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DEPARTMENT OF COMMERCE

Bureau of Industry and Security

15 CFR Parts 734, 740, 742, 748, 770, and 774

[Docket No. 030529136–3136–01]

RIN 0694–AC78

Export Administration Regulations: Encryption Clarifications and Revisions

AGENCY: Bureau of Industry and Security, Commerce.

ACTION: Final rule.

SUMMARY: This rule amends the Export Administration Regulations (EAR) to clarify when encryption commodities and software may be given *de minimis* treatment, when short-range wireless devices incorporating encryption may be given mass market or retail treatment, and to provide guidance on when exporters are required to submit encryption review requests. It also expands the authorizations according to which travelers departing the United States may take encryption for their personal use, and clarifies that specially designed medical equipment and software are not controlled as encryption or “information security” items under the EAR. Finally this rule implements changes to the Wassenaar Arrangement List of dual-use items (agreed upon in the September 2002 meeting and finalized in December 2002) that eliminate from Export Control Classification Number (ECCN) 5A002 certain types of “Personalized smart cards” and equipment specially designed and limited to controlling access to copyright protected data.

EFFECTIVE DATE: June 17, 2003.

FOR FURTHER INFORMATION CONTACT: Norman LaCroix, Acting Director, Information Technology Controls Division, Office of Strategic Trade and

Foreign Policy Controls, Bureau of Industry and Security, U.S. Department of Commerce at (202) 482–4439.

SUPPLEMENTARY INFORMATION

Background

This rule amends § 734.4(b) to clarify the *de minimis* eligibility of encryption items controlled for National Security (“NS”) or Anti-Terrorism (“AT”) reasons under the Export Administration Regulations (EAR), subject to the applicable notification or review requirements described in § 740.13(e) and § 742.15(b). As with other encryption items no longer subject to “EI” controls (such as items classified under Export Control Classification Numbers (ECCNs) 5A992, 5D992 or 5E992), this rule clarifies that ECCN 5D002 encryption source code that would be considered publicly available under § 734.3(b)(3) of the EAR (and the corresponding object code) is eligible for *de minimis* treatment once exporters have complied with the applicable notification requirement that releases such ECCN 5D002 software from “EI” controls.

This rule also updates License Exception BAG and the Related Control notes to ECCN 5A002 relative to the Wassenaar Arrangement List of dual-use items, and in several sections of the EAR clarifies existing instructions related to encryption commodities and software pre-loaded onto laptops, handheld devices, computers or other equipment. This rule also adds a “checklist” on encryption and other “information security” functions to Supplement 5 to part 742 of the EAR, to help exporters more fully consider and identify controlled encryption and “information security” components within their products, when making classification decisions and assessing whether an encryption review by BIS is required.

Consistent with the standing export control agreement among Wassenaar Arrangement member nations, this rule also adds a *nota bene* (“NB”) immediately following Note 1 in Category 5 part II that clarifies that commodities and software specially designed for medical end-use that incorporate encryption items listed in Category 5 part II are not controlled by Category 5, part II of the Commerce Control List. This rule thus clarifies that a commodity or software product that is

specially designed for medical end-use is classified as EAR99, even if the medical product incorporates another product, part or component that would otherwise be classified as 5A002, 5D002, 5A992 or 5D992.

This rule expands the scope of License Exception BAG by allowing U.S. citizens or permanent resident aliens of the United States to export encryption commodities and software for their personal use to any destination except Country Group E:1. Persons other than U.S. citizens or permanent resident aliens of the United States (except nationals of countries listed in Country Group E:1 of Supplement No. 1 to part 740 who are not U.S. citizens or permanent resident aliens of the United States) may also take such commodities and software as accompanying baggage for their personal use to any destination except Country Group E:1. This rule updates the provisions in 740.14(d) for “unaccompanied baggage” by permitting shipments of personal use encryption commodities and software subject to “EI” controls to the same destinations that are permitted for CB, MT, NS and NP controlled items.

In the Related Control notes to ECCN 5A002, the previous restriction to “one-time” copy control of copyright protected audio/video data has been removed. Likewise, as is now the case for such playback audio/video data, software that is subject to the EAR but not specified on the Commerce Control List (*i.e.*, items that are classified as EAR99) remains classified EAR99 when copy protected. Lastly, Related Control note (a) is amended and divided into two sub-paragraphs.

Although the Export Administration Act expired on August 20, 2001, Executive Order 13222 of August 17, 2001 (66 FR 44025, August 22, 2001), as extended by the notice of August 14, 2002 (67 FR 53721, August 16, 2002), continues the Regulations in effect under the International Emergency Economic Powers Act.

Rulemaking Requirements

1. This final rule has been determined to be not significant for purposes of E.O. 12866.

2. Notwithstanding any other provision of law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply, with a collection of information subject to the requirements of the

Paperwork Reduction Act, unless that collection of information displays a currently valid Office of Management and Budget Control Number. This rule involves a collection of information subject to the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 *et seq.*). This collection has been approved by the Office of Management and Budget under control number 0694-0088, "Multi-Purpose Application," which carries a burden hour estimate of 45 minutes for a manual submission and 40 minutes for an electronic submission.

3. This rule does not contain policies with Federalism implications as that term is defined under E.O. 13132.

4. The provisions of the Administrative Procedure Act (5 U.S.C. 553) requiring notice of proposed rulemaking, the opportunity for public participation, and a delay in effective date, are inapplicable because this regulation involves a military and foreign affairs function of the United States (5 U.S.C. 553(a)(1)). Further, no other law requires that a notice of proposed rulemaking and an opportunity for public comment be given for this interim rule. Because a notice of proposed rulemaking and an opportunity for public comment are not required to be given for this rule under the Administrative Procedure Act or by any other law, the analytical requirements of the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*) are not applicable. Therefore, this regulation is issued in final form. Although there is no formal comment period, public comments on this regulation and on proposals to further update the encryption provisions of the EAR are welcome on a continuing basis. Comments should be submitted to Sharron Cook, Office of Exporter Services, Bureau of Industry and Security, Department of Commerce, PO Box 273, Washington, DC 20044.

