these regulations.

(a) The operator of a water vehicle shall immediately comply with instructions issued by authorized officers to facilitate boarding and inspection of the water vehicle.

(b) Upon being approached by an authorized officer, the operator of a water vehicle shall be alert for signals conveying enforcement instructions.

(c) A water vehicle signaled for boarding shall:

(1) Guard channel 16, VHF-FM, if equipped with a VHF-FM radio;

(2) Stop immediately and lay to or maneuver in such a manner as to facilitate boarding by the authorized officer and his or her party;

(3) When necessary to facilitate the boarding, provide a safe ladder, manrope, safety line and illumination of the ladder; and

(4) Take such other actions as may be necessary to ensure the safety of the authorized officer and his or her party and to facilitate the boarding and inspection.

(d) It is unlawful for any person to assault, resist, oppose, impede, intimidate, or interfere with any authorized officer or member of his or her party.

§ 17.108 List of designated manatee protection areas.

(a) *Manatee sanctuaries.* The following areas are designated as manatee sanctuaries. All waterborne activities are prohibited in these areas during the period November 15–March 31 of each year. The areas which will be posted are described as follows:

(1) That part of Kings Bay, Crystal River, Citrus County, within T. 18 S., R. 17 E., Tallahassee Meridian; located in SW¼ fractional section 28, more particularly described as follows:

Beginning at Corner 1 (N–1,653,459/E–308,915) Florida Coordinate System, West Zone, a point on the shoreline of Kings Bay near the southwest corner of Lot 9 as accepted on a plat by the Department of the Interior, General Land Office, dated January 10, 1928; thence easterly, along said shoreline, approximately 1240 feet to Corner 2 (N–1,653,762/E/309,641) a point; thence S. 56°58′11″ W., across open water, 776.49 feet to Corner 3 (N–1,653,339/E–308,990) a point; thence N. 32°03′07″ W., across open water, 142.26 feet to the point of beginning, containing 3.41 acres, more or less, to be known as the Banana Island Sanctuary.

(2) That part of Kings Bay, Crystal River, Citrus County, Florida, within T. 18 S., R. 17 E., Tallahassee Meridian; located in SW¼ fractional section 28, more particularly described as follows:

Beginning at Corner 1 (N–1,652,684/E–309,396) Florida Coordinate System, West Zone, a point on the shoreline of Kings Bay, said point being the northwest corner of Lot 31 Sunset Shores Addition to Woodward Park (Plat Book 2, page 140 Citrus County Property Appraiser's Office); thence N. 35°05′33″ W., across open water, 439.10 feet to Corner 2 (N–1,653,043/E–309,144) a point; thence N. 67°23′28″ E., across open water, 873.45 feet to Corner 3, a point on the shoreline of Kings Bay said point also being a corner in the northerly boundary line of Lot 21 in said subdivision; thence southwesterly along said shoreline and the northerly boundary of Lots 21–31, including a canal, approximately 920 feet to the point of beginning, containing 5.62 acres, more or less, to be known as the Sunset Shores Sanctuary.

(3) A tract of submerged land, lying in Sections 21 and 28, Township 18 South, Range 17 East in Citrus County, Florida, more particularly described as follows: All of the submerged land lying within the mean high water line of a canal bordering the western, northern, and eastern sides of Paradise Isle Subdivision, as recorded in Plat Book 3, Page 88 of the Public Records of Citrus County, Florida; bounded at the western exit by a line drawn between the southwestern corner of Lot 7 of said Paradise Isle Subdivision and the southeastern corner of Lot 22 of Springs O'Paradise Subdivision, Unit No. 3, as recorded in Plat Book 3, Page 70 of said Public Records; and bounded at the eastern exit by an easterly extension of the south boundary of said Paradise Isle Subdivision; Containing 3.4 acres, more or less, to be known as the Magnolia Springs Manatee Sanctuary.

(4) A tract of submerged land, lying in Sections 28 and 29, Township 18 South, Range 17 East in Citrus County, Florida, more particularly described as follows: For a point of reference, commence at the southwest corner of said Section 28; Then go N 06°01′23″ W for 4466.90 feet to a 10-inch diameter concrete monument marking the Point of Beginning; Then go N 10°05′38″ W for 477.32 feet to a 10-inch diameter concrete monument with an attached buoy; Then go N 37°34′41″ E for 651.07 feet to a 10-inch diameter concrete monument with an attached buoy; Then go S 73°26′46″ E for 634.10 feet to a 10-inch diameter concrete monument with an attached buoy; Then go S 17°50′16″ E for 1691.53 feet to a 10-inch diameter concrete monument with an attached buoy; Then go S 71°48′58″ W for 117.87 feet to a 10-inch diameter concrete monument with an attached buoy; Then continue S 71°48′58″ W for 5 feet more or less to the mean high water line of Buzzard Island; Then follow said mean high water line northerly and westerly to a point lying S 10°05′38″ E of the point of beginning; Then go N 10°05′38″ W for 5 feet more or less to the point of beginning; Containing 18.0 acres, more or less, to be known as the Buzzard Island Manatee Sanctuary.

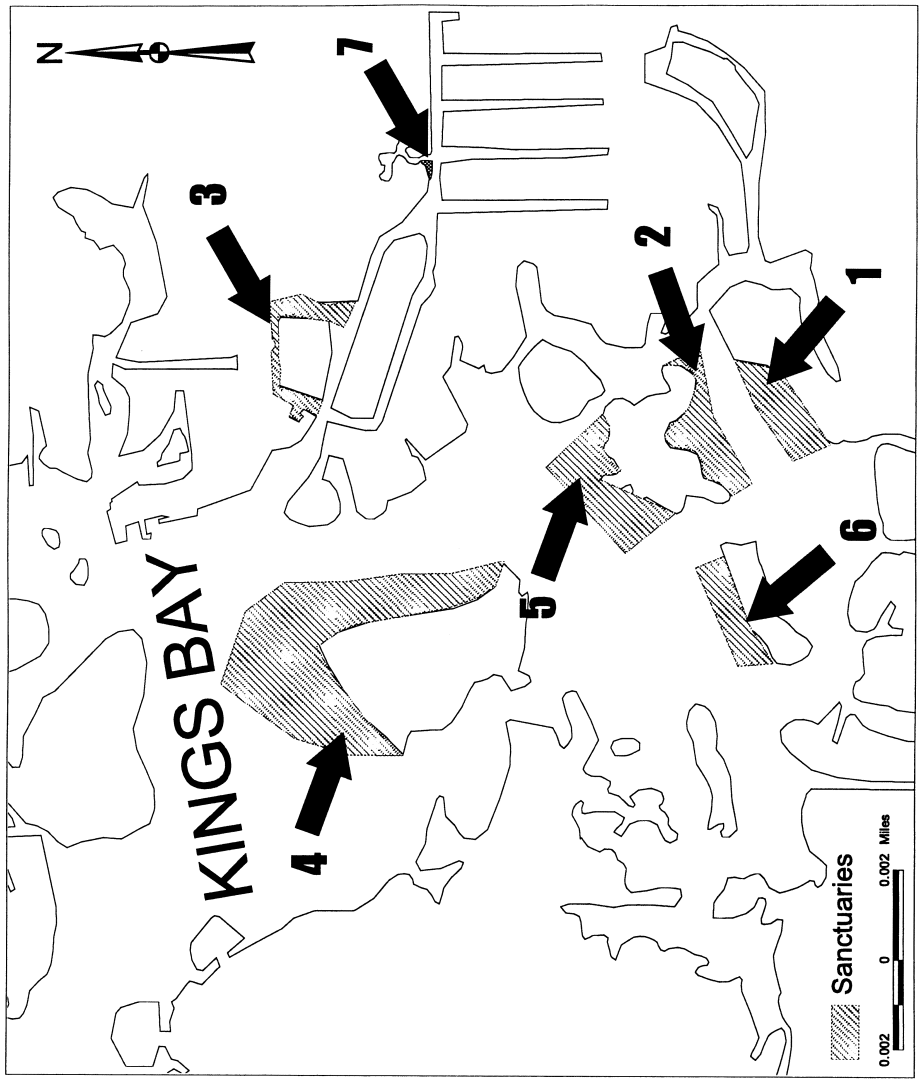
(5) A tract of submerged land, lying in Section 28, Township 18 South, Range 17 East in Citrus County, Florida, more particularly described as follows: For a point of reference, commence at the southwest corner of said Section 28; Then go N 28°55′06″ E for 2546.59 feet to a 4-inch diameter iron pipe marking the Point of Beginning; Then go N 44°23′41″ W for 282.45 feet to a 10-inch diameter concrete monument with an attached buoy; Then go N

33°53′16″ E for 764.07 feet to a 10-inch diameter concrete monument with an attached buoy; Then go S 31°51′55″ E for 333.22 feet to a 4-inch diameter iron pipe; Then continue S 31°51′55″ E for 5 feet more or less to the mean high water line of Banana Island; Then go westerly along said main high water line to a point lying S 44°23′41″ E from the point of beginning; Then go N 44°23′41″ W for 5 feet more or less to the point of beginning; Containing 4.6 acres, more or less, to be known as the Tarpon Springs Manatee Sanctuary.

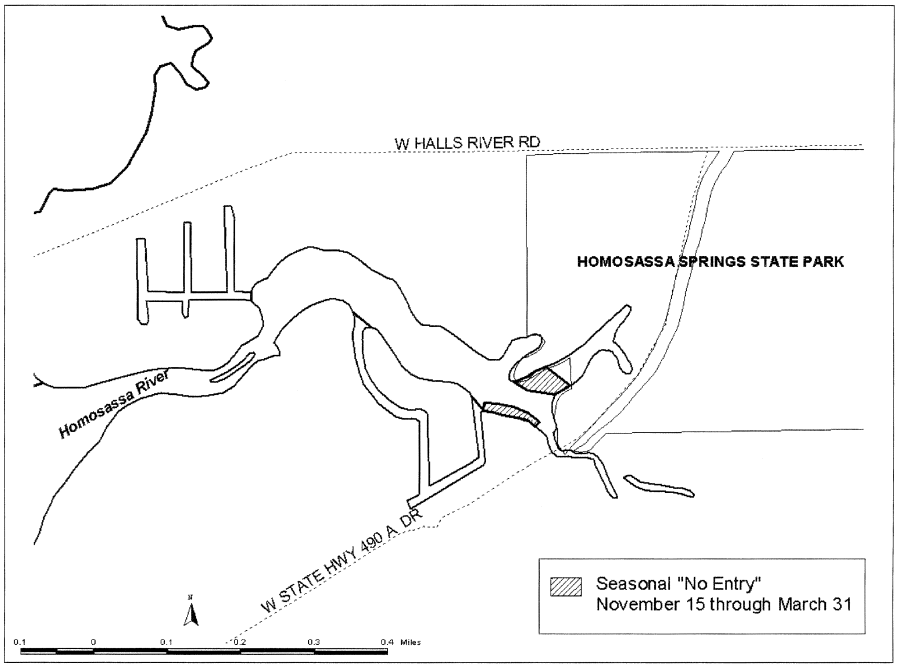
(6) A tract of submerged land, lying in Section 28, Township 18 South, Range 17 East in Citrus County, Florida, more particularly described as follows: For a point of reference, commence at the southwest corner of said Section 28; Then go N 06°43′00″ E for 1477.54 feet to a 10-inch diameter concrete monument marking the Point of Beginning; Then go N 06°24′59″ W for 251.66 feet to a 10-inch diameter concrete monument with an attached buoy; Then go N 65°41′12″ E for 637.83 feet to a 10-inch diameter concrete monument with an attached buoy; Then go S 55°40′52″ E for 272.86 feet to a 10-inch diameter concrete monument; Then continue S 65°15′06″ W for 857.22 feet to the point of beginning; Containing 4.0 acres, more or less, to be known as the Warden Key Manatee Sanctuary.

(7) A tract of submerged land, lying in Section 28, Township 18 South, Range 17 East, Tallahassee Meridian, Citrus County, Florida, more particularly described as follows: For a point of reference, commence at the southwest corner of said Section 28 (N–1651797.56 E–463846.96) Florida Coordinate System, West Zone, NAD 1983, N.G.S. adjustment of 1990 (expressed in U.S. survey feet); thence N. 40°08′47″ E., 5551.65 feet (5551.57 feet grid distance) to an aluminum monument stamped ''PSM 3341 1998'' (N1656009.01 E-467449.35) marking the Point of Beginning; thence N. 77°06′49″ E., 71.84 feet to an aluminum monument stamped ''PSM3341 1998'' (N–1656025.04, N–467519.38); thence S. 04°37′09″ W., 29.88 feet to an aluminum monument stamped ''PSM 3341 1998'' (N–1655995.26 E–467516.98); thence N. 78°29′57″ W., 69.01 feet to the point of beginning; to be known as the Three Sisters Spring Sanctuary.

NOTE: Map for paragraphs (a)(1) through (a)(7) follows:

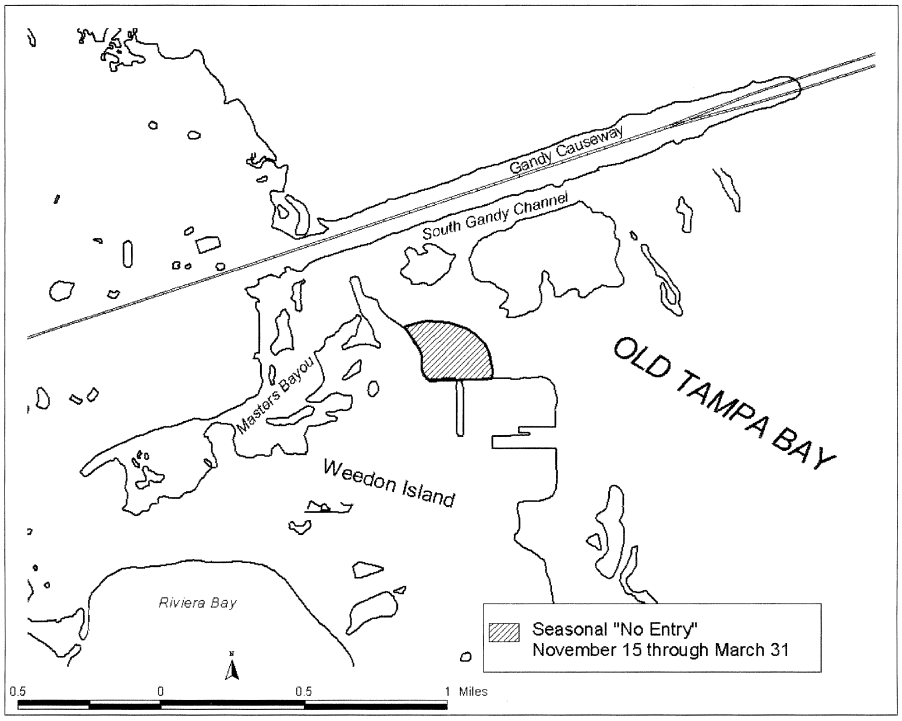


(8) That part of the Homosassa River, Homosassa, Citrus County, Florida, within Section 28, Township 19 South, Range 17 East, described as the headwaters of the Homosassa River (adjacent to the Homosassa Springs State Wildlife Park), including the spring run at the point where the run enters the northeast fork of the river along the southeastern shore and an area opposite this site along the southern shoreline; containing approximately 0.67 ha (1.66 acres). Map follows (see Blue Waters Manatee Sanctuary):



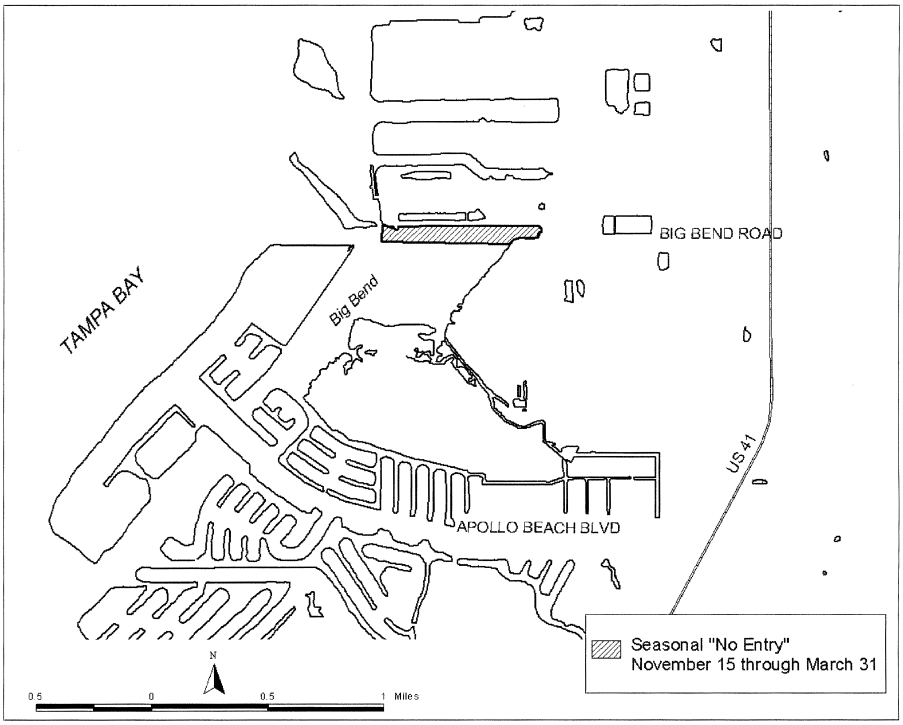
Blue Waters Manatee Sanctuary

(9) That part of Tampa Bay, St. Petersburg, Pinellas County, Florida, within Sections 16 and 21, Township 30 South, Range 17 East, described as the warm-water outflow of the Bartow Electric Generating Plant located on the northern shore of Weedon Island, encircling that point where the discharge enters receiving waters along the western shore of Old Tampa Bay; to be known as the Bartow Electric Generating Plant Manatee Sanctuary, containing approximately 12.07 ha (29.82 acres). Map follows (see Bartow Electric Generating Plant Manatee Sanctuary):



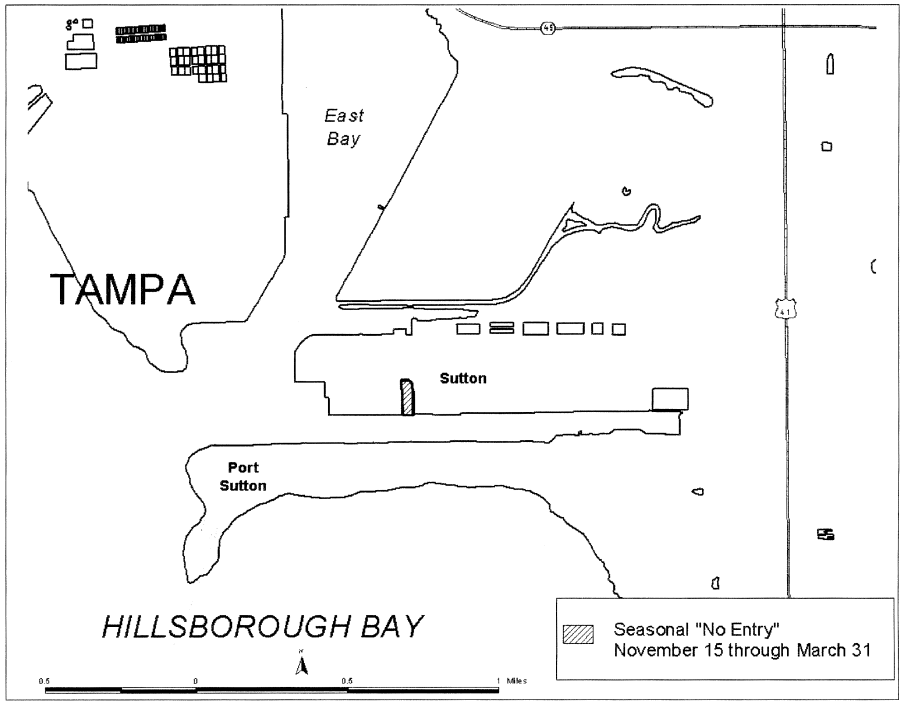
Bartow Electric Generating Plant Manatee Sanctuary

(10) That part of Tampa Bay, Tampa, Hillsborough County, Florida, within Sections 10 and 15, Township 31 South, Range 19 East, described as the waters in and around the warm-water outflow of the Tampa Electric Company Big Bend Electric Generating Station located west of Jackson Branch and including the Big Bend area of eastern Tampa Bay, to be known as the Tampa Electric Company Big Bend Manatee Sanctuary, containing approximately 12.08 ha (29.85 acres). Map follows (See TECO Big Bend Manatee Sanctuary):



TECO Big Bend Manatee Sanctuary

(11) That part of Tampa Bay, Tampa, Hillsborough County, Florida, lying within Section 4, Township 30 South, Range 19 East, described as the warm-water outflow of the Tampa Electric Company Gannon Electric Generating Station, to be known as the Port Sutton Manatee Sanctuary, containing approximately 1.1 ha (2.7 acres). Map follows (see Port Sutton Manatee Sanctuary):



Port Sutton Manatee Sanctuary

(b) *Exceptions.* (1) Adjoining property owners, their guests, employees, and their designees (including but not limited to contractors and lessees) may engage in watercraft access and property maintenance activities through manatee sanctuaries (set forth in paragraphs (a)(1) through (a)(11) of this section) and designated ''no-entry areas'' in the Kings Bay Manatee Refuge (set forth in paragraph (c)(14) of this section). Use of sanctuary and no-entry area waters is restricted to authorized individuals accessing adjoining properties, storing watercraft, and maintaining property and waterways. Maintenance activities include those actions necessary to maintain property and waterways, subject to any Federal, State, and local government permitting requirements.