List of Subjects

15 CFR Part 734

Administrative practice and procedure, Exports, Foreign trade, Reporting and recordkeeping requirements.

15 CFR Parts 740 and 748

Administrative practice and procedure, Advisory committees, Exports, Foreign trade, Reporting and recordkeeping requirements.

15 CFR Parts 742, 770, and 774

Exports, Foreign trade.

■ Accordingly, parts 734, 740, 742, 748, 770, and 774 of the Export

Administration Regulations (15 CFR parts 730-799) are amended as follows:

PART 734—[AMENDED]

■ 1. The authority citation for part 734 continues to read as follows:

Authority: 50 U.S.C. app. 2401 *et seq.*; 50 U.S.C. 1701 *et seq.*; E.O. 12938, 59 FR 59099, 3 CFR, 1994 Comp., p. 950; E.O. 13020, 61 FR 54079, 3 CFR, 1996 Comp. p. 219; E.O. 13026, 61 FR 58767, 3 CFR, 1996 Comp., p. 228; E.O. 13222, 66 FR 44025, 3 CFR, 2001 Comp., p. 783; notice of November 9, 2001, 66 FR 56965, 3 CFR, 2001 Comp., p. 917; notice of August 14, 2002, 67 FR 53721, August 16, 2002.

■ 2. Section 734.4 is amended by revising paragraph (b) to read as follows:

§ 734.4 De minimis U.S. content.

(a) * * *

(b) There is no *de minimis* level for foreign-made items that incorporate U.S.-origin items controlled for "EI" reasons under ECCN 5A002, 5D002 or 5E002 on the Commerce Control List (Supplement No. 1 to part 774 the EAR). However, exporters may, as part of an encryption review request, ask that software controlled for EI reasons under ECCN 5D002 and eligible for export under the "retail" or "source code" provisions of license exception ENC, and parts and components controlled under ECCN 5A002, be made eligible for *de minimis* treatment. The review of *de minimis* eligibility will take U.S. national security interests into account. Other encryption items controlled for NS or AT reasons under ECCNs 5D002, 5A992, 5D992, and 5E992 are not eligible for *de minimis* treatment, unless exporters have complied with the applicable notification or review requirements described in § 740.13(e), § 742.15(b)(1), and § 742.15(b)(2) of the EAR. Encryption items controlled by ECCN 5A992, 5D992, or 5E992 and described in § 742.15(b)(3) of the EAR are not subject to these notification or review requirements.

* * * * *

PART 740—[AMENDED]

■ 3. The authority citation for part 740 continues to read as follows:

Authority: 50 U.S.C. app. 2401 *et seq.*; 50 U.S.C. 1701 *et seq.*; sec. 901-911, Pub. L. 106-387; E.O. 13026, 61 FR 58767, 3 CFR, 1996 Comp., p. 228; E.O. 13222, 66 FR 44025, 3 CFR, 2001 Comp., p. 783; notice of August 14, 2002, 67 FR 53721, August 16, 2002.

■ 4. Section 740.9 is amended by revising paragraph (a)(2)(i) to read as follows:

§ 740.9 Temporary imports, exports, and reexports (TMP).

* * * * *

(a) * * *

(2) * * *

(i) *Tools of trade.* Usual and reasonable kinds and quantities of tools of trade (commodities and software) for use by the exporter or employees of the exporter in a lawful enterprise or undertaking of the exporter. Eligible tools of trade may include, but are not limited to, such equipment and software as is necessary to commission or service goods, provided that the equipment or software is appropriate for this purpose and that all goods to be commissioned or serviced are of foreign origin, or if subject to the EAR, have been legally exported or reexported. The tools of trade must remain under the effective control of the exporter or the exporter's employee (see part 772 of the EAR for a definition of "effective control"). All tools of trade may accompany the individual departing from the United States or may be shipped unaccompanied within one month before the individual's departure from the United States, or at any time after departure. No tools of the trade may be taken to Country Group E:2 (see Supplement No.1 to part 740) or Sudan. For exports under this License Exception of laptops, handheld devices and other computers and equipment loaded with encryption commodities or software, refer to item interpretation 13 in § 770.2 of the EAR.

* * * * *

5. Section 740.14 is amended by revising "items" in the last sentence of paragraph (b)(4) to read "commodities and software" and by revising paragraphs (d) and (f) to read as follows:

§ 740.14 Baggage (BAG).

* * * * *

(d) *Special provision: unaccompanied baggage.* Individuals departing the United States may ship unaccompanied baggage, which is baggage sent from the United States on a carrier other than that on which an individual departs. Crew members of exporting carriers may not ship unaccompanied baggage. Unaccompanied shipments under this License Exception shall be clearly marked "BAGGAGE." Shipments of unaccompanied baggage may be made at the time of, or within a reasonable time before or after departure of the consignee or owner from the United States. Personal baggage controlled for chemical and biological weapons (CB), missile technology (MT), national security (NS), encryption items (EI) or nuclear nonproliferation (NP) must be shipped within 3 months before or after the month in which the consignee or owner departs the United States. However, commodities controlled for

CB, MT, NS, EI or NP may not be exported under this License Exception as unaccompanied baggage to Country Groups D:1, D:2, D:3, D:4, or E:1. (See Supplement No. 1 of this part).