(2) Authorized individuals must obtain a sticker or letter of authorization from the U.S. Fish and Wildlife Service identifying them as individuals authorized to enter no-entry areas that adjoin their property. Stickers must be placed in a conspicuous location to readily identify authorized watercraft. Individuals with a letter of authorization must have a valid letter in their possession when accessing no-entry areas.

(3) Authorized individuals must conduct any authorized boating activity within these areas at idle or no-wake speeds.

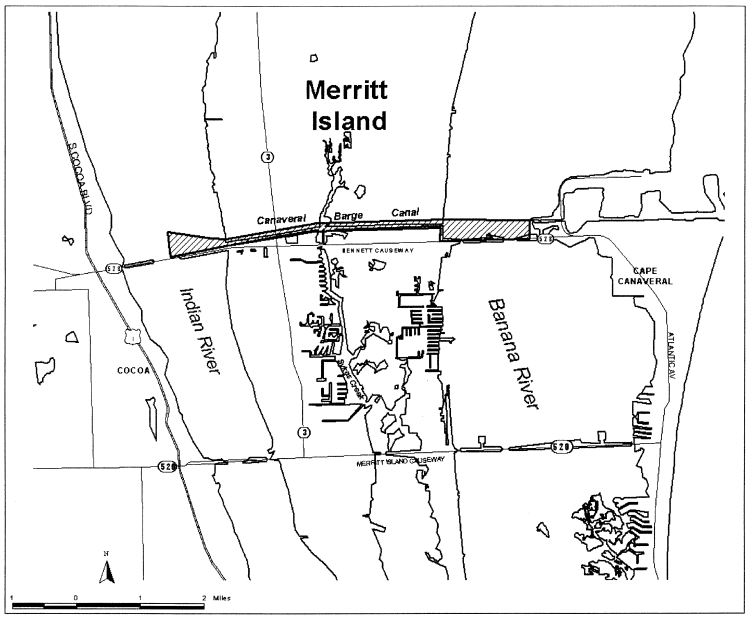
(c) *Manatee refuges.* The following areas are designated as manatee refuges. For each manatee refuge, we will state on appropriate signs which, if any, waterborne activities are prohibited, and state the applicable restrictions, if any, on permitted waterborne activities. The areas that will be posted are described as follows:

(1) *The Barge Canal Manatee Refuge.* (i) The Barge Canal Manatee Refuge is described as all waters lying within the

banks of the Barge Canal, Brevard County, Florida, including all waters lying within the marked channel in the Banana River that lie between the east entrance of the Barge Canal and the Canaveral Locks; containing approximately 276.3 ha (682.7 acres).

(ii) Watercraft are required to proceed at slow speed (channel included) all year. The use of watercraft at speeds greater than slow speed is prohibited throughout the Barge Canal Manatee Refuge.

(iii) Map of the Barge Canal Manatee Refuge follows:

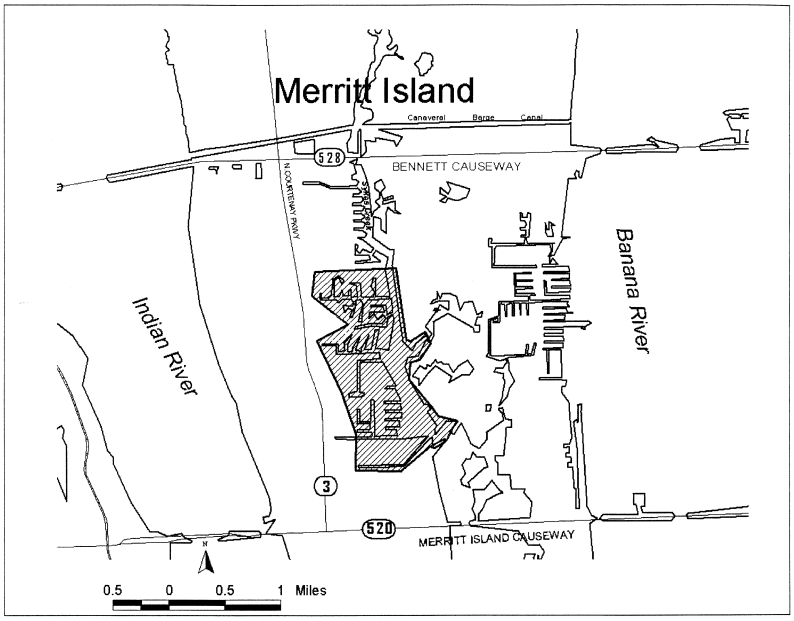


Barge Canal Manatee Refuge

(2) *The Sykes Creek Manatee Refuge.* (i) The Sykes Creek Manatee Refuge is described as all waters, including the marked channel in Sykes Creek, Brevard County, Florida. In particular, the portion of Sykes Creek southerly of the southern boundary of that portion of the creek commonly known as the ''S'' curve (said boundary being a line bearing east from a point on the western shoreline of Sykes Creek at approximate latitude 28 degrees 23′24″ N, approximate longitude 80 degrees 41′27″ W) and northerly of the Sykes Creek Parkway; containing approximately 342.3 ha (845.8 acres).

(ii) Watercraft are required to proceed at slow speed (channel included) all year. The use of watercraft at speeds greater than slow speed is prohibited throughout the Sykes Creek Manatee Refuge.

(iii) Map of the Sykes Creek Manatee Refuge follows:

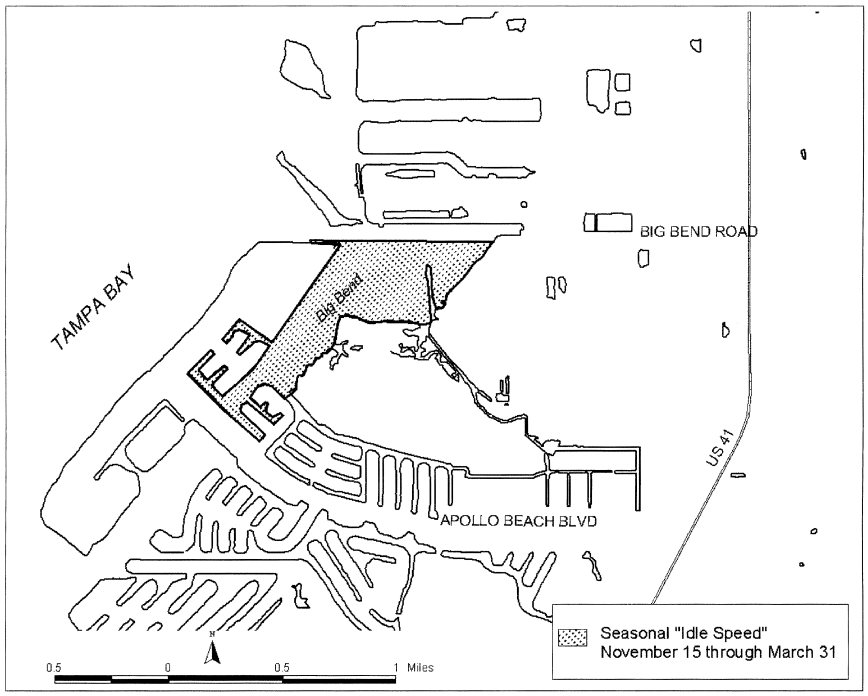


Sykes Creek Manatee Refuge

(3) *The Tampa Electric Company's Big Bend Manatee Refuge.* (i) The Tampa Electric Company's Big Bend Manatee Refuge is described as the entrance channel and those waters south of the manatee sanctuary at the Tampa Electric Company's Big Bend Electric Generating Station within Hillsborough County, Florida; containing approximately 89.35 ha (220.79 acres).

(ii) Watercraft are required to operate at idle speed from November 15 through March 31. Watercraft are prohibited from operating at speeds greater than idle speed from November 15 through March 31, inclusive.

(iii) Map of the Tampa Electric Company's Big Bend Manatee Refuge follows (see TECO Big Bend Manatee Refuge):

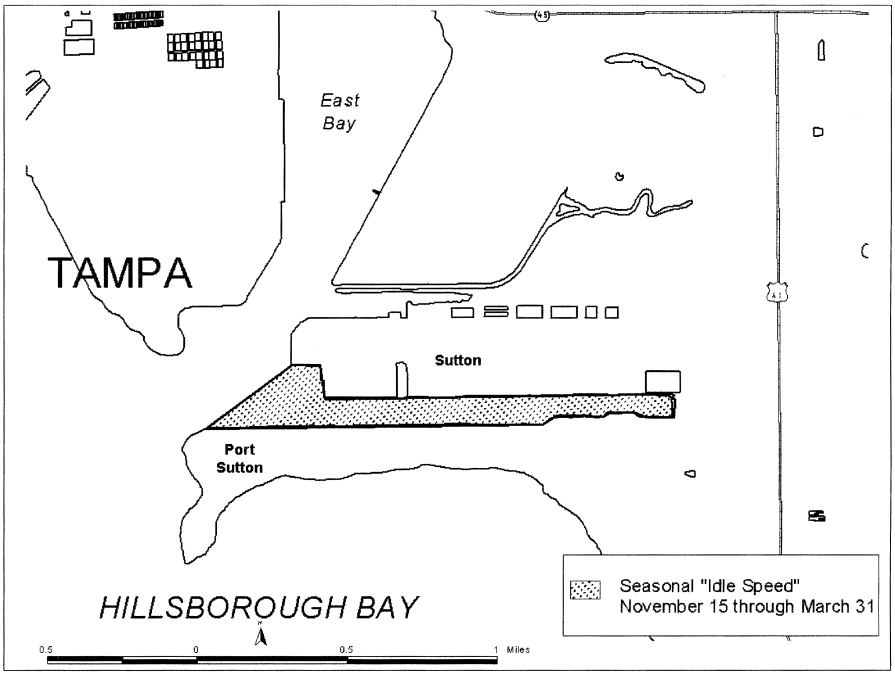


TECO Big Bend Manatee Refuge

(4) *The Port Sutton Manatee Refuge.* (i) The Port Sutton Manatee Refuge is described as those waters surrounding the Port Sutton Manatee Sanctuary, including all waters within Port Sutton, Hillsborough County, Florida; containing approximately 39.2 ha (96.9 acres).

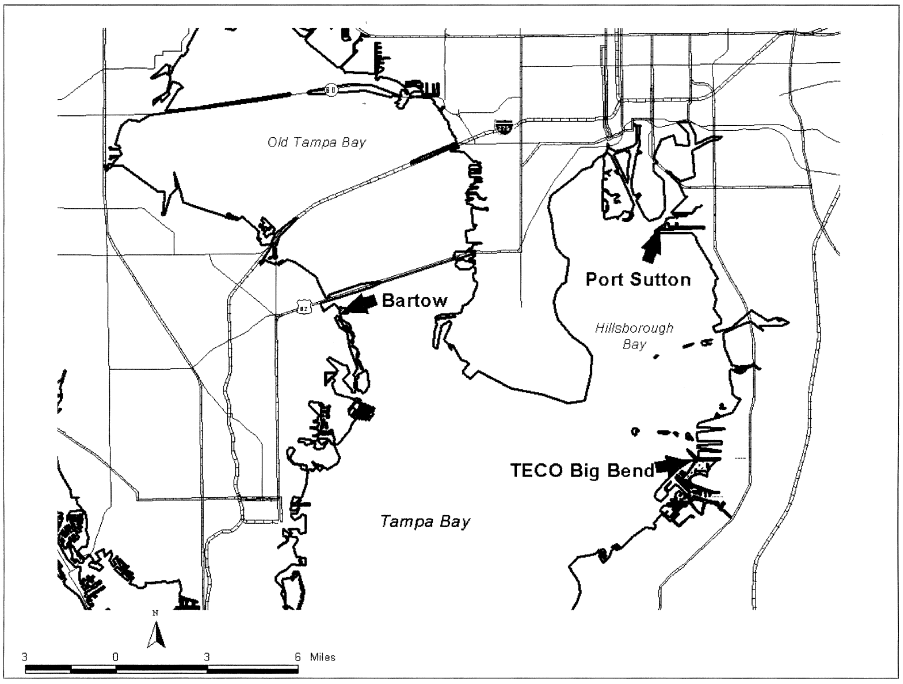
(ii) Watercraft are required to operate at idle speed from November 15 through March 31, inclusive. Watercraft are prohibited from operating at speeds greater than idle speed from November 15 through March 31, inclusive.

(iii) Map of Port Sutton Manatee Refuge follows (see Port Sutton Manatee Refuge):



Port Sutton Manatee Refuge

(iv) Map showing the relative locations of the Bartow, TECO Big Bend, and Port Sutton areas of Tampa Bay follows (see Tampa Bay Manatee Sanctuaries and Refuges):

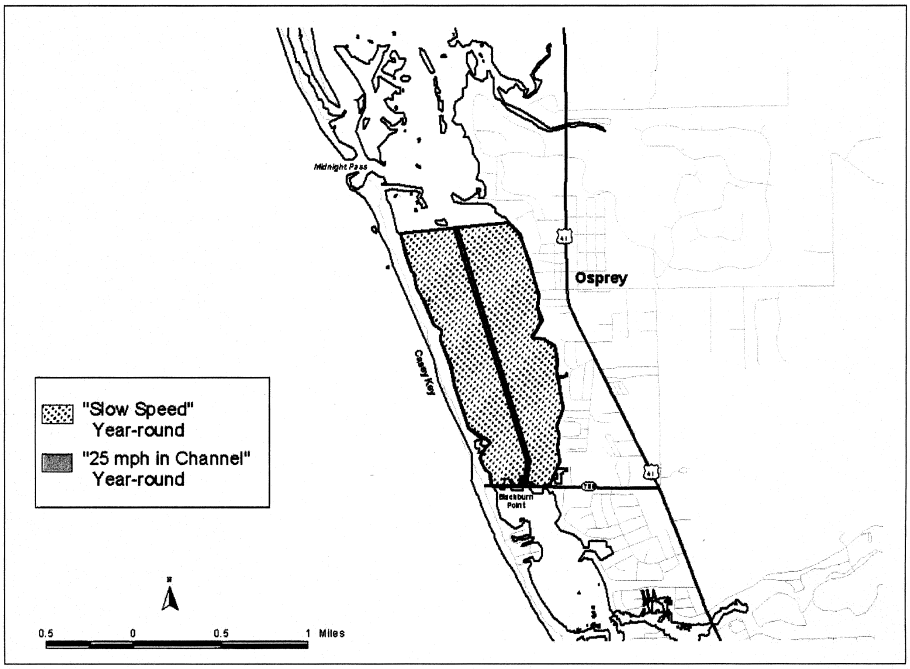


Tampa Bay Manatee Sanctuaries and Refuges

(5) *The Little Sarasota Bay Manatee Refuge.* (i) The Little Sarasota Bay Manatee Refuge is described as those waters lying southerly of a line that bears north 90 degrees 00′00″ E (true) and runs through the southerly tip of the first unnamed island south of Red Intracoastal Waterway Channel Marker ''40'' (latitude 27 degrees 10′07″ N, longitude 82 degrees 30′05″ W) and those waters lying northerly of the Blackburn Point Bridge, Sarasota County, Florida; containing approximately 214.2 ha (529.40 acres).

(ii) Watercraft are required to proceed at slow speed, 40 kilometers per hour (25 miles per hour) within the channel, year-round. Watercraft are prohibited from operating in excess of slow speed outside of the channel and operating at speeds in excess of 40 kilometers per hour (25 miles per hour) within the channel, year-round.

(iii) Map of the Little Sarasota Bay Manatee Refuge follows (see Little Sarasota Bay Manatee Refuge):

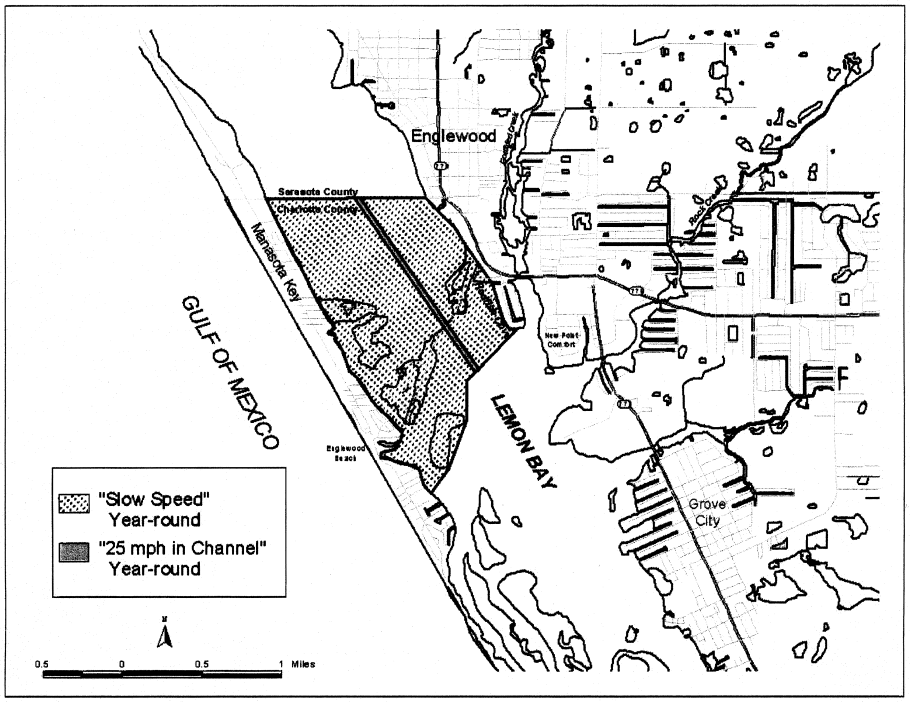


Little Sarasota Bay Manatee Refuge

(6) *The Lemon Bay Manatee Refuge.* (i) The Lemon Bay Manatee Refuge is described as those waters of Lemon Bay lying south of the Sarasota/Charlotte County, Florida, boundary and north of a line north 60 degrees 14′00″ E (true) parallel with a series of small islands approximately 1.6 kilometer (1 mile) south of the Bay Road Bridge; containing approximately 383.61 ha (948.06 acres).

(ii) Watercraft are required to proceed at slow speed, 40 kilometers per hour (25 miles per hour) within the channel, year-round. Watercraft are prohibited from operating in excess of slow speed outside of the channel and operating at speeds in excess of 40 kilometers per hour (25 miles per hour) within the channel, year-round.

(iii) Map of the Lemon Bay Manatee Refuge follows (see Lemon Bay Manatee Refuge):



Lemon Bay Manatee Refuge

(7) *The Peace River Manatee Refuge.* (i) The Peace River Manatee Refuge is described as all waters of the Peace River and certain associated water bodies north and east of the U.S. Highway 41, Charlotte and De Soto Counties, Florida; containing approximately 1.698.11 ha (4,196.11 acres).

(ii) In the Peace River in Charlotte County, watercraft are required to travel at slow speed within a posted shoreline buffer between the US Highway 41 and I–75 bridges. The buffer is approximately 300 meters (1,000 feet) from shore except in a slightly larger area north and west of I–75 to be consistent with recently adopted Florida Fish and Wildlife Conservation Commission's regulations. Watercraft are allowed to travel at a maximum speed of 40 kilometers per hour (25 miles per hour) year-round outside the buffer. Watercraft are prohibited from traveling in excess of slow speed within the posted shoreline buffer between the U.S. Highway 41 and I–75 bridges and are further prohibited from operating in excess of 40 kilometers per hour (25 miles per hour) outside the buffer throughout the year.

(iii) In the Peace River within Charlotte County and upstream of I–75 to red channel marker ''14,'' watercraft are required to travel at slow speed outside of the marked navigation channel. Watercraft are allowed to travel at a maximum speed of 40 kilometers per hour (25 miles per hour) year-round inside the marked navigation channel. Watercraft are prohibited from traveling in excess of slow speed in areas outside of the navigation channel and are further prohibited from traveling in excess of 40 kilometers per hour (25 miles per hour) inside the marked navigation channel, year-round.

(iv) In the waters of the Peace River in Charlotte and De Soto Counties upstream of red channel marker ''14,'' watercraft are allowed to travel at a

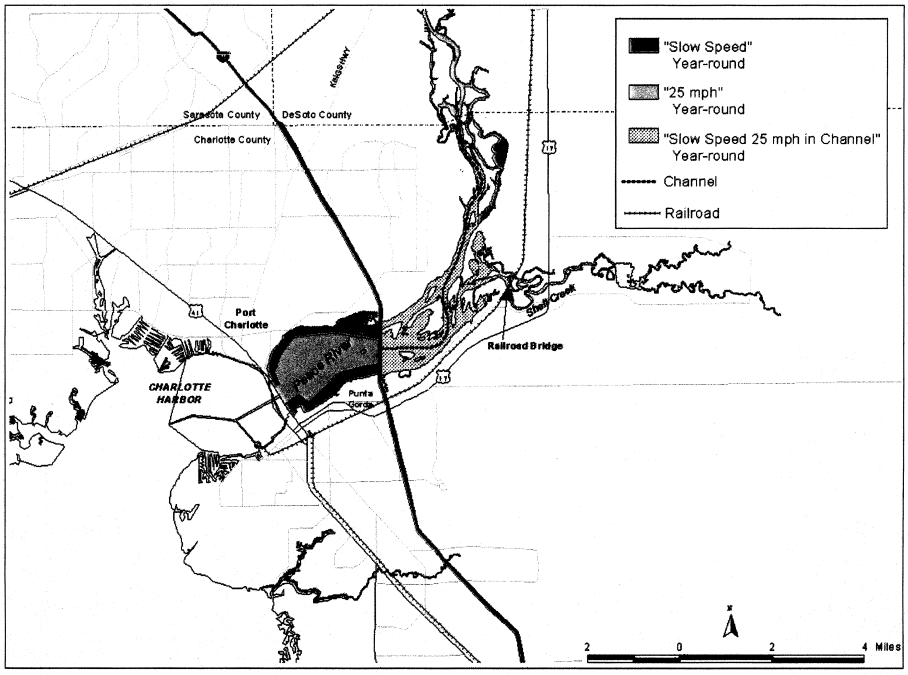
maximum speed of 40 kilometers per hour (25 miles per hour) year-round. Watercraft are prohibited from traveling in excess of 40 kilometers per hour (25 miles per hour), year-round, in this area.

(v) Within the waters of Jim Long Lake and Hunter Creek in Charlotte and De Soto Counties, watercraft are required to travel at slow speed year-round. Watercraft are prohibited from traveling in excess of slow speed in this area, year-round.

(vi) Within the waters of Deep Creek in Charlotte and De Soto Counties, watercraft are required to travel at slow speed year-round. Watercraft are prohibited from traveling in excess of slow speed in this area, year-round.

(vii) Within the waters of Shell Creek in Charlotte County, watercraft are required to travel at slow speed year-round with the following exception. Should a U.S. Coast Guard or State of Florida approved marked navigation channel be established in that portion of Shell Creek approximately 1.6 kilometers (1 mile) downstream of the Seaboard Railroad trestles, watercraft will be allowed to travel at a maximum speed of 40 kilometers per hour (25 miles per hour) in this section of Shell Creek upon posting by the Fish and Wildlife Service or the Florida Fish and Wildlife Conservation Commission. Watercraft are prohibited from traveling in excess of slow speed in this area, year-round.

(viii) Map of the Peace River Manatee Refuge follows (see Peace River Manatee Refuge):



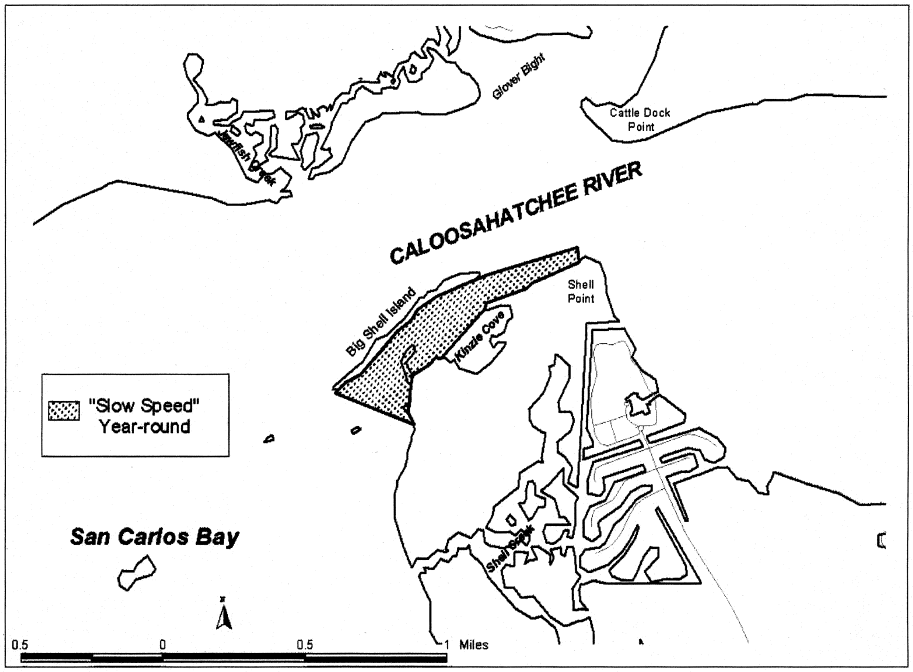
Peace River Manatee Refuge

(8) *The Shell Island Manatee Refuge.* (i) The Shell Island Manatee Refuge is described as all waters within the marked Intracoastal Waterway channel between Green Marker ''99'' (approximate

latitude 26 degrees 31′00″ N, approximate longitude 82 degrees 00′52″ W) and Green Marker ''93'' (approximate latitude 26 degrees 31′37″ N, approximate longitude 81 degrees 59′46″ W), Lee County, Florida; containing approximately 32.6 ha (80.5 acres).

(ii) Watercraft are required to proceed at slow speed (channel included) year-round. Watercraft are prohibited from traveling in excess of slow speed in this area, year-round.

(iii) Map of the Shell Island Manatee Refuge follows (see Shell Island Manatee Refuge):

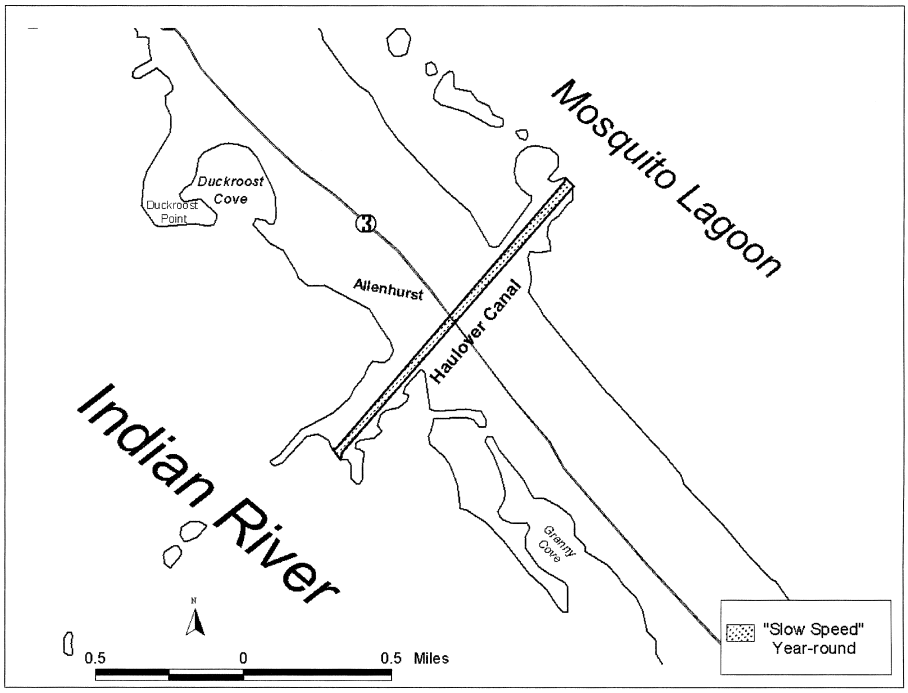


Shell Island Manatee Refuge

(9) *The Haulover Canal Manatee Refuge.* (i) The Haulover Canal Manatee Refuge is described as all waters lying within Haulover Canal in Brevard County, Florida; containing approximately 8.95 ha (22.11 acres).

(ii) Watercraft are required to proceed at slow speed (channel included) year-round. Watercraft are prohibited from traveling in excess of slow speed in this area, year-round.

(iii) Map of the Haulover Canal Manatee Refuge follows (see Haulover Canal Manatee Refuge):



Haulover Canal Manatee Refuge

(10) *The Caloosahatchee River—San Carlos Bay Manatee Refuge.* (i) The Caloosahatchee River—San Carlos Bay Manatee Refuge is described as all waters of the Caloosahatchee River and San Carlos Bay downstream of the Seaboard Coastline trestle at Beautiful Island to Channel Marker ''93'' and from Channel Marker ''99'' to the Sanibel Causeway, in Lee County. A map showing the refuge and four maps showing specific areas in the refuge are at paragraph (10)(x) of this section.

(ii) From the Seaboard Coastline Railroad trestle at Beautiful Island, downstream to Channel Marker ''25'', a distance of approximately 1.6 kilometers (1 mile), watercraft are required to proceed at slow speed in the marked navigation channel from November 15 to March 31 and at not more than 40 kilometers per hour (km/h) (25 miles per hour) in the channel from April 1 to November 14. See map of ''Edison Bridge Area'' in paragraph (10)(x) of this section.

(iii) From a point 152 meters (500 feet) east of the Edison Bridge downstream to a point 152 meters (500 feet) west of the Caloosahatchee Bridge, approximately 1.1 kilometers (0.7 mile) in length, shoreline-to-shoreline (including the marked navigation channel), watercraft are required to proceed at slow speed (channel included), year-round. See map of ''Edison Bridge Area'' in paragraph (10)(x) of this section.

(iv) From a point 152 meters (500 feet) west of the Caloosahatchee Bridge downstream to a point 152 meters (500 feet) northeast of the Cape Coral Bridge, a distance of approximately 10.9 kilometers (6.8 miles), watercraft are required to proceed year-round at slow speed, while traveling within shoreline buffers extending out from the shore to a minimum distance of approximately 402 meters (1,320 feet), as

marked. Watercraft, with the exception of seaplanes, are required to proceed at not more than 40 km/h (25 miles per hour) throughout the year between these buffers (including the marked navigation channel where not more restrictively designated). See map of ''Cape Coral Bridge Area'' in paragraph (10)(x) of this section.

(v) From a point 152 meters (500 feet) northeast of the Cape Coral Bridge downstream to a point 152 meters (500 feet) southwest of the Cape Coral Bridge, a distance of approximately 0.4 kilometer (0.25 mile), shoreline-to-shoreline (excluding the marked navigation channel), watercraft are required to proceed at slow speed, year-round. In the marked navigation channel, watercraft are required to proceed at not more than 40 km/h (25 miles per hour) throughout the year. See map of ''Cape Coral Bridge Area'' in paragraph (10)(x) of this section.

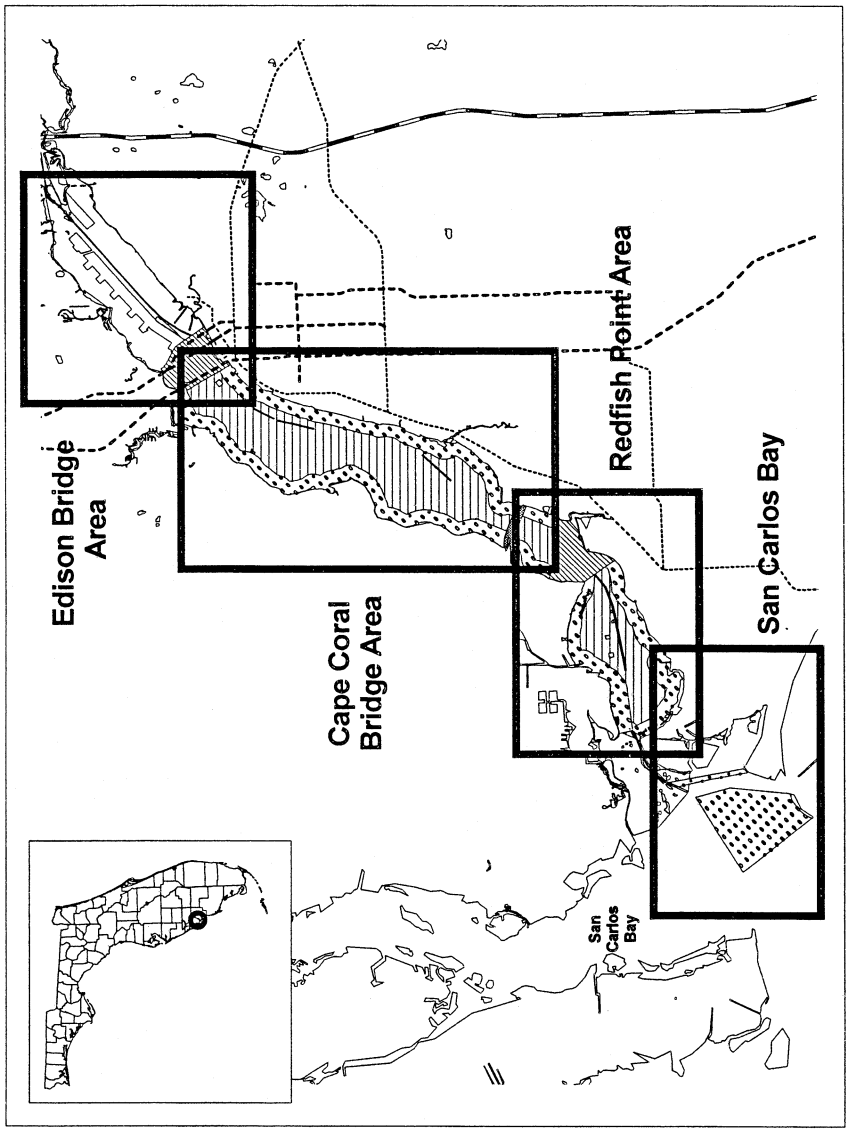
(vi) From a point 152 meters (500 feet) southwest of the Cape Coral Bridge to Channel Marker ''72,'' a distance of approximately 1.9 kilometers (1.2 miles), watercraft are required to proceed year-round at slow speed, while traveling within shoreline buffers extending out from the shore to a minimum distance of approximately 402 meters (1,320 feet), as marked. Watercraft are required to proceed at not more than 40 km/h (25 miles per hour) throughout the year between these buffers (including the marked navigation channel where not more restrictively designated). See map of ''Redfish Point Area'' in paragraph (10)(x) of this section.

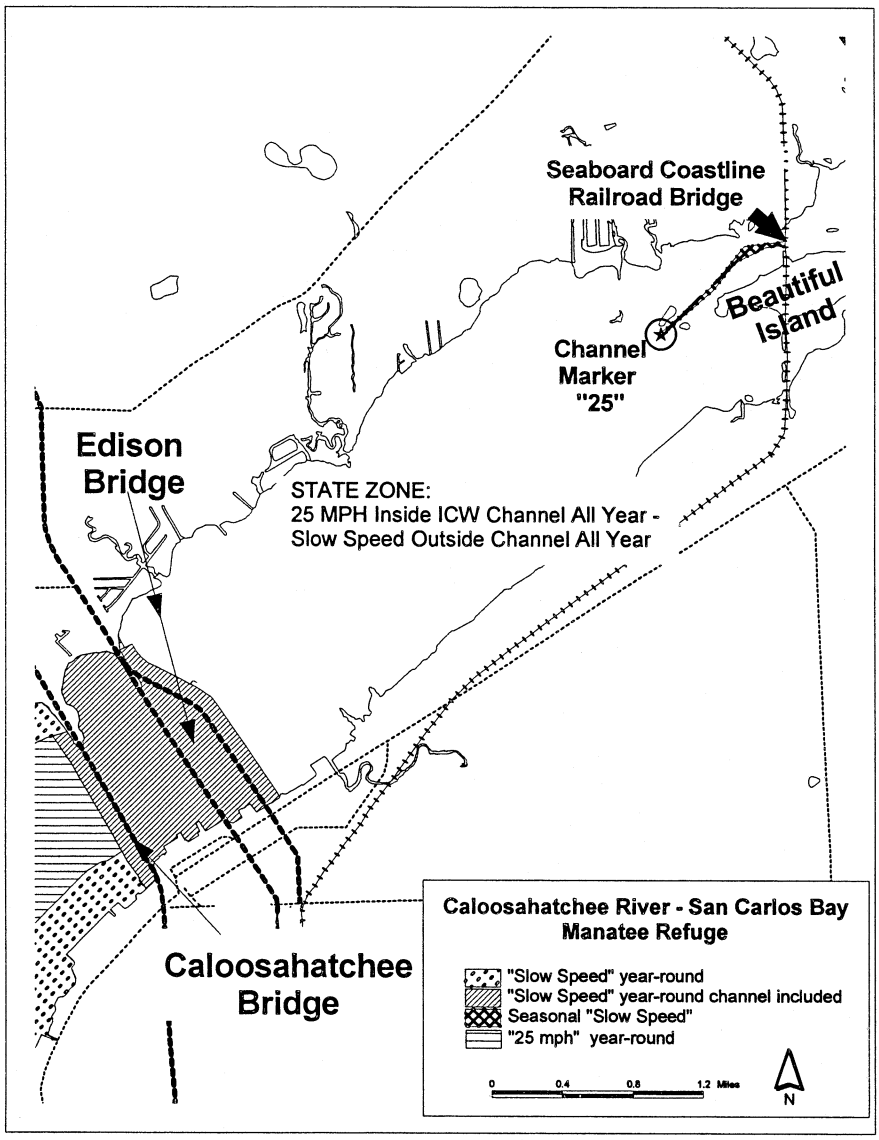
(vii) From Channel Marker ''72'' to Channel Marker ''76'' (in the vicinity of Redfish Point), for a distance of approximately 1.8 kilometers (1.1 miles) in length, shoreline-to-shoreline (including the marked navigation channel), watercraft are required to proceed at slow speed, year-round. See map of ''Redfish Point Area'' in paragraph (10)(x) of this section.

(viii) From Channel Marker ''76'' to Channel Marker ''93,'' a distance of approximately 5.2 kilometers (3.2 miles) in length, watercraft are required to proceed year-round at slow speed, while traveling within shoreline buffers extending out from the shore to a minimum distance of approximately 402 meters (1,320 feet), as marked. Watercraft are required to proceed at not more than 40 km/h (25 miles per hour) throughout the year between these buffers (including the marked navigation channel where not more restrictively designated). See map of ''Redfish Point Area'' in paragraph (10)(x) of this section.