* * * * *

(f) *Special provisions: encryption commodities and software subject to EI controls on the Commerce Control List.* (1) A U.S. citizen or permanent resident alien of the United States as defined by 8 U.S.C. 1101(a)(20) may use this license exception to export or reexport encryption commodities and software to any destination not in Country Group E:1 of Supplement No. 1 of this part.

(2) A person other than a U.S. citizen or permanent resident alien of the United States as defined by 8 U.S.C. 1101(a)(20) (except a national of a country listed in Country Group E:1 of Supplement No. 1 of this part who is not a U.S. citizen or permanent resident alien of the United States) may also use this license exception to export or reexport encryption commodities and software to any destination not in Country Group E:1 of Supplement No. 1 of this part.

■ 6. Section 740.17 is amended by revising paragraph (b)(3)(iii)(H) to read as follows:

§ 740.17 Encryption Commodities and Software (ENC).

* * * * *

- (b) * * *
(3) * * *
(iii) * * *

(H) Short-range wireless components and software that do not qualify as mass market. Commodities and software that would not otherwise be controlled under Category 5 (telecommunications and “information security”) of the Commerce Control List, but which are controlled under ECCN 5A002 or 5D002 only because they incorporate components or software that provide short-range wireless encryption functions (e.g., with an operating range typically not exceeding 100 meters), may be exported or reexported under the retail provisions of License Exception ENC, without review or reporting.

* * * * *

PART 742—[AMENDED]

■ 7. The authority citation for part 742 continues to read as follows:

Authority: 50 U.S.C. app. 2401 *et seq.*; 50 U.S.C. 1701 *et seq.*; 18 U.S.C. 2510 *et seq.*; 22 U.S.C. 3201 *et seq.*; 42 U.S.C. 2139a; sec. 901–911, Pub. L. 106–387; sec. 221, Pub. L. 107–56; E.O. 12058, 43 FR 20947, 3 CFR, 1978 Comp., p. 179; E.O. 12851, 58 FR 33181, 3 CFR, 1993 Comp., p. 608; E.O. 12938, 59

FR 59099, 3 CFR, 1994 Comp., p. 950; E.O. 13026, 61 FR 58767, 3 CFR, 1996 Comp., p. 228; E.O. 13222, 66 FR 44025, 3 CFR, 2001 Comp., p. 783; notice of November 9, 2001, 66 FR 56965, 3 CFR, 2001 Comp., p. 917; notice of August 14, 2002, 67 FR 53721, August 16, 2002.

■ 8. Section 742.15 is amended by revising the first two sentences of paragraph (b) (1), and revising paragraph (b)(3)(ii) to read as follows:

§ 742.15 Encryption items.

* * * * *

- (b) * * *

(1) *Notification requirement for specified encryption items.* You may export or reexport encryption items controlled under ECCN 5A992, 5D992 or 5E992 and identified in paragraphs (b)(1)(i) and (b)(1)(ii) of this section to most destinations without a license (NLR: No License Required), provided that you have submitted to BIS, by the time of export, the information described in paragraphs (a) through (e) of Supplement No. 6 of this part. For notifications submitted under paragraph (b)(1)(i) of this section, you must also provide specific information describing how your products qualify for mass market treatment under the criteria in the Cryptography Note (Note 3) of Category 5, Part 2, of the Commerce Control List (Supplement No. 1 to part 774 of the EAR). * * *

* * * * *

- (3) * * *

(ii) *Mass market short-range wireless commodities or software.* Mass market commodities or software that would not otherwise be controlled under Category 5 (telecommunications and “information security”) of the Commerce Control List, but which are controlled under ECCN 5A992 or 5D992 only because they incorporate components or software that provide short-range wireless encryption functions (e.g., wireless products with an operating range typically not exceeding 100 meters).

* * * * *

■ 9. Part 742 is amended by adding a new Supplement No. 5 to read as follows:

SUPPLEMENT NO. 5 TO PART 742—CHECKLIST ON ENCRYPTION AND OTHER “INFORMATION SECURITY” FUNCTIONS

1. Does your product perform “cryptography”, or otherwise contain any parts or components that are capable of performing any of the following “information security” functions? (Mark with an “X” all that apply)

- a. _____ encryption
b. _____ decryption only (no encryption)
c. _____ key management/public key infrastructure (PKI)

- d. _____ authentication (e.g., password protection, digital signatures)
e. _____ copy protection
f. _____ anti-virus protection
g. _____ other (please explain) :

h. _____ NONE/NOT APPLICABLE

2. For items with encryption, decryption and/or key management functions (1.a, 1.b, 1.c above):

a. What symmetric algorithms and key lengths (e.g., 56-bit DES, 112/168-bit Triple-DES, 128/256-bit AES/Rijndael) are implemented or supported?

b. What asymmetric algorithms and key lengths (e.g., 512-bit RSA/Diffie-Hellman, 1024/2048-bit RSA/Diffie-Hellman) are implemented or supported?

c. What encryption protocols (e.g., SSL, SSH, IPSEC or PKCS standards) are implemented or supported?

d. What type of data is encrypted?

3. For products that contain an “encryption component”, can this encryption component be easily used by another product, or else accessed/re-transferred by the end-user for cryptographic use?

PART 748—[AMENDED]

■ 10. The authority citation for part 748 continues to read as follows:

Authority: 50 U.S.C. app. 2401 *et seq.*; 50 U.S.C. 1701 *et seq.*; E.O. 13026, 61 FR 58767, 3 CFR, 1996 Comp., p. 228; E.O. 13222, 66 FR 44025, 3 CFR, 2001 Comp., p. 783; notice of August 14, 2002, 67 FR 53721, August 16, 2002.

■ 11. Section 748.3 is amended by adding a sentence to the end of paragraph (a), and revising (d) to read as follows:

§ 748.3 Classification requests, advisory opinions, and encryption review requests.

(a) *Introduction.* * * * A review of the questions provided in Supplement No. 5 to part 742 of the EAR may assist in determining whether you must submit an encryption review request (see paragraph (d) of this section) for your particular item.

* * * * *

(d) *Review requests for encryption items.* A Department of Commerce review of encryption items transferred from the U.S. Munitions List consistent with Executive Order 13026 of November 15, 1996 (3 CFR, 1996 Comp., p. 228) and pursuant to the Presidential Memorandum of that date may be required to determine eligibility under License Exception ENC or for release from “EI” controls. Refer to Supplement No. 5 to part 742 of the EAR for questions that provide initial guidance in determining whether you must submit an encryption review request for your item. Refer to Supplement No. 6 to part 742 of the EAR for a complete list of technical information that is required for encryption review requests. Refer

also to § 742.15(b) of the EAR for instructions regarding mass market encryption commodities and software. Refer to § 740.17 of the EAR for the provisions of License Exception ENC.

■ 12. Part 748, Supplement No. 1 is amended by revising the paragraph labeled “Block 5” to read as follows:

SUPPLEMENT NO. 1 TO PART 748—BIS—748P, BIS—748P—A; ITEM APPENDIX, AND BIS—748P—B; END USER APPENDIX; MULTIPURPOSE APPLICATION INSTRUCTIONS

* * * * *

Block 5: Type of Application. *Export*. If the items are located within the United States, and you wish to export those items, mark the Box labeled “Export” with an (X). *Reexport*. If the items are located outside the United States, mark the Box labeled “Reexport” with an (X). *Classification*. If you are requesting BIS to classify your item against the Commerce Control List (CCL), mark the Box labeled “Classification Request” with an (X). *Encryption Review*. If you are requesting encryption review under License Exception ENC (§ 740.17 of the EAR) or “mass market” encryption provisions (§ 742.15(b)(2) of the EAR), mark the Box labeled “Classification Request” with an (X). *Special Comprehensive License*. If you are submitting a Special Comprehensive License application in accordance with the procedures described in part 752 of the EAR, mark the Box labeled “Special Comprehensive License” with an (X).

* * * * *

■ 13. Part 748, Supplement No. 2 is amended by adding a new paragraph (r) immediately following paragraph (q) and reading as follows:

SUPPLEMENT NO. 2 TO PART 748—UNIQUE LICENSE APPLICATION REQUIREMENTS

* * * * *

(r) *Encryption review requests*. Enter, in Block 9 (Special Purpose) of the BIS—748P, “License Exception ENC” if you are submitting an encryption review request for License Exception ENC (§ 740.17 of the EAR) or “mass market encryption” if you are submitting an encryption review request under the mass market encryption provisions (§ 742.15(b)(2) of the EAR). If you seek an encryption review for another reason, enter “encryption—other”.

PART 770—[AMENDED]

■ 14. The authority citation for part 770 continues to read as follows:

Authority: 50 U.S.C. app. 2401 *et seq.*; 50 U.S.C. 1701 *et seq.*; E.O. 13222, 66 FR 44025, 3 CFR, 2001 Comp., p. 783; notice of August 14, 2002, 67 FR 53721, August 16, 2002.

■ 15. Section 770.2 is amended by revising paragraph (m) to read as follows:

§ 770.2 Item interpretations.

* * * * *

(m) *Interpretation 13: Encryption commodities and software controlled for EI reasons*. Encryption commodities and software controlled for EI reasons under ECCNs 5A002 and 5D002 may be pre-loaded on a laptop, handheld device or other computer or equipment and exported under the tools of trade provision of License Exception TMP or the personal use exemption under License Exception BAG, subject to the terms and conditions of such License Exceptions. This provision replaces the personal use exemption of the International Traffic and Arms Regulations (ITAR) that existed for such software prior to December 30, 1996. Neither License Exception TMP nor License Exception BAG contains a reporting requirement. Like other “information security” “software”, components, “electronic assemblies” or modules, the control status of encryption commodities and software is determined in Category 5, part 2 even if they are bundled, commingled or incorporated in a computer or other equipment. However, commodities and software specially designed for medical end-use that incorporate an item in Category 5, part 2 are not controlled in Category 5, part 2. See Note 1 to Category 5, part 2 (“Information Security”) of Supplement No. 1 to Part 774 (the Commerce Control List) of the EAR.

* * * * *

PART 774—[AMENDED]

Supplement No. 1 to Part 774 (The Commerce Control List)—[Amended]

■ 16. The authority citation for part 774 continues to read as follows:

Authority: 50 U.S.C. app. 2401 *et seq.*; 50 U.S.C. 1701 *et seq.*; 10 U.S.C. 7420; 10 U.S.C. 7430(e); 18 U.S.C. 2510 *et seq.*; 22 U.S.C. 287c, 22 U.S.C. 3201 *et seq.*; 22 U.S.C. 6004; 30 U.S.C. 185(s), 185(u); 42 U.S.C. 2139a; 42 U.S.C. 6212; 43 U.S.C. 1354; 46 U.S.C. app. 466c; 50 U.S.C. app. 5; sec. 901–911, Pub. L. 106–387; sec. 221, Pub. L. 107–56; E.O. 13026, 61 FR 58767, 3 CFR, 1996 Comp., p. 228; E.O. 13222, 66 FR 44025, 3 CFR, 2001 Comp., p. 783; notice of August 14, 2002, 67 FR 53721, August 16, 2002.