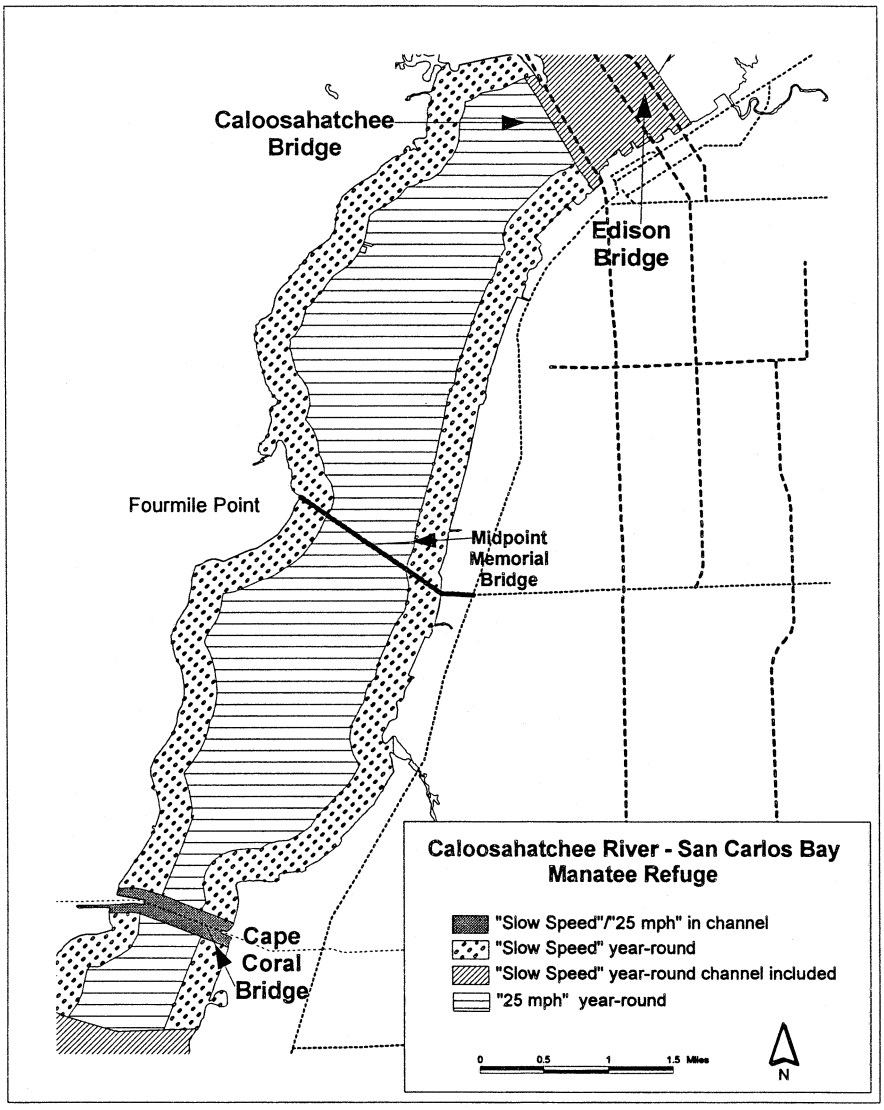
(ix) Except as described below and as marked, from Channel Marker ''99'' to the Sanibel Causeway, watercraft are required to proceed at slow speed year-round in San Carlos Bay within the following limits: A northern boundary described by the southern edge of the marked navigation channel, a line approximately 2.9 kilometers (1.8 miles) in length; a southern boundary described by the Sanibel Causeway (approximately 1.9 kilometers (1.2 miles) in length); a western boundary described by a line that connects the western end of the easternmost Sanibel Causeway island and extending northwest to Channel Marker ''7'' (approximately 2.9 kilometers (1.8 miles) in length); and the eastern boundary includes the western limit of the State-designated manatee protection area (68C–22.005) near Punta Rassa (approximately 2.9 kilometers (1.8 miles) in length). However this area excludes the marked navigation channel from Channel Marker ''99'' to the Sanibel Causeway and adjacent waters, as marked. See map of ''San Carlos Bay'' in paragraph (10)(x) of this section.

(x) Five maps of the Caloosahatchee River—San Carlos Bay Manatee Refuge follow:

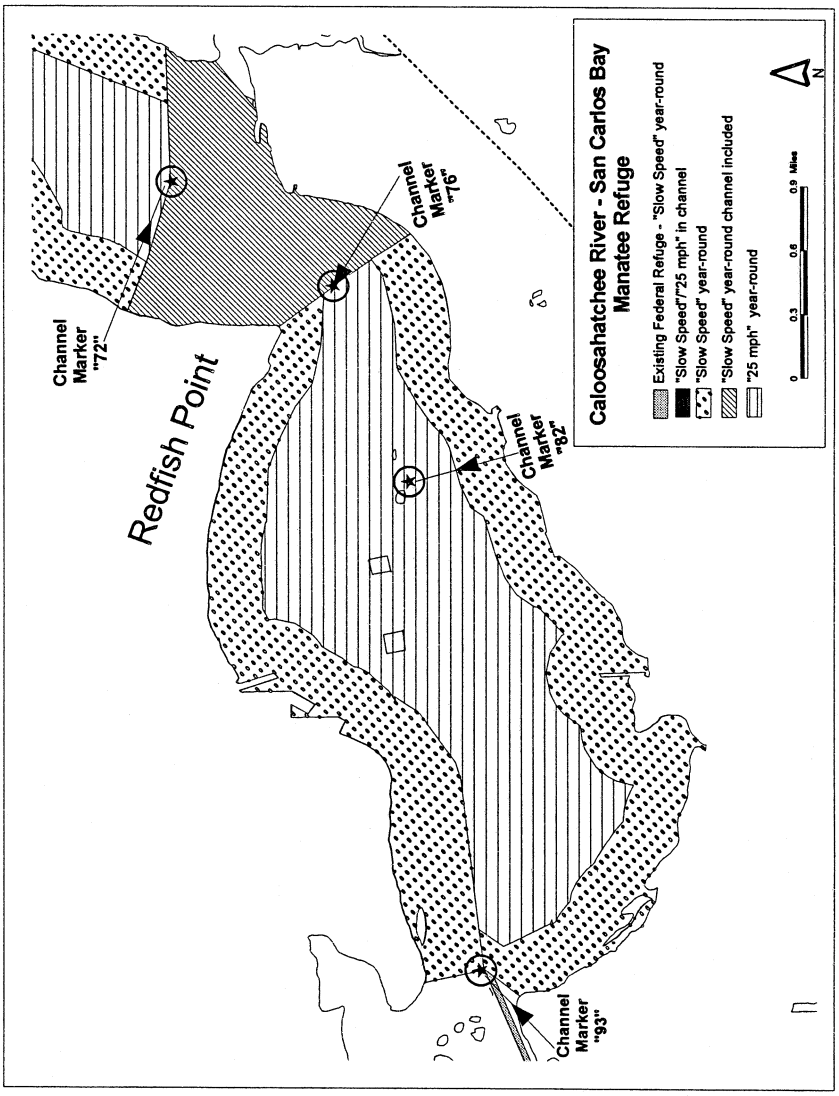

Edison Bridge Area
Cape Coral Bridge Area
Redfish Point Area
San Carlos Bay
San Carlos Bay
Caloosahatchee River - San Carlos Bay Manatee Refuge



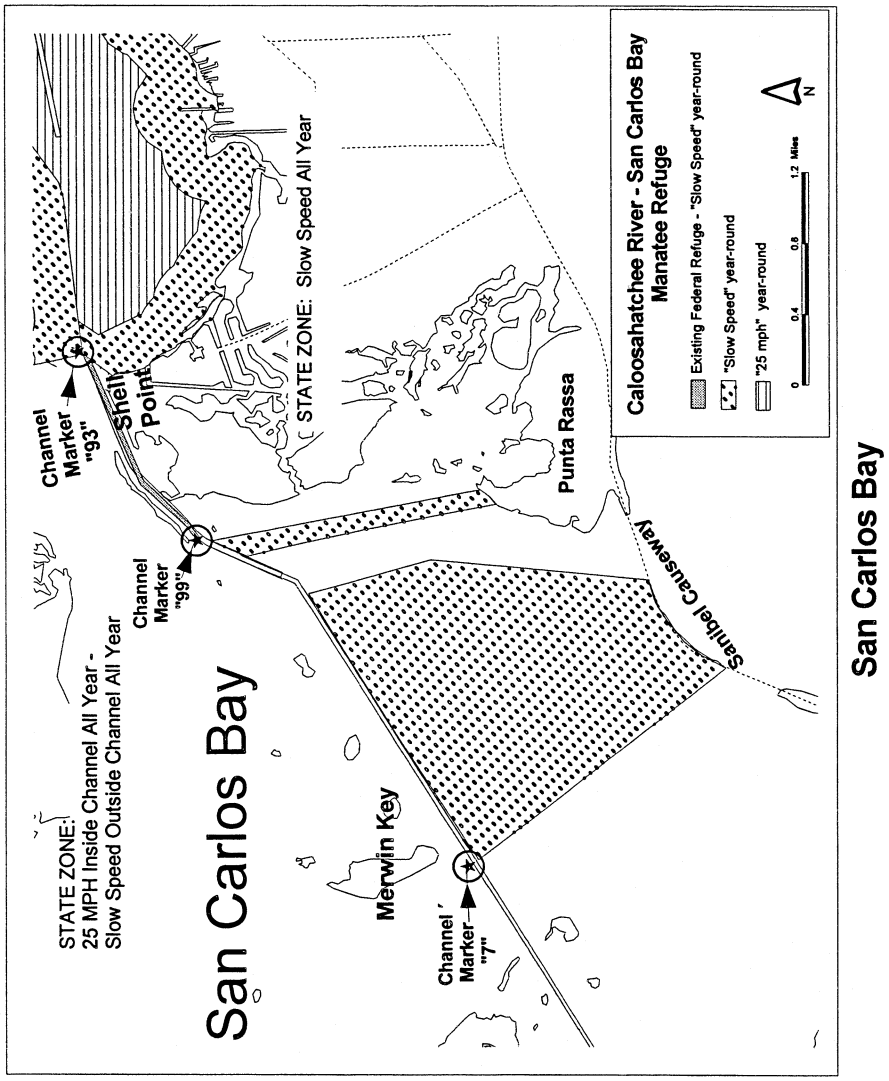
Edison Bridge Area



Cape Coral Bridge Area



Redfish Point Area



(11) *The Lower St. Johns River Manatee Refuge.* (i) The Lower St. Johns River Manatee Refuge is described as portions of the St. Johns River and adjacent waters in Duval, Clay, and St. Johns Counties from Sandfly Point (the intersection of the right descending bank of the Trout River and the left descending bank of the St. Johns River) and Reddie Point, as marked, upstream to the mouth of Peter's Branch, including Doctors Lake, in Clay County on the western shore, and to the southern shore of the mouth of Julington Creek in St. Johns County on the eastern shore. A map showing the refuge and two maps showing specific areas of the refuge are at paragraph (11)(vi) of this section.

(ii) In the St. Johns River from Sandfly Point on the left descending bank of the St. Johns River and Reddie

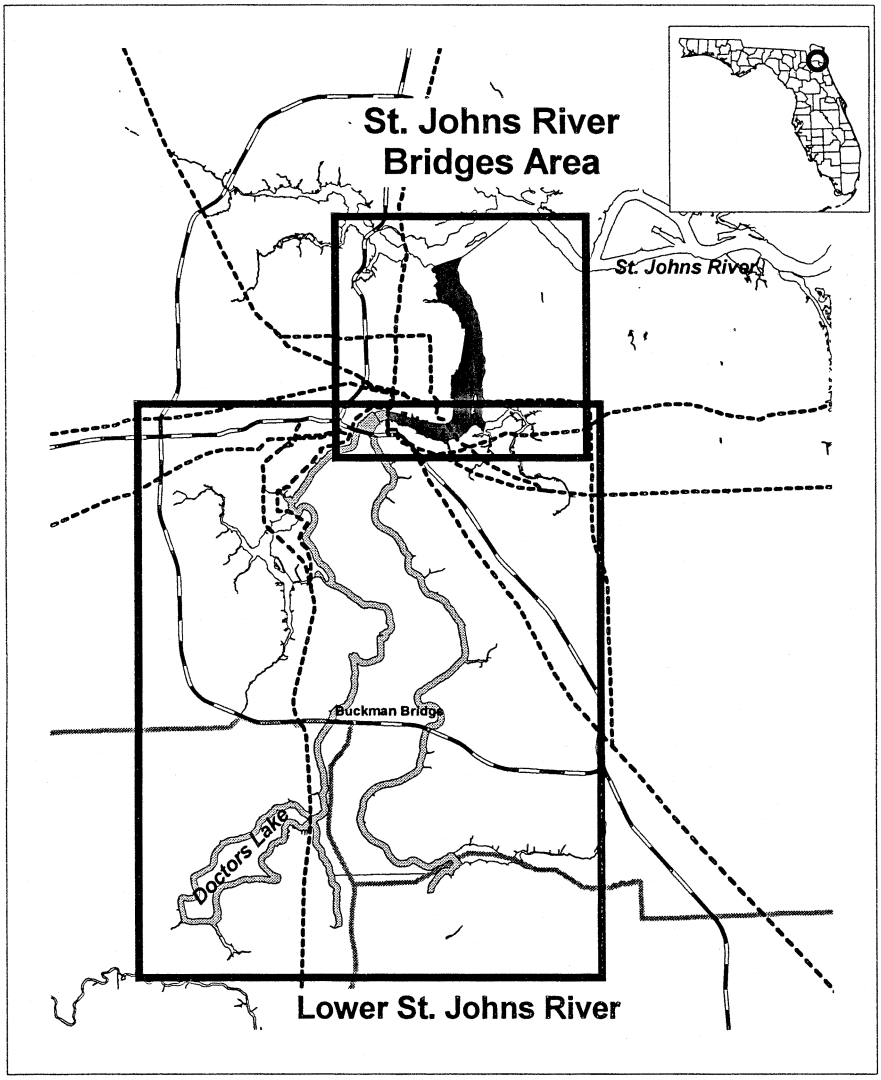
Point on the right descending bank of the St. Johns River, upstream to the Hart Bridge, a distance of approximately 5.5 miles (8.8 km), watercraft are required to proceed at slow speed, year-round, within 300 feet (91 m) of the shoreline on the left descending bank of the St. Johns River and within a buffer as marked, typically about 1,000 feet (305 m) from the shoreline along the right descending bank of the river. The slow speed designation also includes that portion of the river between Exchange Island and the right descending bank, a marked buffer approximately 300 feet (91 m) along the west (channel-ward) shoreline of Exchange Island, and a portion of the Arlington River as marked. Watercraft are also required to proceed at not more than 25 miles per hour (40 km/h), year round, in the area posted as such between these slow speed shoreline buffers. See map of ''St. Johns River Bridges Area'' in paragraph (11)(vi) of this section.

(iii) From the Hart Bridge to the Main Street Bridge, a distance of approximately 2 miles (3.2 km), watercraft are required to proceed at slow speed, year-round, outside the marked navigation channel and at speeds of not more than 25 miles per hour (40 km/h) in the marked channel (from Channel Marker ''81'' to the Main Street Bridge, the channel is defined as the line of sight extending west from Channel Markers ''81'' and ''82'' to the fenders of the Main Street Bridge). See map of ''St. Johns River Bridges Area'' in paragraph (11)(vi) of this section.

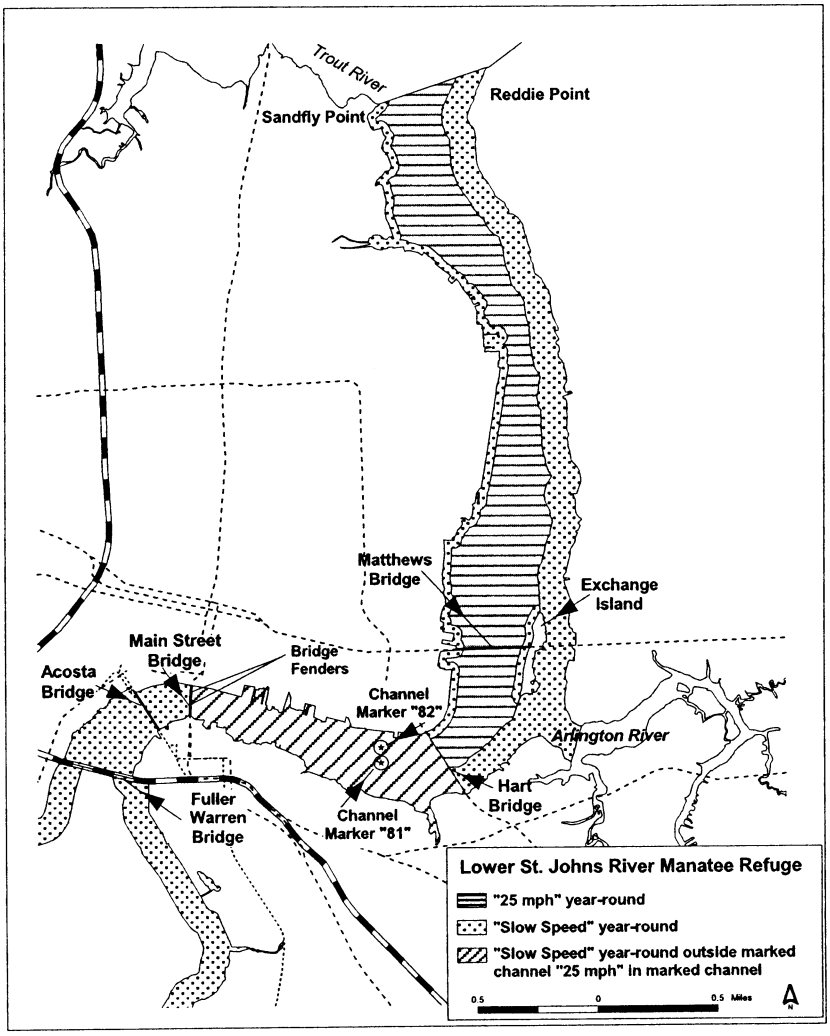
(iv) From the Main Street Bridge to the Fuller Warren Bridge, a distance of approximately 1 mile (1.6 km), shoreline to shoreline, watercraft are required to proceed at slow speed (channel included), year-round. See map of ''St. Johns River Bridges Area'' in paragraph (11)(vi) of this section.

(v) Upstream of the Fuller Warren Bridge: for a distance of approximately 19.3 miles (31.1 km) along the left descending bank of the St. Johns River, watercraft are required to proceed at slow speed, year-round, in a 700-foot (213 m) to 1,000-foot (305 m) as-marked, shoreline buffer from the Fuller Warren Bridge to the south bank of the mouth of Peter's Branch in Clay County; for a distance of approximately 20.2 miles (32.5 km) along the right descending bank of the St. Johns River, watercraft are required to proceed at slow speed, year round, in a 700-foot (213 m) to 1,000-foot (305 m) as marked, shoreline buffer from the Fuller Warren Bridge to the south bank of the mouth of Julington Creek in St. Johns County (defined as a line north of a western extension of the Nature's Hammock Road North); and in Doctors Lake in Clay County watercraft are required to proceed at slow speed, year-round, in a 700-foot (213 m) to 900-foot (274 m) as-marked, shoreline buffer (approximately 12.9 miles (20.8 km)). See map of ''Lower St. Johns River'' in paragraph (11)(vi) of this section.