■ 17. Supplement No. 1 to Part 774 (Commerce Control List), Category 5—Telecommunications and “Information Security”, following the heading II—“INFORMATION SECURITY” is amended by adding a new Nota Bene (“N.B.”) immediately following Note 1, and amending Export Control Classification Number (ECCN) 5A002 by revising the *Related Controls* paragraph of the List of Items Controlled section as set forth below:

SUPPLEMENT NO. 1 TO PART 774—THE COMMERCE CONTROL LIST

* * * * *

Category 5—Telecommunications and “Information Security”

* * * * *

Part II. “Information Security”

Note 1: * * *

N.B. to Note 1: Commodities and software specially designed for medical end-use that incorporate an item in Category 5, part 2 are not classified in any ECCN in Category 5, part 2.

* * * * *

A. SYSTEMS, EQUIPMENT AND COMPONENTS

5A002 Systems, equipment, application specific “electronic assemblies”, modules and integrated circuits for “information security”, as follows (see List of Items Controlled), and other specially designed components therefor.

* * * * *

List of Items Controlled

Unit * * *

Related Controls: See also 5A992. This entry does not control: (a) “Personalized smart cards”: (1) Where the cryptographic capability is restricted for use in equipment or systems excluded from control paragraphs (b) through (f) of this note; or (2) For general public-use applications where the cryptographic capability is not user-accessible and it is specially designed and limited to allow protection of personal data stored within. Note that if a “personalized smart card” has multiple functions, the control status of each function is assessed individually; (b) Receiving equipment for radio broadcast, pay television or similar restricted audience broadcast of the consumer type, without digital encryption except that exclusively used for sending the billing or program-related information back to the broadcast providers; (c) Portable or mobile radiotelephones for civil use (e.g., for use with commercial civil cellular radio communications systems) that are not capable of end-to-end encryption; (d) Equipment where the cryptographic capability is not user-accessible and which is specially designed and limited to allow any of the following: (1) Execution of copy-protected “software”; (2) Access to any of the following: (a) Copy-protected contents stored on read-only media; or (b) Information stored in encrypted form on media (e.g., in connection with the protection of intellectual property rights) where the media is offered for sale in identical sets to the public; or (3) Copying control of copyright protected audio/video data; (e) Cryptographic equipment specially designed and limited for banking use or money transactions; (f) Cordless telephone equipment not capable of end-to-end encryption where the maximum effective range of unboosted cordless operation (e.g., a single, unrelayed hop between terminal and home basestation) is less than 400 meters according to the manufacturer’s specifications. These items are controlled under ECCN 5A992.

Related Definitions: * * *
Items: * * *

Dated: June 10, 2003.

James J. Jochum,
*Assistant Secretary for Export
Administration.*

[FR Doc. 03-15189 Filed 6-16-03; 8:45 am]

BILLING CODE 3510-33-P

SECURITIES AND EXCHANGE COMMISSION

17 CFR Part 201

[Release Nos. 33-8240; 34-48018; 35-
27686; 39-2408; IA-2137; IC-26074; File No.
S7-04-03]

Rules of Practice

AGENCY: Securities and Exchange
Commission.

ACTION: Final rule.

SUMMARY: The Securities and Exchange Commission is adopting amendments to its Rules of Practice to formalize new policies designed to improve the timeliness of its administrative proceedings. The changes include specifying in all orders instituting proceedings a maximum time period for completion by an administrative law judge of the initial decision in the proceeding, establishing policies disfavoring requests that would delay proceedings once instituted and creating time limits for the negotiation and submission of offers of settlement to the Commission. The Commission has taken additional steps to reduce delay in its internal deliberations on appeals from hearing officer's initial decisions and from final determinations of self-regulatory organizations and, accordingly amends current guidelines for issuance of Commission opinions.

EFFECTIVE DATE: July 17, 2003.

FOR FURTHER INFORMATION CONTACT: Scot E. Draeger, Counsel to Commissioner Campos at (202) 942-0500. Margaret H. McFarland, Deputy Secretary, or J. Lynn Taylor, Assistant Secretary, at (202) 942-7070, Securities and Exchange Commission, 450 Fifth Street, NW., Washington, DC 20549-0609.

SUPPLEMENTARY INFORMATION: The Commission is adopting amendments to Rules 161, 230, 360, 450, and 900 of its Rules of Practice [17 CFR 201.161, 201.230, 201.360, 201.450, and 201.900].

I. Discussion

The Commission adopted, after notice and comment (Release No. 33-8190 (February 12, 2003) 68 FR 8137 (February 19, 2003), comprehensive

revisions to its Rules of Practice that became effective on July 24, 1995. These revisions were the result of an approximately two-and-a-half year study by the Commission's Task Force on Administrative Proceedings that culminated in a comprehensive report. The Task Force found that the fundamental structure of the Commission's administrative process was sound and successfully protected the essential interests of respondents, investors, and the public, but that some changes were necessary. The Task Force recommended changes to the Rules of Practice in an effort to set forth applicable procedural requirements more completely, in a format easier to use, and to streamline procedures that had become burdensome.

Promoting the timely adjudication and disposition of administrative proceedings was one of the principal goals of this project. While many of the rule amendments were designed to improve efficiency and timeliness, the Commission as part of this project did not impose firm deadlines for completion of the proceedings. Instead it included, as Rule 900, a series of non-binding goals for the completion of each step in the administrative process. Rule 900 included a ten-month guideline for completion of the hearing and issuance of the initial decision by the administrative law judge and it contained an eleven-month target for completion of deliberations by the Commission when it reviews appeals of administrative law judges' initial decisions and appeals of determinations of the securities self-regulatory organizations. In the seven years since the adoption of these non-binding targets, the Commission and its administrative law judges have generally failed to meet these goals.