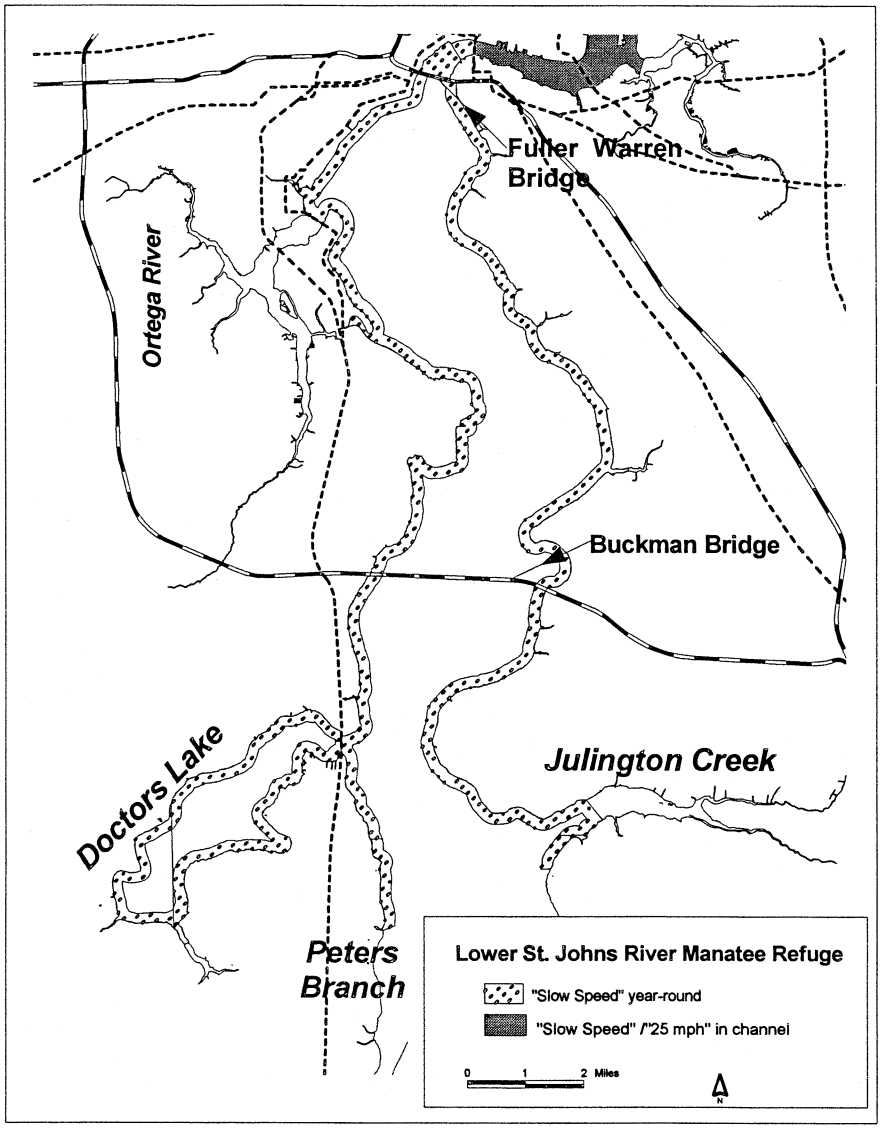
(vi) Three maps of the Lower St. Johns River Manatee Refuge follow:



Lower St. Johns River Manatee Refuge



St. Johns River Bridges Area



Lower St. Johns River

(12) *The Halifax and Tomoka Rivers Manatee Refuge.* (i) The Halifax and Tomoka Rivers Manatee Refuge is described as the Halifax River and associated waterbodies in Volusia County, from the Volusia County—Flagler County line to New Smyrna Beach. A map showing the refuge and eight maps showing specific areas in the refuge are at paragraph (12)(xii) of this section.

(ii) From the Volusia County—Flagler County line at Halifax Creek south to Channel Marker ''9,'' a distance of approximately 11.3 kilometers

(7.0 miles) in length, watercraft are required to proceed at not more than 40 km/h (km/h)(25 miles per hour) in the channel. See maps of ''Halifax Creek'' and ''Tomoka River Basin'' in paragraph (12)(xii) of this section.

(iii) From Channel Marker ''9'' to a point 152 meters (500 feet) north of the Granada Bridge (State Road 40) (including the Tomoka Basin), a distance of approximately 5.0 km (3.1 miles) in length, watercraft are required to proceed at not more than 40 km/h (25 mph) in areas between the existing 91-meter (300-foot) buffers (and including the marked navigation channel). See maps of ''Tomoka River Basin'' and ''Tomoka River'' in paragraph (12)(xii) of this section.

(iv) In the Tomoka River, from the I–95 Bridge to Alligator Island, as marked, a distance of approximately 1.6 kilometers (1 mile), watercraft are required to proceed at slow speed, shoreline to shoreline, from April 1 to August 31. See map of ''Tomoka River'' in paragraph (12)(xii) of this section.

(v) From 152 meters (500 feet) north to 305 meters (1,000 feet) south of the Granada Bridge (State Road 40), a distance of approximately 0.5 kilometers (0.3 miles) in length, watercraft are required to proceed at slow speed, year-round, shoreline to shoreline. See map of ''Halifax River A'' in paragraph (12)(xii) of this section.

(vi) From a point 305 meters (1,000 feet) south of the Granada Bridge (State Road 40) to a point 152 meters (500 feet) north of the Seabreeze Bridge, a distance of approximately 6.4 km (4.0 miles) in length, watercraft are required to proceed at not more than 40 km/h (25 mph) in areas between the existing 91-meter (300-foot) buffers (and including the marked navigation channel). See map of ''Halifax River A'' in paragraph (12)(xii) of this section.

(vii) As marked, from 152 meters (500 feet) north of the Seabreeze Bridge, to 152 meters (500 feet) north of the Main Street bridge, a distance of approximately 1 kilometer (1 mile) in length, watercraft are required to proceed at slow speed (channel included), year-round. See map of ''Halifax River B'' in paragraph (12)(xii) of this section.

(viii) From Channel Marker ''40'' to a point a minimum of 152 meters (500 feet) north, as marked, of the Dunlawton Bridge, a distance of approximately 14.5 kilometers (9 miles) in length, watercraft are required to proceed at not more than 40 km/h (25 mph) in areas between the existing 91-meter (300-foot) buffers (and including the marked navigation channel). See map of ''Halifax River B'' in paragraph (12)(xii) of this section.

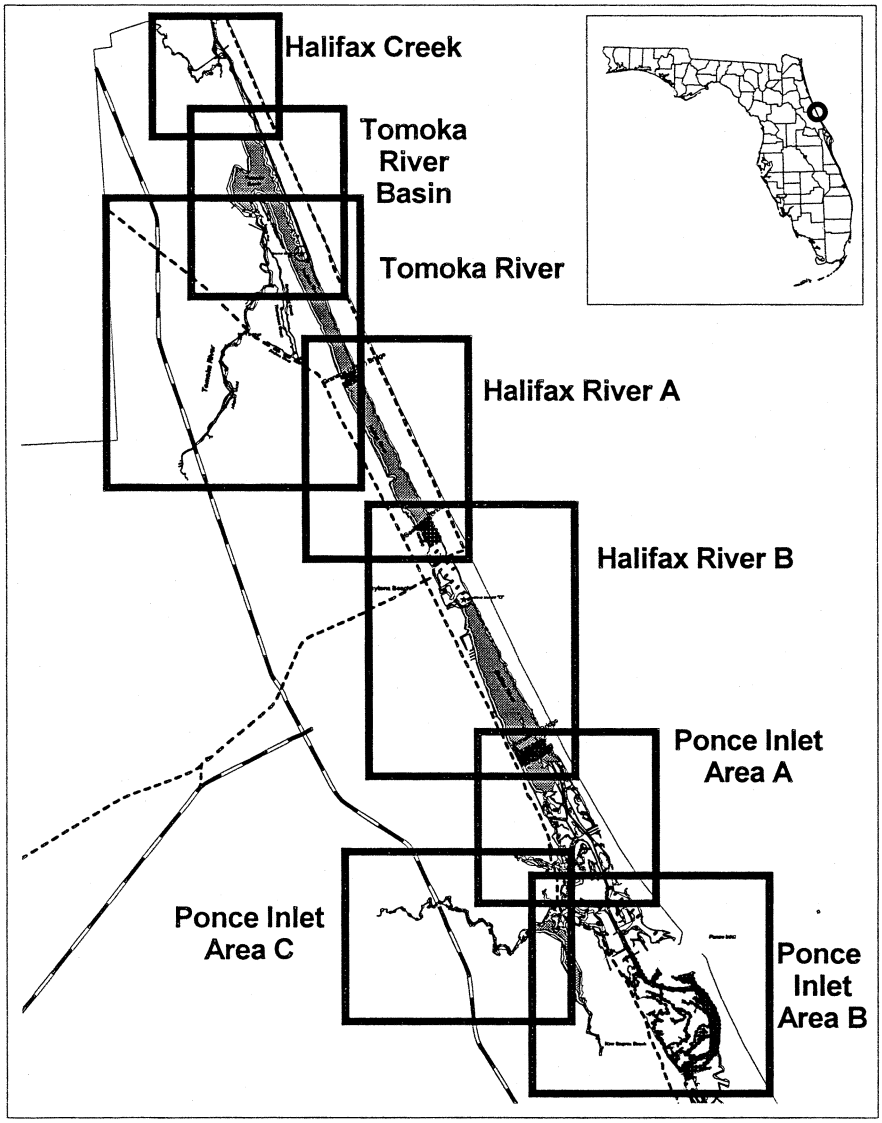
(ix) As marked, a minimum of 152 meters (500 feet) north to 152 meters (500 feet) south of the Dunlawton Bridge, a distance of approximately 0.3 kilometers (0.2 miles) in length, watercraft are required to proceed at slow speed (channel included), year-round, shoreline to shoreline; and adjacent to the western shoreline of the Halifax River north of the Dunlawton Bridge for a distance of approximately 640 meters (2,100 feet), and a minimum of 91 meters (300 feet) from shore, as marked, watercraft are required to proceed at slow speed, year-round. See map of ''Halifax River B'' in paragraph (12)(xii) of this section.

(x) As marked, from a minimum of 152 meters (500 feet) south of the Dunlawton Bridge to Redland Canal, a distance of approximately 10.5 kilometers (6.5 miles) in length, watercraft are required to proceed at not more than 40 km/h (25 mph) in waters not more restrictively designated; along the western shore of the Halifax River, a distance of approximately 3.1 km (1.95 miles), watercraft are required to proceed at not more than 40 km/h (25 mph) in the waters not more restrictively designated; in Rose Bay, a distance of approximately 2.7 km (1.7 miles), watercraft are required to proceed at not more than 40 km/h (25 mph) in waters not more restrictively designated; in Turnbull Bay, a distance of approximately 3.9 km (2.4 miles), watercraft are required to proceed at not more than 40 km/h (25 mph) in waters not more restrictively designated. See maps of ''Ponce Inlet Area A,'' ''Ponce Inlet Area B,'' and ''Ponce Inlet Area C'' in paragraph (12)(xii) of this section.

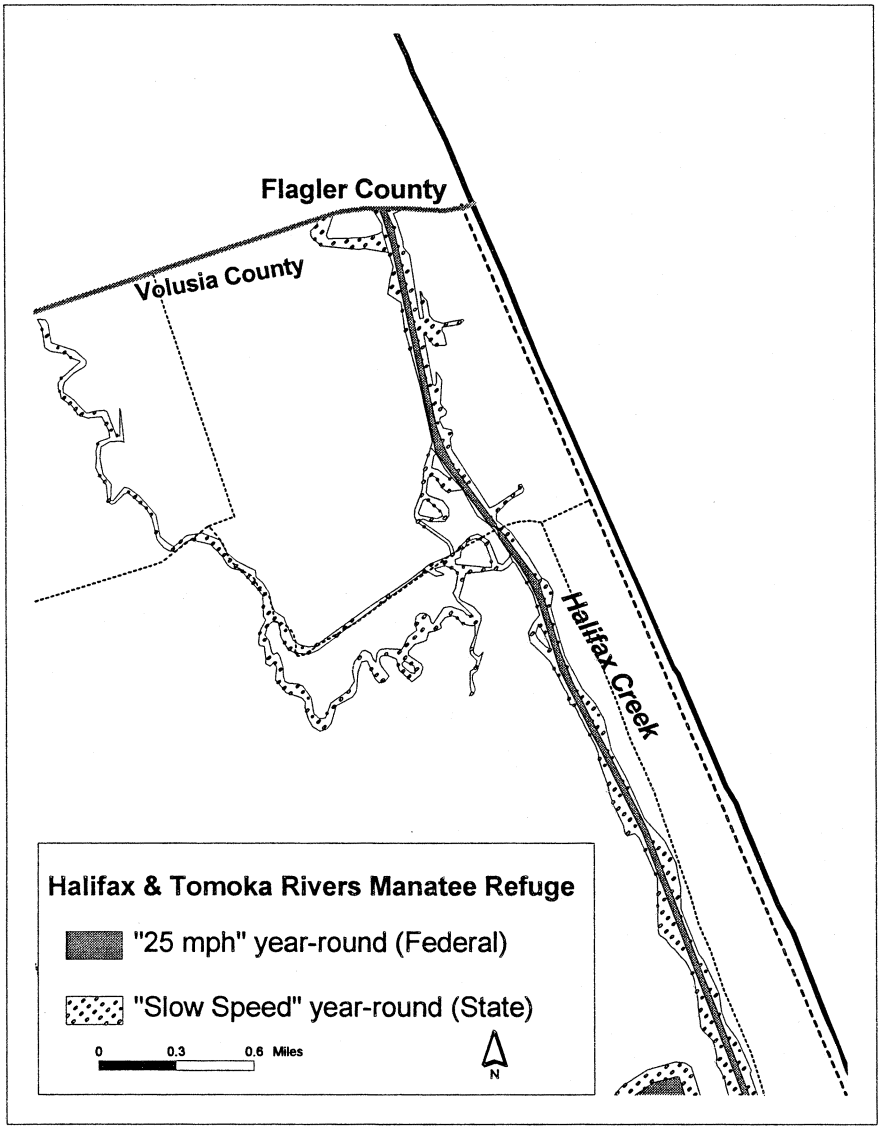
(xi) As marked, in the Intracoastal Waterway and adjacent waters from Redland Canal to the A1A Bridge (New Smyrna Beach, for a distance of approximately 5.3 kilometers (3.3 miles)

in length, watercraft are required to proceed at slow speed (channel included), year-round. See map of ''Ponce Inlet Area B'' in paragraph (12)(xii) of this section.

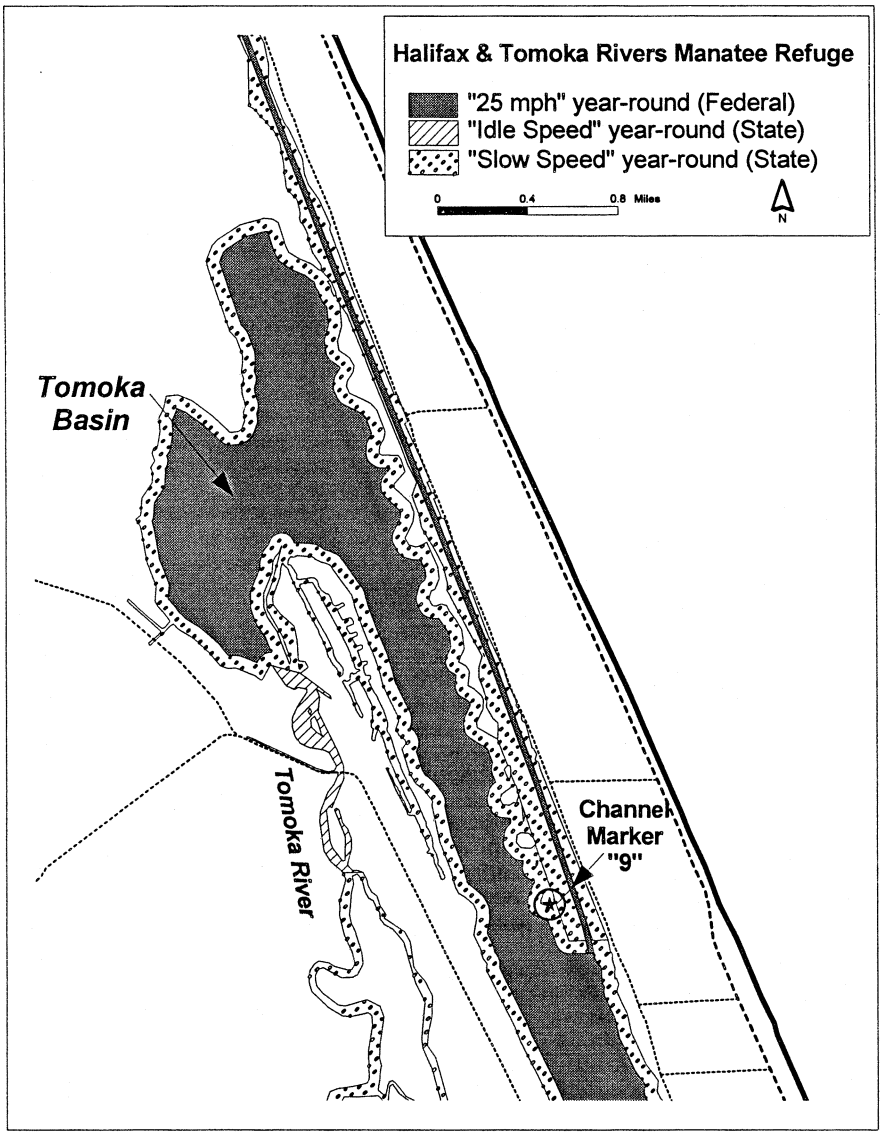
(xii) Nine maps of the Halifax and Tomoka Rivers Manatee Refuge follow:



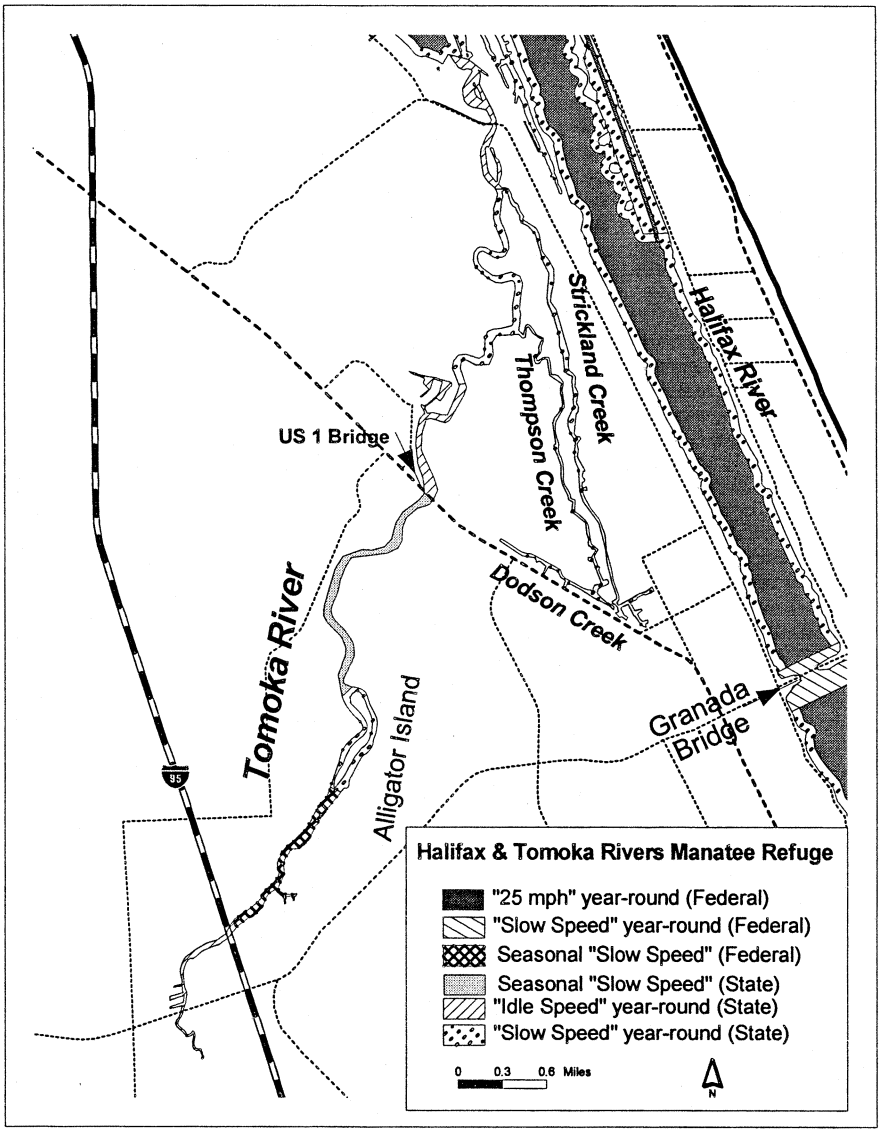
Halifax & Tomoka Rivers Manatee Refuge



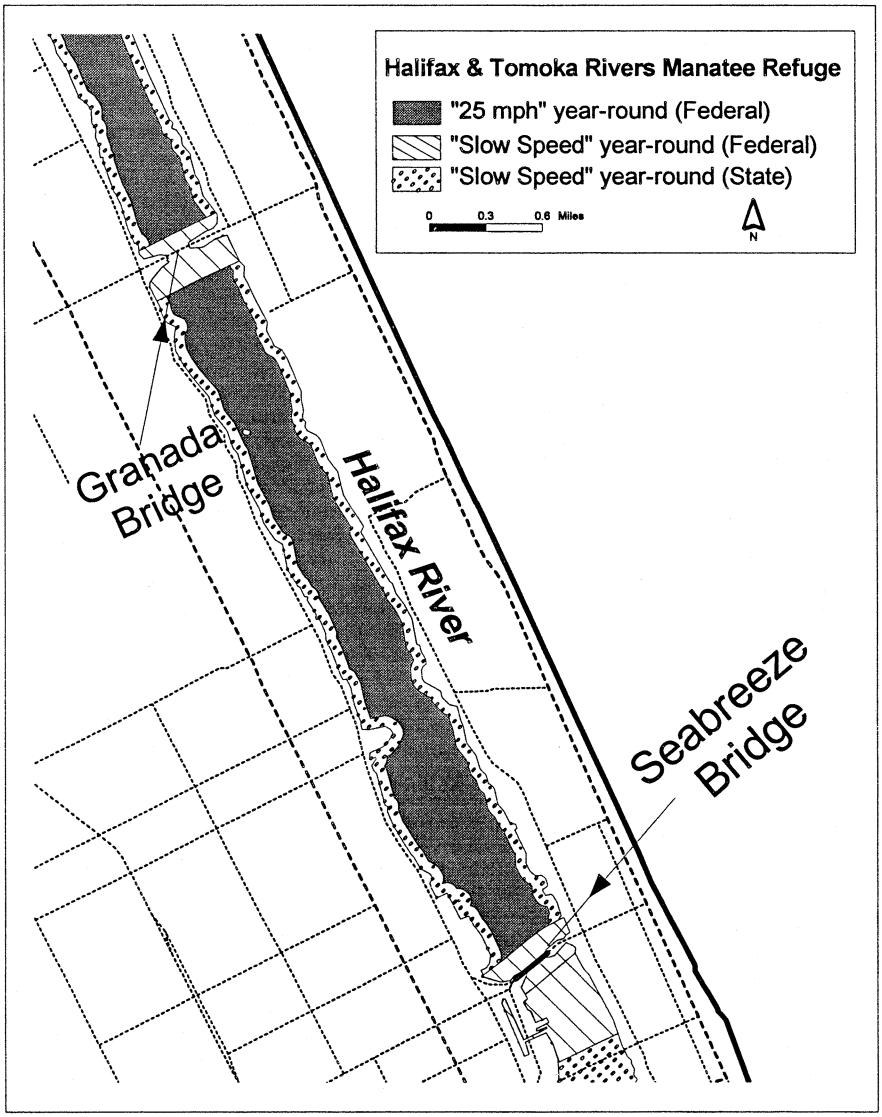
Halifax Creek



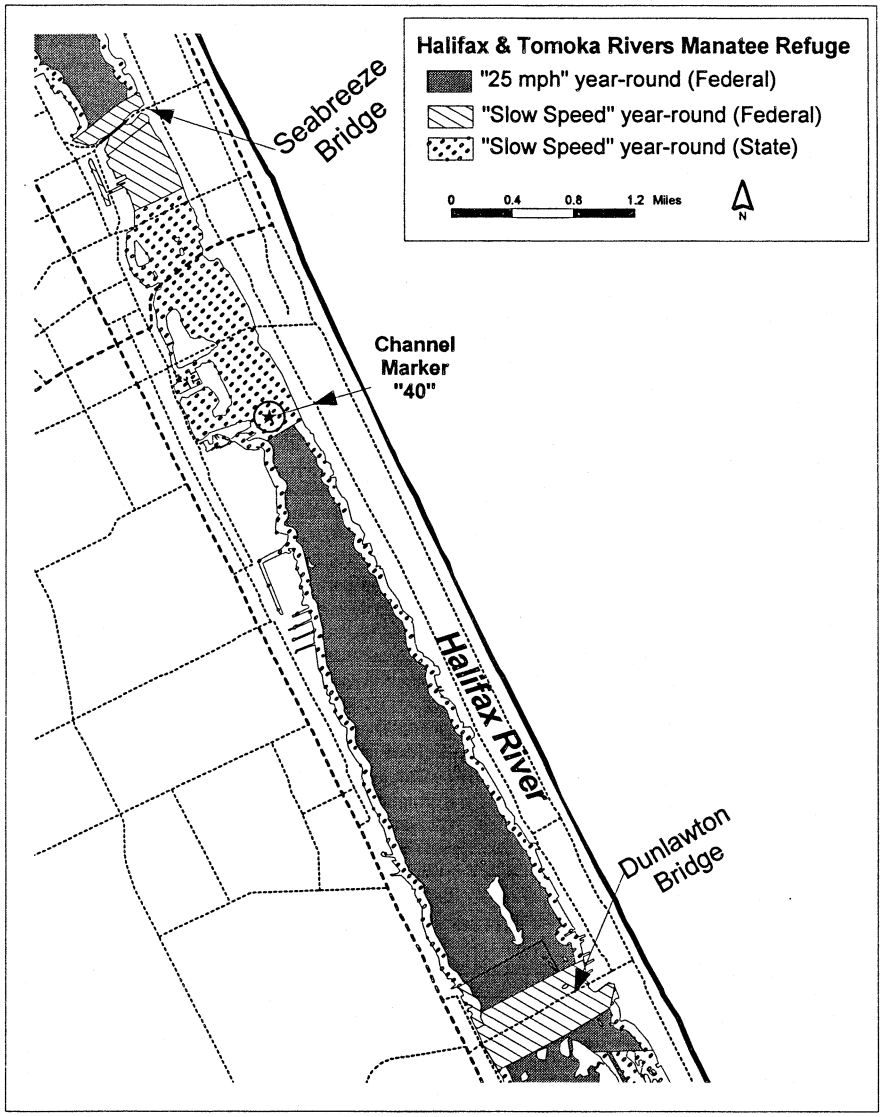
Tomoka River Basin



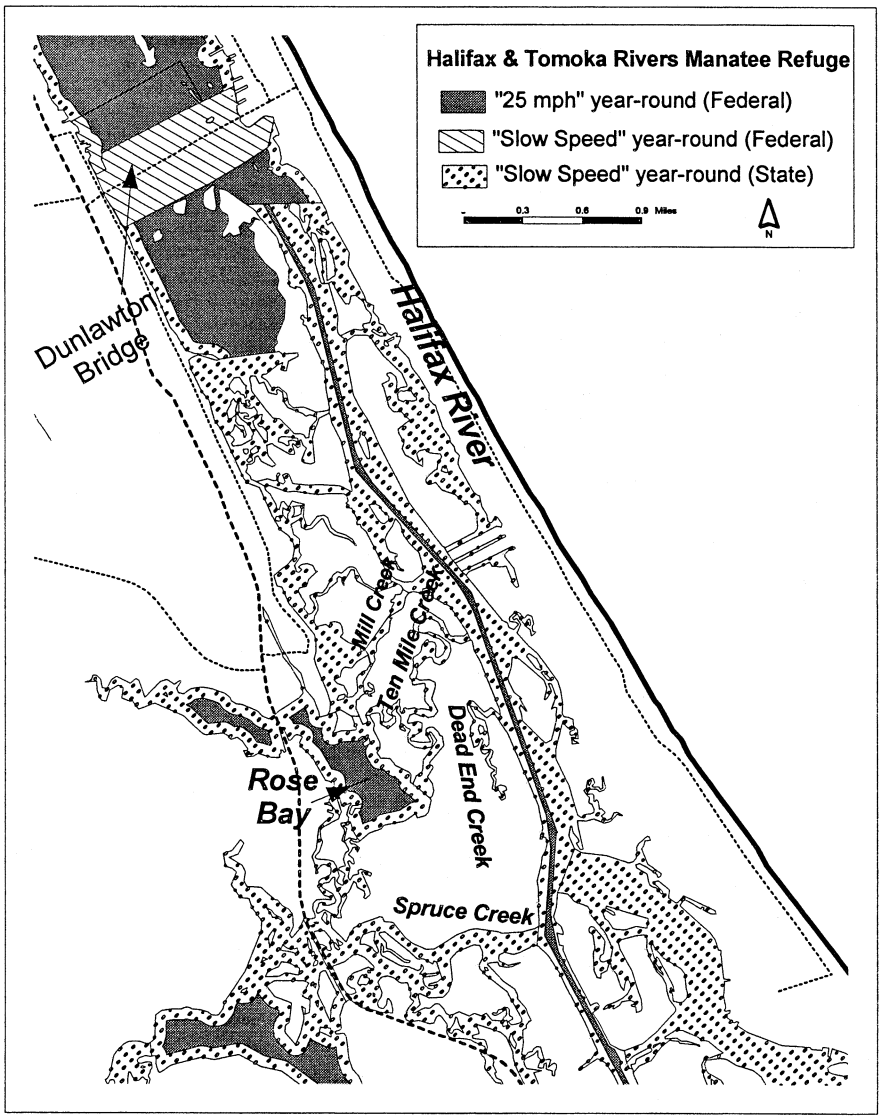
Tomoka River



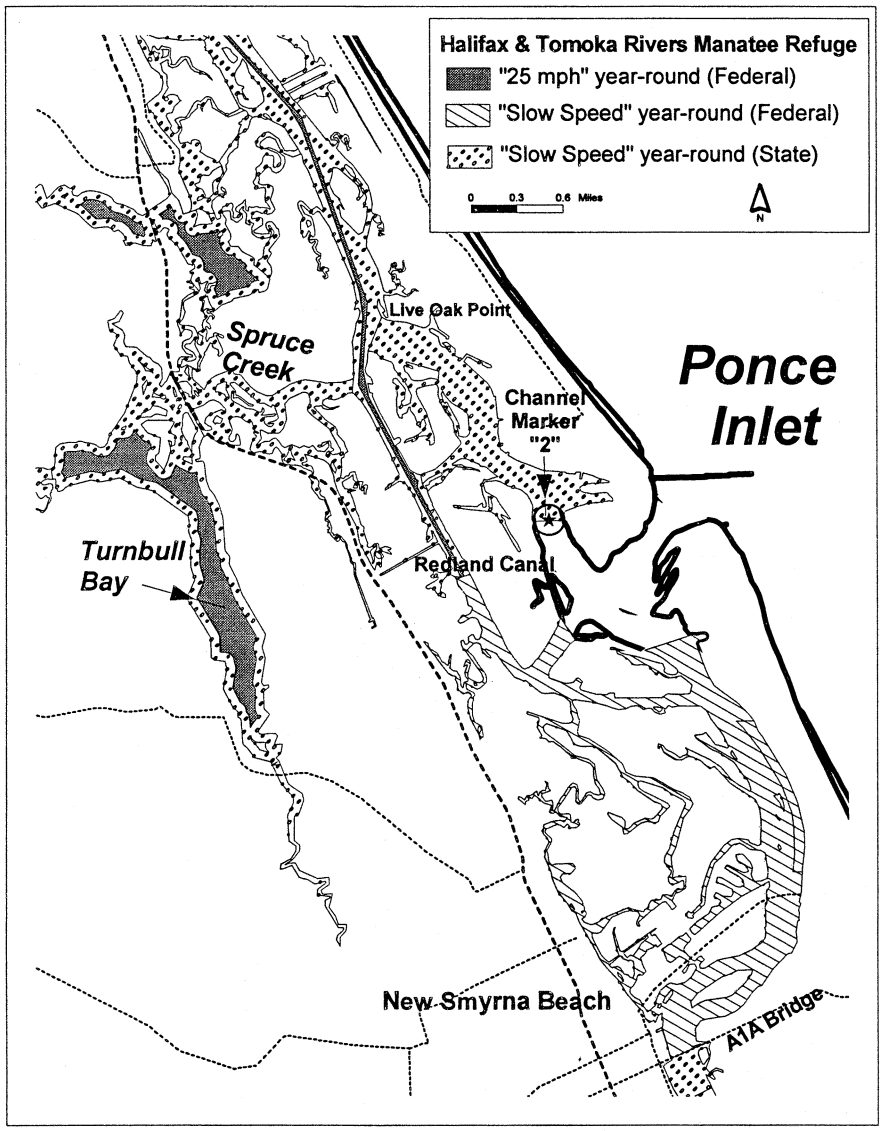
Halifax River A



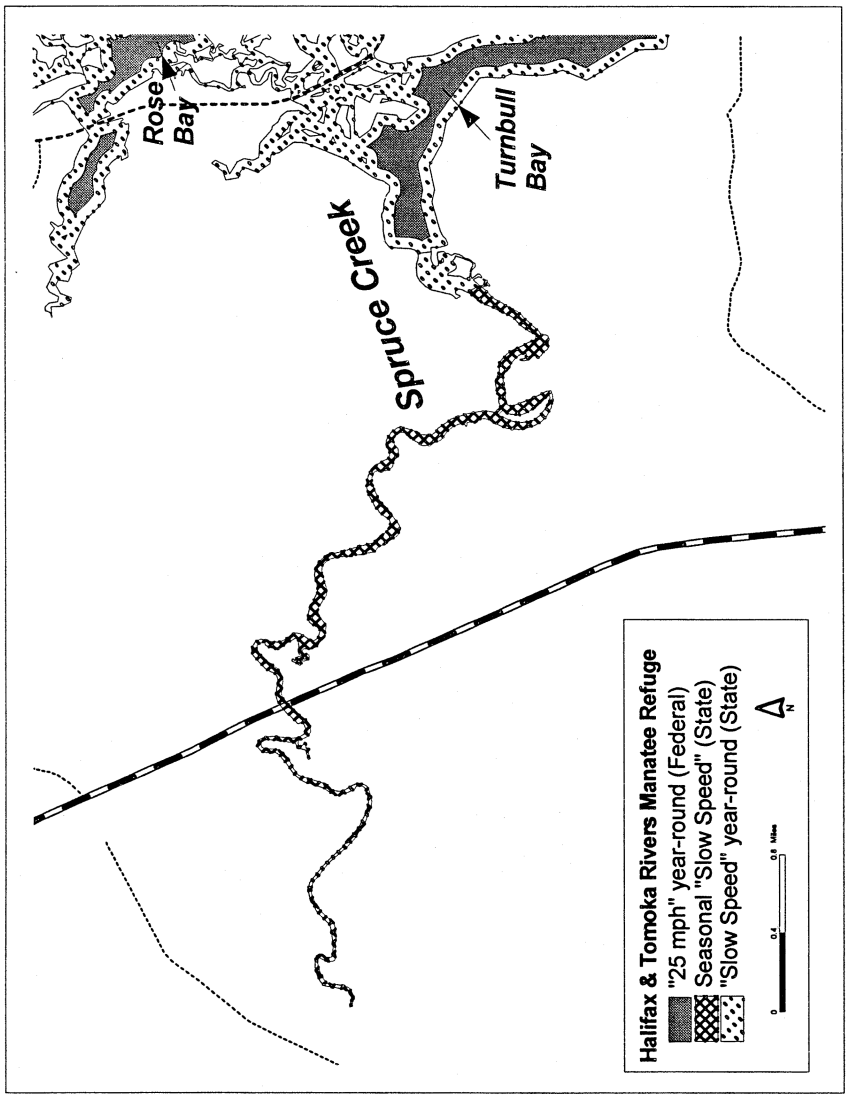
Halifax River B



Ponce Inlet Area A



Ponce Inlet Area B



(13) *The Pine Island-Estero Bay Manatee Refuge.* (i) Watercraft are required to proceed at slow speed all year in all waters of Matlacha Pass, south of a line that bears 90° and 270° from Matlacha Pass Green Channel Marker 77 (approximate latitude 26°40′00″ North, approximate longitude 82°06′00″ West), and north of Pine Island Road (State Road 78), excluding:

(A) The portion of the marked channel otherwise designated in paragraph (c)(13)(iii) of this section;

(B) All waters of Buzzard Bay east and northeast of a line beginning at a point (approximate latitude 26°40′00″ North, approximate longitude 82°05′20″ West) on the southwest shoreline of an unnamed mangrove island east of Matlacha Pass Green Channel Marker

77 and bearing 219° to the northeasternmost point (approximate latitude 26°39′58″ North, approximate longitude 82°05′23″ West) of another unnamed mangrove island, then running along the eastern shoreline of said island to its southeasternmost point (approximate latitude 26°39′36″ North, approximate longitude 82°05′09″ West), then bearing 115° to the westernmost point (approximate latitude 26°39′34″ North, approximate longitude 82°05′05″ West) of the unnamed mangrove island to the southeast, then running along the western shoreline of said island to its southwesternmost point (approximate latitude 26°39′22″ North, approximate longitude 82°04′53″ West), then bearing 123° to the northwesternmost point (approximate latitude 26°39′21″ North, approximate longitude 82°04′52″ West) of an unnamed mangrove island, then running along the western shoreline of said island to its southeasternmost point (approximate latitude 26°39′09″ North, approximate longitude 82°04′44″ West), then bearing 103° to the northwesternmost point (approximate latitude 26°39′08″ North, approximate longitude 82°04′41″ West) of a peninsula on the unnamed mangrove island to the southeast, then running along the southwestern shoreline of said island to its southeasternmost point (approximate latitude 26°38′51″ North, approximate longitude 82°04′18″ West), then bearing 99° to the southernmost point (approximate latitude 26°38′50″ North, approximate longitude 82°04′03″ West) of the unnamed mangrove island to the east, then bearing 90° to the line's terminus at a point (approximate latitude 26°38′50″ North, approximate longitude 82°03′55″ West) on the eastern shoreline of Matlacha Pass; and

(C) All waters of Pine Island Creek and Matlacha Pass north of Pine Island Road (State Road 78) and west and southwest of a line beginning at a point (approximate latitude 26°39′29″ North, approximate longitude 82°06′29″ West) on the western shoreline of Matlacha Pass and bearing 160° to the westernmost point (approximate latitude 26°39′25″ North, approximate longitude 82°06′28″ West) of an unnamed island, then running along the western shoreline of said island to its southernmost point (approximate latitude 26°39′18″ North, approximate longitude 82°06′24″ West), then bearing 128° to the northernmost point (approximate latitude 26°39′12″ North, approximate longitude 82°06′17″ West) of an unnamed mangrove island to the south, then running along the eastern shoreline of said island to its southeasternmost point (approximate latitude 26°39′00″ North, approximate longitude 82°06′09″ West), then bearing 138° to a point (approximate latitude 26°38′45″ North, approximate longitude 82°05′53″ West) on the northern shoreline of Bear Key, then running along the northern shoreline of Bear Key to its easternmost point (approximate latitude 26°38′44″ North, approximate longitude 82°05′46″ West), then bearing 85° to the westernmost point (approximate latitude 26°38′45″ North, approximate longitude 82°05′32″ West) of Deer Key, then running along the northern shoreline of Deer Key to its easternmost point (approximate latitude 26°38′46″ North, approximate longitude 82°05′22″ West), then bearing 103° to the northwesternmost point (approximate latitude 26°38′45″ North, approximate longitude 82°05′17″ West) of the unnamed mangrove island to the east, then running along the western shoreline of said island to its southernmost point (approximate latitude 26°38′30″ North, approximate longitude 82°05′04″ West), then bearing 106° to the westernmost point (approximate latitude 26°38′30″ North, approximate longitude 82°04′57″ West) of the unnamed island to the southeast, then running along the northern and eastern shorelines of said island to a point (approximate latitude 26°38′23″ North, approximate longitude 82°04′51″ West) on its eastern shoreline, then bearing 113° to the northernmost point of West Island (approximate latitude 26°38′21″ North, approximate longitude 82°04′37″ West), then running along the western shoreline of West Island to the point where the line intersects Pine Island Road (State Road 78).