Based upon this experience with non-binding completion dates, the Commission has determined that timely completion of proceedings can be achieved more successfully through the adoption of mandatory deadlines and procedures designed to meet these deadlines. Because there is a wide variation in the subject matter, complexity and urgency of administrative proceedings, the Commission believes that a "one-size-fits-all" approach to timely disposition is not feasible. Instead the Commission is adopting procedures in which it will specify, in the order instituting proceedings, a deadline for completion of the hearing process and the issuance of an initial decision. In every non-settled administrative proceeding, the Commission's Order Instituting Proceedings will specify the maximum

time for completion of the hearing and issuance of the initial decision. This deadline will be either 120, 210, or 300 days, in the Commission's discretion, after consideration of the type of proceeding, the complexity of the matter, and its urgency. Certain commenters expressed concern that setting one time period with only an outside deadline for the issuance of an initial decision by the hearing officer would create an irresistible incentive for the hearing officer to set very short timelines for the litigants to prepare for hearing and for post hearing briefing, and to reserve the majority of the overall time period for the hearing officer to draft the initial decision.¹ In response to this concern, the Commission has provided in Rule 360(a)(2), that each of these periods is further broken down into three parts to ensure fairness to both the litigants and the administrative law judges by providing sufficient time: (1) For the litigants and the judge to prepare for hearing, (2) for the litigants to obtain the transcript and prepare briefs, and (3) for the administrative law judge to prepare an initial decision.

As provided in Rule 360(a)(3), if during the proceeding the presiding hearing officer were to decide that the proceeding could not be concluded in the time specified, the hearing officer could request an extension of the stated deadline. To obtain an extension, the hearing officer would first consult with the Chief Administrative Law Judge (ALJ). If the Chief ALJ concurs in the need for an extension, the Chief ALJ would file a motion with the Commission on behalf of the hearing officer explaining why circumstances require an extension and specifying the length of the extension. An extension could be granted by the Commission, in its discretion, on the basis of the motion filed by the Chief ALJ. Parties to the proceeding would be provided copies of the motion and could separately or jointly file in support of or in opposition to the request. Any such motion by the Chief ALJ would have to be filed no later than thirty days prior to the expiration of the time period specified in the order instituting proceedings.

To complement this new procedure, the Commission has amended Rule 161 to make explicit a policy of strongly disfavoring extensions, postponements or adjournments except in circumstances where the requesting party makes a strong showing that the denial of the request or motion would substantially prejudice their case. This amendment to Rule 161 effects a

¹ See comments on the Section of Business Law of the American Bar Association at 3.

significant change in administrative cease-and-desist proceedings. Section 21C(b) of the Securities Exchange Act of 1934 (and parallel provisions in the other Federal securities laws) requires that the notice instituting proceedings "shall fix a hearing date not earlier than 30 days nor later than 60 days after service of the notice unless an earlier or a later date is set by the Commission with the consent of any respondent so served." Under current practice, parties routinely request extensions of the 60-day deadline, and the hearing officers routinely grant such requests. To the extent that the Commission has chosen a timeline under which the hearing would occur beyond the statutory 60-day deadline, the amendment exempts these requests from the policy of strongly disfavoring such requests, absent a strong showing of substantial prejudice. This would typically be the case under both the 300-day and 210-day timelines articulated in new Rule 360(a)(2).

We requested comment on the impact of the proposed changes to the scheduling of cease and desist proceeding hearings. The Commission received very few comments on the proposal. However, most of the comments were supportive.² Certain commenters did express concern that respondents will have less time to meet the charges against them.³ In response to this concern, the Commission has amended Rule 230(d) to provide for earlier production of the Commission staff's investigative record.

In addition to the adopted amendments to the Commission's Rules of Practice, the Commission has provided guidance to its staff that they should not seek or support extensions or stays not consistent with the standards set forth above. Similarly, staff have been instructed to adopt new procedures to ensure that settlement negotiations do not delay the hearing process. These procedures are consistent with those described in Rule 161(c)(2). Under that rule, if the Commission staff and one or more respondents in the proceeding file a

joint motion notifying the hearing officer that they have agreed in principle to a settlement on all major terms, then the hearing officer shall stay the proceeding as to the settling respondent(s), or in the discretion of the hearing officer as to all respondents, pending completion of Commission consideration of the settlement offer. Any such stay will be contingent upon: (1) The settling respondent(s) submitting to the Commission staff, within fifteen business days of the stay, a signed offer of settlement in conformance with Rule 240, and (2) within twenty business days of receipt of the signed offer, the staff submitting the settlement offer and accompanying recommendation to the Commission for consideration. If the parties fail to meet either of these deadlines, or if the Commission rejects the offer of settlement, the hearing officer must be promptly notified and, upon notification of the hearing officer, the stay shall lapse and the proceeding will continue.

Because unnecessary delays may result from multiple "agreements in principle" that do not result in an actual signed offer, this procedure will be limited. In the circumstance where (1) a hearing officer has granted a stay because the parties have "agreed in principle to a settlement," (2) the agreement in principle does not result in the submission of a signed settlement offer in conformance with Rule 240 within 15 business days of the stay, and (3) the stay lapses, the ALJ will not be required to grant another stay related to the settlement process until both parties have notified the ALJ in writing that a signed settlement offer has been prepared, received by the enforcement staff, and will be submitted to the Commission.

Finally, the Commission recognizes that it too must shoulder responsibility for delays in its appellate review process. In fact, some comment letters suggested that delay in the Commission's appellate review is a more significant problem than delay in the hearing process. Accordingly, during the past year, the Commission has changed certain internal processes to reduce delay in its deliberations and substantially reduce the time taken to complete its appellate review duties. Accordingly, the Commission has amended Rule 900, reducing the guideline for issuance of Commission opinions from eleven months to seven months from the date of an appeal.

As part of this initiative to expedite appellate review, the Commission has amended Rule 450 to provide that opening briefs must be filed within 30

days of the date of a briefing schedule order rather than the current 40 days.

Any and all deadlines and timelines established by these amendments to the Commission's Rules of Practice confer no substantive rights on respondents.