(ii) Watercraft are required to proceed at slow speed all year in all waters of Matlacha Pass, St. James Creek, and San Carlos Bay, south of Pine Island Road (State Road 78), north of a line 500 feet northwest of and parallel to the main marked channel of the Intracoastal Waterway, west of a line that

bears 302° from Intracoastal Waterway Green Channel Marker 99 (approximate latitude 26°31′00″ North, approximate longitude 82°00′52″ West), and east of a line that bears 360° from Intracoastal Waterway Red Channel Marker 10 (approximate latitude 26°29′16″ North, approximate longitude 82°03′35″ West), excluding:

(A) The portions of the marked channels otherwise designated in paragraphs (c)(15)(iv) and (v) of this section;

(B) All waters of Matlacha Pass south of Pine Island Road (State Road 78) and west of the western shoreline of West Island and a line beginning at the southernmost point (approximate latitude 26°37′25″ North, approximate longitude 82°04′17″ West) of West Island and bearing 149° to the northernmost point (approximate latitude 26°37′18″ North, approximate longitude 82°04′12″ West) of the unnamed mangrove island to the south, then running along the eastern shoreline of said island to its southernmost point (approximate latitude 26°36′55″ North, approximate longitude 82°04′02″ West), then bearing 163° to the line's terminus at a point (approximate latitude 26°36′44″ North, approximate longitude 82°03′58″ West) on the eastern shoreline of Little Pine Island;

(C) All waters of Matlacha Pass, Pontoon Bay, and associated embayments south of Pine Island Road (State Road 78) and east of a line beginning at a point (approximate latitude 26°38′12″ North, approximate longitude 82°03′46″ West) on the northwestern shoreline of the embayment on the east side of Matlacha Pass, immediately south of Pine Island Road and then running along the eastern shoreline of the unnamed island to the south to its southeasternmost point (approximate latitude 26°37′30″ North, approximate longitude 82°03′22″ West), then bearing 163° to the northwesternmost point of the unnamed island to the south, then running along the western shoreline of said island to its southernmost point (approximate latitude 26°37′15″ North, approximate longitude 82°03′15″ West), then bearing 186° to the line's terminus at a point (approximate latitude 26°37′10″ North, approximate longitude 82°03′16″ West) on the eastern shoreline of Matlacha Pass;

(D) All waters of Pine Island Creek south of Pine Island Road (State Road 78); and all waters of Matlacha Pass, Rock Creek, and the Mud Hole, west of a line beginning at a point (approximate latitude 26°33′52″ North, approximate longitude 82°04′53″ West) on the western shoreline of Matlacha Pass and bearing 22° to a point (approximate latitude 26°34′09″ North, approximate longitude 82°04′45″ West) on the southern shoreline of the unnamed island to the northeast, then running along the southern and eastern shorelines of said island to a point (approximate latitude 26°34′15″ North, approximate longitude 82°04′39″ West) on its northeastern shoreline, then bearing 24° to a point (approximate latitude 26°34′21″ North, approximate longitude 82°04′36″ West) on the southern shoreline of the large unnamed island to the north, then running along the southern and eastern shorelines of said island to a point (approximate latitude 26°34′31″ North, approximate longitude 82°04′29″ West) on its eastern shoreline, then bearing 41° to the southernmost point (approximate latitude 26°34′39″ North, approximate longitude 82°04′22″ West) of another unnamed island to the northeast, then running along the eastern shoreline of said island to its northwesternmost point (approximate latitude 26°35′22″ North, approximate longitude 82°04′07″ West), then bearing 2° to the southernmost point (approximate latitude 26°35′32″ North, approximate longitude 82°04′07″ West) of the unnamed island to the north, then running along the eastern shoreline of said island to its northernmost point (approximate latitude 26°35′51″ North, approximate longitude 82°03′59″ West), then bearing 353° to the line's terminus at a point (approximate latitude 26°36′08″ North, approximate longitude 82°04′01″ West) on the eastern shoreline of Little Pine Island; and

(E) All waters of Punta Blanca Bay and Punta Blanca Creek, east of the eastern shoreline of Matlacha Pass and east and north of the eastern and northern shorelines of San Carlos Bay.

(iii) Watercraft may not exceed 25 miles per hour, all year, in all waters within the main marked channel in Matlacha Pass south of Green Channel Marker 77 (approximate latitude

26°40′00″ North, approximate longitude 82°06′00″ West) and north of a line perpendicular to the channel at a point in the channel ¼ mile northwest of the Pine Island Road Bridge (State Road 78).

(iv) Watercraft may not exceed 25 miles per hour, all year, in all waters within the main marked channel in Matlacha Pass south of a line perpendicular to the channel at a point in the channel ¼ mile southeast of the Pine Island Road Bridge (State Road 78), and north of a line 500 feet northwest of and parallel to the main marked channel of the Intracoastal Waterway (just north of Green Channel Marker 1).

(v) Watercraft may not exceed 25 miles per hour, all year, in all waters within the marked channel in Matlacha Pass that intersects the main Matlacha Pass channel near Green Channel Marker 15 (approximate latitude 26°31′57″ North, approximate longitude 82°03′38″ West) and intersects the main marked channel of the Intracoastal Waterway near Green Channel Marker 101 (approximate latitude 26°30′39″ North, approximate longitude 82°01′00″ West).

(vi) Watercraft are required to proceed at slow speed from April 1 through November 15 in all canals and boat basins of St. James City and the waters known as Long Cut and Short Cut; and all waters of Pine Island Sound and San Carlos Bay south of a line beginning at the southernmost tip (approximate latitude 26°31′28″ North, approximate longitude 82°06′19″ West) of a mangrove peninsula on the western shore of Pine Island approximately 2200 feet north of Galt Island and bearing 309° to the southeasternmost point (approximate latitude 26°31′32″ North, approximate longitude 82°06′25″ West) of another mangrove peninsula, then running along the southern shoreline of said peninsula to its southwesternmost point (approximate latitude 26°31′40″ North, approximate longitude 82°06′38″ West), then bearing 248° to a point (approximate latitude 26°31′40″ North, approximate longitude 82°06′39″ West) on the eastern shoreline of an unnamed mangrove island, then running along the southern shoreline of said island to its southwesternmost point (approximate latitude 26°31′39″ North, approximate longitude 82°06′44″ West), then bearing 206° to the line's terminus at the northernmost point of the Mac Keever Keys (approximate latitude 26°31′09″ North, approximate longitude 82°07′09″ West), east of a line beginning at said northernmost point of the Mac Keever Keys and running along and between the general contour of the western shorelines of said keys to a point (approximate latitude 26°30′27″ North, approximate longitude 82°07′08″ West) on the southernmost of the Mac Keever Keys, then bearing 201° to a point (approximate latitude 26°30′01″ North, approximate longitude 82°07′19″ West) approximately 150 feet due east of the southeasternmost point of Chino Island, then bearing approximately 162° to Red Intracoastal Waterway Channel Marker 22 (approximate latitude 26°28′57″ North, approximate longitude 82°06′55″ West), then bearing approximately 117° to the line's terminus at Red Intracoastal Waterway Channel Marker 20 (approximate latitude 26°28′45″ North, approximate longitude 82°06′38″ West), north of a line beginning at said Red Intracoastal Waterway Channel Marker 20 and bearing 86° to a point (approximate latitude 26°28′50″ North, approximate longitude 82°05′48″ West) ¼ mile south of York Island, then running parallel to and ¼ mile south of the general contour of the southern shorelines of York Island and Pine Island to the line's terminus at a point on a line bearing 360° from Red Intracoastal Waterway Channel Marker 10 (approximate latitude 26°29′16″ North, approximate longitude 82°03′35″ West), and west and southwest of the general contour of the western and southern shorelines of Pine Island and a line that bears 360° from said Red Intracoastal Waterway Channel Marker 10, excluding the portion of the marked channel otherwise designated in paragraph (c)(13)(vii) of this section.

(vii) Watercraft may not exceed 25 miles per hour from April 1 through November 15 in all waters of the marked channel that runs north of the power lines from the Cherry Estates area of St. James City into Pine Island Sound, east of the western boundary of the zone designated in 17.108(c)(13)(vi), and west of a line perpendicular to the

power lines that begins at the easternmost point (approximate latitude 26°30′25″ North, approximate longitude 82°06′15″ West) of the mangrove island on the north side of the power lines approximately 1,800 feet southwest of the Galt Island Causeway.

(viii) Watercraft are required to proceed at slow speed all year in all waters of San Carlos Bay and Punta Rassa Cove east of a line that bears 352° from the northernmost tip of the northern peninsula on Punta Rassa (approximate latitude 26°29′44″ North, approximate longitude 82°00′33″ West), and south of a line that bears 122° from Intracoastal Waterway Green Channel Marker 99 (approximate latitude 26°31′00″ North, approximate longitude 82°00′52″ West), including all waters of Shell Creek and associated waterways.

(ix) Watercraft are required to proceed at slow speed all year in all waters of San Carlos Bay and the Caloosahatchee River, including the residential canals of Cape Coral, northeast of a line that bears 302° and 122° from Intracoastal Waterway Green Channel Marker 99 (approximate latitude 26°31′00″ North, approximate longitude 82°00′52″ West), west of a line that bears 346° from Intracoastal Waterway Green Channel Marker 93 (approximate latitude 26°31′37″ North, approximate longitude 81°59′46″ West), and north and northwest of the general contour of the northwestern shoreline of Shell Point and a line that bears approximately 74° from the northernmost tip (approximate latitude 26°31′31″ North, approximate longitude 81°59′57″ West) of Shell Point to said Intracoastal Waterway Green Channel Marker 93, excluding the Intracoastal Waterway between markers 93 and 99 (which is already designated as a Federal manatee protection area, requiring watercraft to proceed at slow speed, and is not impacted by this rule).

(x) Watercraft are required to proceed at slow speed from April 1 through November 15 and at not more than 25 miles per hour the remainder of the year in all waters of Hell Peckney Bay southeast of Hurricane Bay, northeast of the northern shorelines of Julies Island and the unnamed island immediately northwest of Julies Island and a line that bears 312° from the northwesternmost point of Julies Island (approximate latitude 26°26′37″ North, approximate longitude 81°54′57″ West), northwest of Estero Bay, and southwest of a line beginning at the southernmost point (approximate latitude 26°27′23″ North, approximate longitude 81°55′11″ West) of an unnamed mangrove peninsula in northwest Hell Peckney Bay and bearing 191° to the northernmost point (approximate latitude 26°27′19″ North, approximate longitude 81°55′11″ West) of an unnamed mangrove island, then running along the northern shoreline of said island to its southeasternmost point (approximate latitude 26°27′11″ North, approximate longitude 81°55′05″ West), then bearing 115° to a point (approximate latitude 26°27′03″ North, approximate longitude 81°54′47″ West) on the northwest shoreline of an unnamed mangrove island, then running along the northern shoreline of said island to its northeasternmost point (approximate latitude 26°27′02″ North, approximate longitude 81°54′33″ West), and then bearing 37° to the line's terminus at the westernmost point of an unnamed mangrove peninsula in eastern Hell Peckney Bay.

(xi) Watercraft are required to proceed at slow speed from April 1 through November 15 and at not more than 25 miles per hour the remainder of the year in all waters of Hendry Creek south of a line that bears 270° from a point (approximate latitude 26°28′40″ North, approximate longitude 81°52′56″ West) on the eastern shoreline of Hendry Creek; and all waters of Estero Bay southeast and east of Hell Peckney Bay, a line that bears 340° from a point (approximate latitude 26°25′56″ North, approximate longitude 81°54′25″ West) on the northern tip of an unnamed mangrove peninsula on the northeastern shoreline of Estero Island, and the northern shoreline of Estero Island, south of Hendry Creek and a line that bears 135° and 315° from Red Channel Marker 18 (approximate latitude 26°27′46″ North, approximate longitude 81°52′00″ West) in Mullock Creek, and north of a line that bears 72° from the northernmost point (approximate latitude 26°24′22″ North, approximate longitude 81°52′34″ West) of Black Island,

including the waters of Buccaneer Lagoon at the southern end of Estero Island, but excluding:

(A) The portions of the marked channels otherwise designated in paragraph (c)(13)(xiii) of this section;

(B) The Estero River; and

(C) To waters of Big Carlos Pass east of a line beginning at a point (approximate latitude 26°24′34″ North, approximate longitude 81°53′05″ West) on the eastern shoreline of Estero Island and bearing 36° to a point (approximate latitude 26°24′40″ North, approximate longitude 81°53′00″ West) on the southern shoreline of Coon Key, south of a line beginning at a point (approximate latitude 26°24′36″ North, approximate longitude 81°52′30″ West) on the eastern shoreline of Coon Key and bearing 106° to a point (approximate latitude 26°24′39″ North, approximate longitude 81°52′34″ West) on the southwestern shoreline of the unnamed mangrove island north of Black Island, and west of a line beginning at a point (approximate latitude 26°24′36″ North, approximate longitude 81°52′30″ West) on the southern shoreline of said unnamed mangrove island north of Black Island and bearing 192° to the northernmost point (approximate latitude 26°24′22″ North, approximate longitude 81°52′34″ West) of Black Island.

(xii) Watercraft are required to proceed at slow speed from April 1 through November 15 and at not more than 25 miles per hour the remainder of the year in all waters of Estero Bay and Big Hickory Bay south of a line that bears 72° from the northernmost point (approximate latitude 26°24′22″ North, approximate longitude 81°52′34″ West) of Black Island, east of the centerline of State Road 865 (but including the waters of the embayment on the eastern side of Black Island and the waters inshore of the mouth of Big Hickory Pass that are west of State Road 865), and north of a line that bears 90° from a point (approximate latitude 26°20′51″ North, approximate longitude 81°50′33″ West) on the eastern shoreline of Little Hickory Island, excluding Spring Creek and the portions of the marked channels otherwise designated under 17.108(c)(13)(xiii) and the portion of Hickory Bay designated in paragraph (c)(13)(xiii) of this section.

(xiii) Watercraft may not exceed 25 miles per hour all year in:

(A) All waters of Big Hickory Bay north of a line that bears 90° from a point (approximate latitude 26°20′51'' North, approximate longitude 81°50′33″ West) on the eastern shoreline of Little Hickory Island, west of a line beginning at a point (approximate latitude 26°20′48″ North, approximate longitude 81°50′24″ West) on the southern shoreline of Big Hickory Bay and bearing 338° to a point (approximate latitude 26°21′39″ North, approximate longitude 81°50′48″ West) on the water in the northwestern end of Big Hickory Bay near the eastern end of Broadway Channel, south of a line beginning at said point on the water in the northwestern end of Big Hickory Bay and bearing 242° to the northernmost point (approximate latitude 26°21′39″ North, approximate longitude 81°50′50″ West) of the unnamed mangrove island south of Broadway Channel, and east of the eastern shoreline of said mangrove island and a line beginning at the southernmost point of said island (approximate latitude 26°21′07″ North, approximate longitude 81°50′58″ West) and bearing 167° to a point on Little Hickory Island (approximate latitude 26°21′03″ North, approximate longitude 81°50′57″ West);

(B) All waters of the main marked North–South channel in northern Estero Bay from Green Channel Marker 37 (approximate latitude 26°26′02 North, approximate longitude 81°54′29″ West) to Green Channel Marker 57 (approximate latitude 26°25′08″ North, approximate longitude 81°53′29″ West);

(C) All waters of the main marked North-South channel in southern Estero Bay south of a line beginning at a point (approximate latitude 26°24′36″ North, approximate longitude 81°52′30″ West) on the southern shoreline of the unnamed mangrove island north of Black Island and bearing 192° to the northernmost point (approximate latitude 26°24′22″ North, approximate longitude 81°52′34″ West) of Black Island, and north and east of Red Channel Marker 62 (approximate latitude 26°21′31″ North, approximate longitude 81°51′20″ West) in Broadway Channel;

(D) All waters within the portion of the marked channel leading to the Gulf

of Mexico through New Pass, west of the North-South channel and east of State Road 865; all waters of the marked channel leading to Mullock Creek north of a line beginning at a point (approximate latitude 26°24′36″ North, approximate longitude 81°52′30″ West) on the eastern shoreline of Coon Key and bearing 106° to a point (approximate latitude 26°24′39″ North, approximate longitude 81°52′34″ West) on the southwestern shoreline of the unnamed mangrove island north of Black Island, and south of Red Channel Marker 18 (approximate latitude 26°27′46″ North, approximate longitude 81°52′00″ West);

(E) All waters of the marked channel leading from the Mullock Creek Channel to the Estero River, west of the mouth of the Estero River. (This designation only applies if a channel is marked in accordance with permits issued by all applicable State and federal authorities. In the absence of a properly permitted channel, this area is as designated under paragraph (c)(13)(xi) of this section);

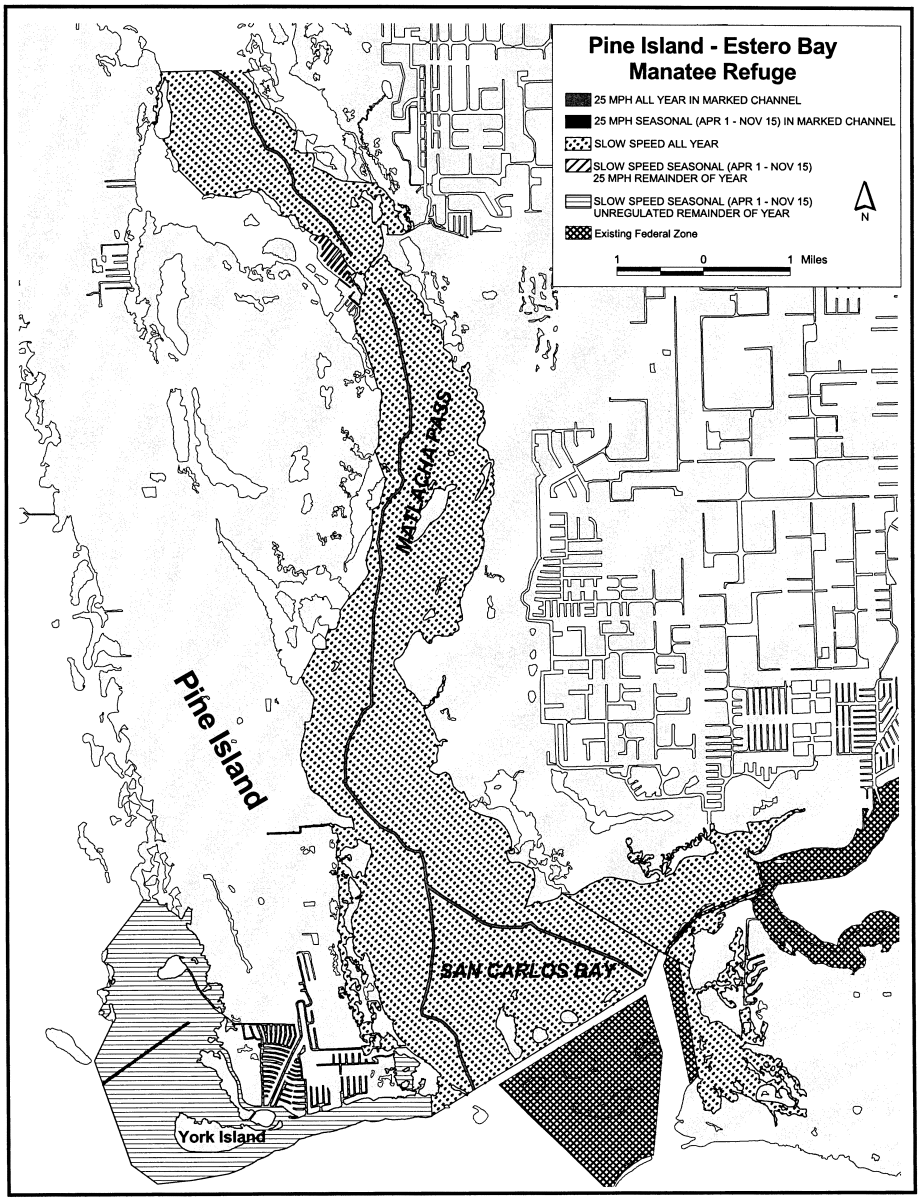
(F) All waters of the marked channel commonly known as Alternate Route Channel, with said channel generally running between Channel Marker 1 (approximate latitude 26°24′29″ North, approximate longitude 81°51′53″ West) and Channel Marker 10 (approximate latitude 26°24′00″ North, approximate longitude 81°51′09″ West);

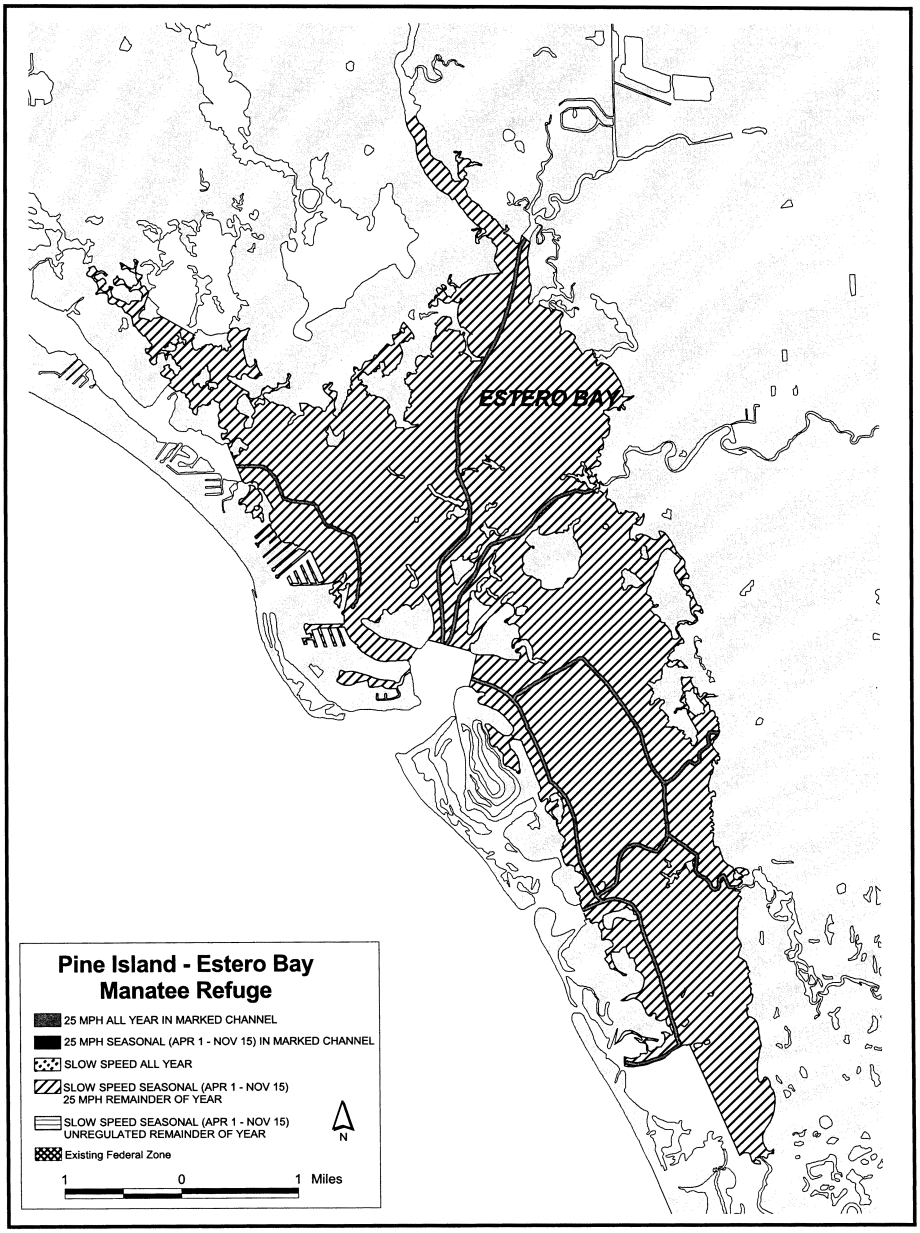
(G) All waters of the marked channel commonly known as Coconut Channel, with said channel generally running between Channel Marker 1 (approximate latitude 26°23′44″ North, approximate longitude 81°50′55″ West) and Channel Marker 23 (approximate latitude 26°24′00″ North, approximate longitude 81°50′30″ West);

(H) All waters of the marked channel commonly known as Southern Passage Channel, with said channel generally running between Channel Marker 1 (approximate latitude 26°22′58″ North, approximate longitude 81°51′57″ West) and Channel Marker 22 (approximate latitude 26°23′27″ North, approximate longitude 81°50′46″ West); and

(I) All waters of the marked channel leading from the Southern Passage Channel to Spring Creek, west of the mouth of Spring Creek.

(xiv) Maps of the Pine Island-Estero Bay Manatee Refuge follow:


Pine Island - Estero Bay
Manatee Refuge
25 MPH ALL YEAR IN MARKED CHANNEL
25 MPH SEASONAL (APR 1 - NOV 15) IN MARKED CHANNEL
SLOW SPEED ALL YEAR
SLOW SPEED SEASONAL (APR 1 - NOV 15)
25 MPH REMAINDER OF YEAR
SLOW SPEED SEASONAL (APR 1 - NOV 15)
UNREGULATED REMAINDER OF YEAR
Existing Federal Zone
1 0 1 Miles
N
MATLACHA PASS
Pine Island
SAN CARLOS BAY
York Island

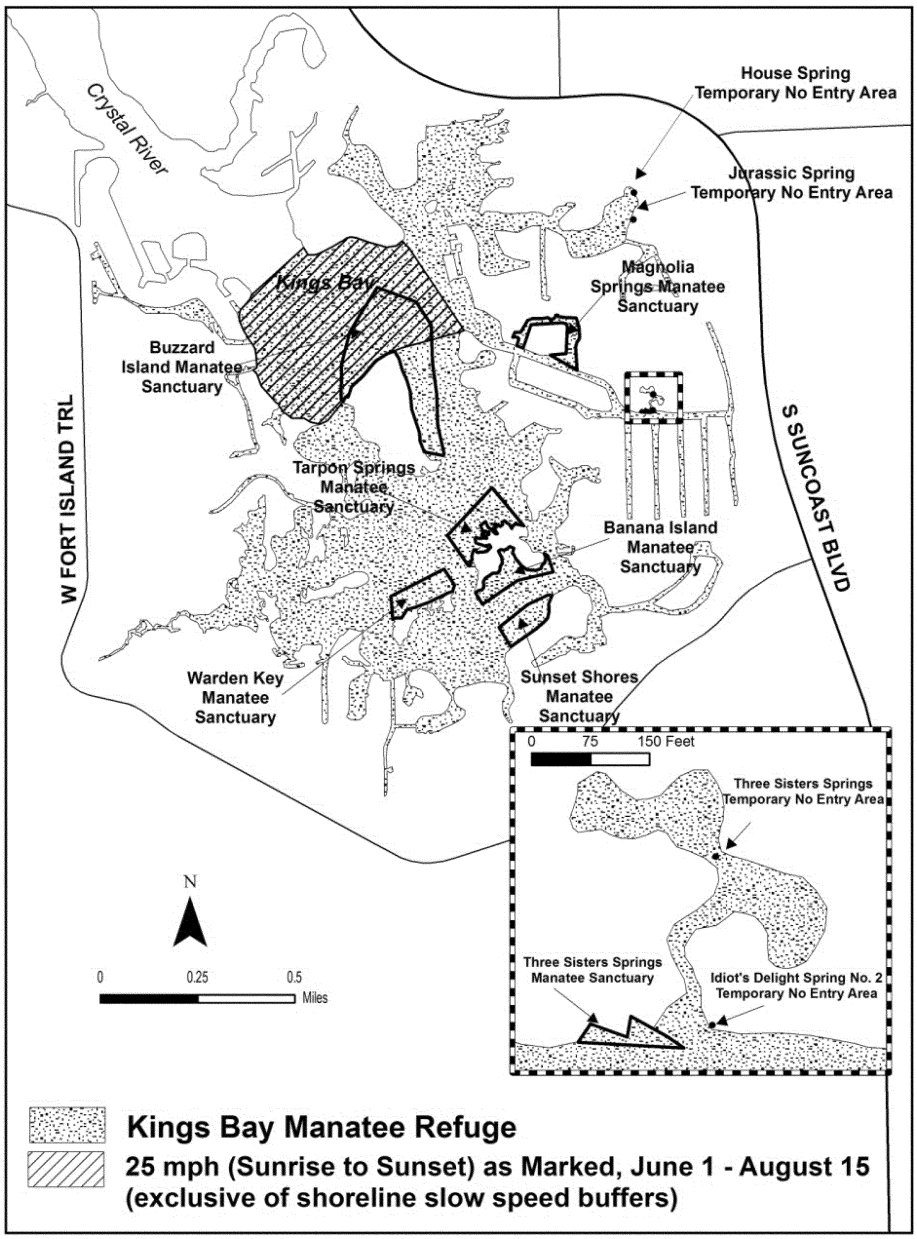


(14) *The Kings Bay Manatee Refuge.* A tract of submerged land that includes all waters of Kings Bay, including all tributaries and adjoining waterbodies, upstream of the confluence of Kings Bay and Crystal River, described by a line that bears North 53°00′00″ East (True) from the northeasternmost point of an island on the southwesterly shore of Crystal River (approximate

latitude 28°53′32″ North, approximate longitude 82°36′23″ West) to the southwesternmost point of a peninsula of Magnolia Shores (approximate latitude 28°53′38″ North, approximate longitude 82°36′16″ West).

(i) *Area covered.* The Kings Bay Manatee Refuge encompasses existing manatee protection areas as described in paragraphs (a)(1) through (a)(7) of this section, and areas outside these sections as depicted on the map in paragraph (c)(14)(ii) of this section.

(ii) *Particular areas.* The following springs fall within the boundaries of the Kings Bay Manatee Refuge. A map showing the entire refuge, including these springs, follows:



(A) *Three Sisters Springs.* A tract of submerged land, lying in Section 28, Township 18 South, Range 17 East, Tallahassee Meridian, Citrus County, Florida, more particularly described as follows: For a point of reference, commence at the northwest corner of said

Section 28 in an east southeast direction to the canal that begins on the west side of Southeast Cutler Spur Boulevard and runs west-northwest to Kings Bay. The spring is north and east of the northern terminus of Southeast Paradise Avenue along the northern shore of said canal. Three Sisters Springs includes three main and numerous smaller spring vents and a spring run that connects the vents to said canal in Crystal River, Citrus County, Florida. This area is not the same as set forth in paragraph (a)(7) of this section. This area is behind the sanctuary (north from the mouth of the channel) as set forth in paragraph (a)(7) of this section.

(*1*) All waterborne activities in this specific area are prohibited from sunset to sunrise from November 15 through March 31 exclusive of the provisions of paragraph (c)(14)(v) of this section.

(*2*) Scuba diving and fishing (including but not limited to fishing by hook and line, by cast net, and by spear) are also prohibited in this specific area from November 15 through March 31 exclusive of the provisions of paragraph (c)(14)(v) of this section.

(*3*) If the provisions of paragraph (c)(14)(vi) of this section are put in effect, all waterborne activities are prohibited in this specific area for the duration established under paragraph (c)(14)(vi) of this section.

(B) *House Spring.* A tract of submerged land, lying in Section 21, Township 18 South, Range 17 East, Tallahassee Meridian, Citrus County, Florida, more particularly described as follows: For a point of reference, commence at the southwest corner of said Section 21 in an east-northeast direction to the northeasternmost corner of Hunter Spring Run. The spring is immediately west of and adjacent to Northeast 2nd Court in Crystal River, Citrus County, Florida.

(C) *Jurassic Spring.* A tract of submerged land, lying in Section 21, Township 18 South, Range 17 East, Tallahassee Meridian, Citrus County, Florida, more particularly described as follows: For a point of reference, commence at the southwest corner of said Section 21 in an east northeast direction to the eastern shore of Hunter Spring Run. The spring is immediately west of the western terminus of Bayshore Drive in Crystal River, Citrus County, Florida.

(D) *Idiot's Delight Number 2 Spring.* A tract of submerged land, lying in Section 28, Township 18 South, Range 17 East, Tallahassee Meridian, Citrus County, Florida, more particularly described as follows: For a point of reference, commence at the northwest corner of said Section 28 in an east southeast direction to the canal that begins on the west side of Southeast Cutler Spur Boulevard and runs west-northwest to Kings Bay. The spring is north and east of the northern terminus of Southeast Paradise Avenue along the northern shore of said canal just east of the southern terminus of the Three Sisters Springs run in Crystal River, Citrus County, Florida.

(iii) *Speed and anchoring restrictions.* (A) Throughout the entire year, watercraft speeds are restricted to slow speed throughout the manatee refuge with the following exceptions:

(*1*) A posted area generally north of Buzzard Island, exclusive of shoreline slow-speed buffer zones, where watercraft may travel at speeds up to 25 miles per hour during daylight hours (sunrise to sunset) from June 1 through August 15;

(*2*) Those areas where access is precluded (manatee sanctuaries, no-entry areas); or

(*3*) Areas where more restrictive speed restrictions are in effect.

(B) From June 1 through August 15, anchorage (other than emergency anchorage) of watercraft is prohibited in the posted high speed (25 miles per hour) area around Buzzard Island referenced in paragraph (c)(14)(iii)(A) of this section.

(iv) *Time and area prohibitions.* When the provisions of paragraphs (c)(14)(v) or (vi) of this section are in effect (November 15 through March 31 and April 1 through November 14, respectively), all waterborne activities, including swimming, diving (including skin and scuba diving), snorkeling, water skiing, surfing, fishing (including with hook and line, by cast net, or spear), and the use of water vehicles (including but not limited to boats powered by engine, wind, or other means; ships powered by engine, wind, or other means; barges,

surfboards, personal watercraft, water skis, and any other devices or mechanisms capable of locomotion on, across, or underneath the surface of the water) are prohibited in areas that are adjacent to and within specified distances from the existing manatee sanctuaries located in Kings Bay (defined in paragraphs (a)(1) through (a)(7) of this section) and the springs defined in paragraph (c)(14)(ii) of this section: Three Sisters Springs, House Spring, Jurassic Spring, and Idiot's Delight Number 2 Spring.

(v) *Expanded temporary no-entry area (November 15 through March 31).* When manatees exceed the capacity of an existing manatee sanctuary or shift usage around an existing manatee sanctuary or shift usage to Three Sisters Springs, House Spring, Jurassic Spring, and Idiot's Delight Number 2 Spring, due to water or weather or other conditions, we will designate ''no-entry'' areas from November 15 through March 31 as appropriate and necessary around any of these sites. The determination to designate and subsequently remove no-entry areas around existing manatee sanctuaries and Three Sisters Springs, House Spring, Jurassic Spring, and Idiot's Delight Number 2 Spring within the Kings Bay Manatee Refuge will be based on aerial survey observations of manatees using the existing sanctuary sites, current weather information, and other sources of credible, relevant information. We will designate no-entry areas within Kings Bay Manatee Refuge and outside of existing sanctuaries as follows:

(A) For the sanctuaries set forth in paragraphs (a)(1) through (a)(6) of this section, to a distance not to exceed 100 feet from the existing sanctuary boundary.

(B) For the Three Sisters Springs Sanctuary, to a distance not to exceed 400 feet from the existing boundary. We do not intend to completely mark off the manmade channel. Expansions could occur directly around the existing sanctuary and north into the area locally known as Three Sisters Springs.

(C) For House Spring and Jurassic Spring, an area that does not exceed 100 feet from the associated spring vents.

(D) For Idiot's Delight Number 2 Spring, an area that does not exceed 25 feet from the associated spring vent. Any temporary designation will be configured to avoid the manmade channel in the canal and will not block access into Three Sisters Springs.

(vi) *Temporary no-entry areas (April 1 through November 14).* Temporary no-entry area designations may be made in the existing manatee sanctuaries located in Kings Bay defined in paragraphs (a)(1) through (a)(7) and paragraphs (c)(14)(v)(A) through (D) of this section prior to November 15 and after March 31 during cold fronts when manatees are present. Designations will remain in effect for the duration of a cold front and only when there is regular manatee use; temporary no-entry area designations will remain in effect for no longer than 14 consecutive days.

(vii) *Posting of temporary no-entry areas designated in accordance with paragraph (c)(14)(v) or (vi) of this section.* Additional temporary protection areas will be posted to distances as described in paragraph (c)(14)(v) of this section and identified by the following devices: buoys, float lines, signs, advisories from onsite Service employees and their designees, or other methods.

(viii) *Notifications of temporary no-entry areas designated in accordance with paragraph (c)(14)(v) or (vi) of this section.* When we determine that the provisions of paragraph (c)(14)(v) or (vi) of this section are appropriate, the temporary protection areas will be designated and posted to distances as described in paragraph (c)(14)(v) of this section. No-entry area designations will occur immediately. We will advise the public of designations through public notice(s) announcing and describing the measures in a local newspaper and other media, including but not limited to, local television and radio broadcasts, Web sites and other news outlets, as soon as time permits. Onsite Service employees and their designees, when present, may also inform waterway users of designations.

(ix) *Prohibited activities (year-round).* We specifically identify and prohibit the activities set forth in this paragraph to prevent the take of one or

more manatees by individuals engaged in waterborne activities while in the water, in boats, or on-shore within the Kings Bay Manatee Refuge. In regard to these prohibited activities, we consider a resting manatee to be a mostly motionless manatee that rises to breathe from the water bottom, in the water column, or on the water's surface. While resting, a manatee may make minor changes in its posture and may slightly shift its position. Minor changes in posture occur when resting manatees breathe or roll. Resting manatees may also make slight movements with their flippers or tail to compensate for drift, etc. Prohibited activities include:

(A) Chasing or pursuing manatee(s).

(B) Disturbing or touching a resting or feeding manatee(s).

(C) Diving from the surface on to a resting or feeding manatee(s).

(D) Cornering or surrounding or attempting to corner or surround a manatee(s).

(E) Riding, holding, grabbing, or pinching or attempting to ride, hold, grab, or pinch a manatee(s).

(F) Poking, prodding, or stabbing or attempting to poke, prod, or stab a manatee(s) with anything, including your hands and feet.

(G) Standing on or attempting to stand on manatee(s).

(H) Separating a mother and calf or attempting to separate a mother and calf.

(I) Separating manatee(s) from a group or attempting to separate manatee(s) from a group.

(J) Giving manatee(s) anything to eat or drink or attempting to give manatee(s) anything to eat or drink.

(K) Actively initiating contact with belted or tagged manatee(s) and associated gear, including any belts, harnesses, tracking devices, or antennae.

(L) Interfering with rescue and research activities.

[45 FR 74881, Nov. 12, 1980, as amended at 57 FR 5990, Feb. 19, 1992; 59 FR 24658, May 12, 1994; 63 FR 55556, Oct. 16, 1998; 67 FR 693, Jan. 7, 2002; 67 FR 66473, Nov. 8, 2002; 68 FR 46898, Aug. 6, 2003; 69 FR 40805, July 7, 2004; 70 FR 17874, Apr. 7, 2005; 70 FR 21969, Apr. 28, 2005; 70 FR 29458, May 23, 2005; 77 FR 15631, Mar. 16, 2012]

§§ 17.109–17.199 [Reserved]

FINDING AIDS

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For changes to this volume of the CFR prior to this listing, consult the annual edition of the monthly List of CFR Sections Affected (LSA). The LSA is available at *www.govinfo.gov*. For changes to this volume of the CFR prior to 2001, see the ''List of CFR Sections Affected, 1949–1963, 1964–1972, 1973–1985, and 1986–2000'' published in 11 separate volumes. The ''List of CFR Sections Affected 1986–2000'' is available at *www.govinfo.gov*.

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