II. Administrative Procedure Act and Regulatory Flexibility Act

The Commission finds, in accordance with the Administrative Procedure Act, 5 U.S.C. 553(b)(3)(A), that this revision relates solely to agency organization, procedures, or practice. It is therefore not subject to the provisions of the Administrative Procedure Act requiring notice, opportunity for public comment, and publication. The Regulatory Flexibility Act, 5 U.S.C. 601 *et seq.*, also does not apply. Nonetheless, the Commission previously determined that it would be useful to publish the proposed rule changes for notice and comment before adoption. The Commission has considered all comments received.

III. Statutory Basis and Text of Amendment

These rule amendments are adopted pursuant to section 19 of the Securities Act, 15 U.S.C. 77s; section 23 of the Securities Exchange Act, 15 U.S.C. 78w; section 20 of the Public Utility Holding Company Act, 15 U.S.C. 79t; section 319 of the Trust Indenture Act, 15 U.S.C. 77sss; sections 38 and 40 of the Investment Company Act, 15 U.S.C. 80a-37 and 80a-39; and section 211 of the Investment Advisers Act, 15 U.S.C. 80b-11.

List of Subjects in 17 CFR Part 201

Administrative practice and procedure.

■ For the reasons set forth in the preamble, Title 17, Chapter II of the Code of Federal Regulations is amended as follows:

PART 201—RULES OF PRACTICE

■ 1. The authority citation for part 201, subpart D, is revised to read as follows:

Authority: 15 U.S.C. 77f, 77g, 77h, 77h-1, 77j, 77s, 77u, 78c(b), 78d-1, 78d-2, 78l, 78m, 78n, 78o(d), 78o-3, 78s, 78u-2, 78u-3, 78v, 78w, 79c, 79s, 79t, 79z-5a, 77sss, 77ttt, 80a-8, 80a-9, 80a-37, 80a-38, 80a-39, 80a-40, 80a-41, 80a-44, 80b-3, 80b-9, 80b-11, and 80b-12.

■ 2. Section 201.161 is amended by:

■ a. Revising the phrase "paragraph (b)" in paragraph (a) to read "paragraphs (b) and (c)";

■ b. Revising the introductory text of paragraph (b) and paragraph (b)(1);

■ c. Redesignating paragraph (b)(2) as paragraph (c)(1); and

² See comments of NASD and Mary L. Schapiro at 2 ("NASD staff believes that the proposed deadlines contained in the Release are an appropriate mechanism to focus the parties and ALJs on achieving timely resolution of cases."). See also comments of Barbara Mortensen and John Polanskey, two individual investors who wrote separately to support the proposal. ("Please move toward all rule changes that will improve the timeliness of your administrative proceedings * * *." Polanskey at 1.)

³ See comments of Corporation, Finance, and Securities Law Section, District of Columbia Bar at 1, 4-8. See also comments of the Section of Business Law of the American Bar Association at 3.

■ d. Adding new paragraph (b)(2) and paragraph (c)(2).

The revisions and additions read as follows:

§ 201.161 Extensions of time, postponements and adjournments.

* * * * *

(b) *Considerations in determining whether to extend time limits or grant postponements, adjournments and extensions.* (1) In considering all motions or requests pursuant to paragraph (a) or (b) of this section, the Commission or the hearing officer should adhere to a policy of strongly disfavoring such requests, except in circumstances where the requesting party makes a strong showing that the denial of the request or motion would substantially prejudice their case. In determining whether to grant any requests, the Commission or hearing officer shall consider, in addition to any other relevant factors:

(i) The length of the proceeding to date;

(ii) The number of postponements, adjournments or extensions already granted;

(iii) The stage of the proceedings at the time of the request;

(iv) The impact of the request on the hearing officer's ability to complete the proceeding in the time specified by the Commission; and

(v) Any other such matters as justice may require.

(2) To the extent that the Commission has chosen a timeline under which the hearing would occur beyond the statutory 60-day deadline, this policy of strongly disfavoring requests for postponement will not apply to a request by a respondent to postpone commencement of a cease and desist proceeding hearing beyond the statutory 60-day period.

(c)(1) * * *

(2) *Stay pending Commission consideration of offers of settlement.* (i) If the Commission staff and one or more respondents in the proceeding file a joint motion notifying the hearing officer that they have agreed in principle to a settlement on all major terms, then the hearing officer shall stay the proceeding as to the settling respondent(s), or in the discretion of the hearing officer as to all respondents, pending completion of Commission consideration of the settlement offer.

Any such stay will be contingent upon:

(A) The settling respondent(s) submitting to the Commission staff, within fifteen business days of the stay, a signed offer of settlement in conformance with § 201.240; and

(B) Within twenty business days of receipt of the signed offer, the staff

submitting the settlement offer and accompanying recommendation to the Commission for consideration.

(ii) If the parties fail to meet either of these deadlines or if the Commission rejects the offer of settlement, the hearing officer must be promptly notified and, upon notification of the hearing officer, the stay shall lapse and the proceeding will continue. In the circumstance where:

(A) A hearing officer has granted a stay because the parties have "agreed in principle to a settlement;"

(B) The agreement in principle does not materialize into a signed settlement offer within 15 business days of the stay; and

(C) The stay lapses, the hearing officer will not be required to grant another stay related to the settlement process until both parties have notified the hearing officer in writing that a signed settlement offer has been prepared, received by the Commission's staff, and will be submitted to the Commission.

(iii) The granting of any stay pursuant to this paragraph (c) shall not affect any deadline set pursuant to § 201.360.

■ 3. Section 201.230 is amended by revising the phrase "14 days after the respondent files an answer" to "7 days after service of the order instituting proceedings" in the first sentence of paragraph (d).

■ 4. Section 201.360 is amended by:

■ a. Redesignating paragraph (a) as paragraph (a)(1); and

■ b. Adding paragraphs (a)(2) and (a)(3).

The additions read as follows:

§ 201.360 Initial decision of hearing officer.

(a)(1) * * *

(2) *Time period for filing initial decision.* In the order instituting proceedings, the Commission will specify a time period in which the hearing officer's initial decision must be filed with the Secretary. In the Commission's discretion, after consideration of the nature, complexity, and urgency of the subject matter, and with due regard for the public interest and the protection of investors, this time period will be either 120, 210 or 300 days from the date of service of the order. Under the 300-day timeline, the hearing officer shall issue an order providing that there shall be approximately 4 months from the order instituting the proceeding to the hearing, approximately 2 months for the parties to obtain the transcript and submit briefs, and approximately 4 months after briefing for the hearing officer to issue an initial decision. Under the 210-day timeline, the hearing officer shall issue an order providing

that there shall be approximately 2½ months from the order instituting the proceeding to the hearing, approximately 2 months for the parties to review the transcript and submit briefs, and approximately 2½ months after briefing for the hearing officer to issue an initial decision. Under the 120-day timeline, the hearing officer shall issue an order providing that there shall be approximately 1 month from the order instituting the proceeding to the hearing, approximately 2 months for the parties to review the transcript and submit briefs, and approximately 1 month after briefing for the hearing officer to issue an initial decision. These deadlines confer no substantive rights on respondents.

(3) *Motion for extension.* In the event that the hearing officer presiding over the proceeding determines that it will not be possible to issue the initial decision within the specified period of time, the hearing officer should consult with the Chief Administrative Law Judge. Following such consultation, the Chief Administrative Law Judge may determine, in his or her discretion, to submit a motion to the Commission requesting an extension of the time period for filing the initial decision. This motion must be filed no later than 30 days prior to the expiration of the time specified in the order for issuance of an initial decision. The motion will be served upon all parties in the proceeding, who may file with the Commission statements in support of or in opposition to the motion. If the Commission determines that additional time is necessary or appropriate in the public interest, the Commission shall issue an order extending the time period for filing the initial decision.

* * * * *

■ 5. Section 201.450 is amended by revising the phrase "within 40 days" to read "within 30 days" in the second sentence of paragraph (a).

■ 6. Section 201.900 is amended by:

■ a. Removing paragraph (a)(1)(i);

■ b. Redesignating paragraphs (a)(1)(ii) through (a)(1)(iv) as paragraphs (a)(1)(i) through (a)(1)(iii); and

■ c. Revising newly redesignated paragraph (a)(1)(iii).

The revision reads as follows:

§ 210.900 Informal Procedures and Supplementary Information Concerning Adjudatory Proceedings.

(a) * * *

(1) * * *

(iii) Ordinarily, a decision by the Commission with respect to an appeal from the initial decision of a hearing officer, a review of a determination by

a self-regulatory organization, or a remand of a prior Commission decision by a court of appeals should be issued within seven months from the date the petition for review, application for review, or mandate of the court is filed, unless the Commission determines that the matter presents unusual complicating circumstances, in which case a decision by the Commission on the matter may be issued within 11 months from the date the petition for review, application for review, or mandate of the court is filed. The Commission retains discretion to take additional time to dispose of an appeal from the initial decision of a hearing officer, a review of a determination by a self-regulatory organization, or a remand of a prior Commission decision by a court of appeals when the Commission determines that extraordinary facts and circumstances of the matter so require. The deadlines in § 201.900 confer no substantive rights on the parties.

* * * * *

Dated: June 11, 2003.

By the Commission.

Jonathan G. Katz,

Secretary.

[FR Doc. 03-15262 Filed 6-16-03; 8:45 am]

BILLING CODE 8010-01-U

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[SIP NOS. CO-001-0052, CO-001-0032, CO9-3-5603; FRL-7503-4]

Approval and Promulgation of Air Quality Implementation Plans; Colorado; State Implementation Plan Corrections

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule; technical correction.

SUMMARY: When EPA approved the Denver-Boulder metropolitan carbon monoxide (CO) area redesignation to attainment, maintenance plan and amendments to Colorado's Regulation No. 11, "Motor Vehicle Emissions Inspection Program," on December 14, 2001, we inadvertently removed the appendices to Regulation No. 11 from the State Implementation Plan (SIP). When EPA approved the Colorado Springs carbon monoxide area redesignation to attainment and maintenance plan on April 25, 1999, we inadvertently failed to indicate that a control measure had been removed from the SIP. Finally, when EPA approved

revisions to the Colorado Ozone SIP along with amendments to Regulation No. 7, "Regulation To Control Emissions of Volatile Organic Compounds," on May 30, 1995, we inadvertently submitted extraneous pages for incorporation by reference into the SIP and referenced incorrect state rules. EPA is correcting these errors with this document.

DATES: This rule is effective on July 17, 2003.

FOR FURTHER INFORMATION CONTACT: Laurie Ostrand, EPA, Region 8, (303) 312-6437.

SUPPLEMENTARY INFORMATION:

Throughout this document, wherever "we" or "our" is used it means the EPA.

Section 553 of the Administrative Procedures Act, 5 U.S.C. 553(b)(B), provides that, when an agency for good cause finds that notice and public procedures are impracticable, unnecessary or contrary to the public interest, the agency may issue a rule without providing notice and an opportunity for public comment. We have determined that there is good cause for making today's rule final without prior proposal and opportunity for comment because we are merely correcting incorrect text in previous rulemakings. Thus notice and public procedure are unnecessary. We find that this constitutes good cause under 5 U.S.C. 553(b)(B).

I. Correction

A. Correction to *Federal Register*

Document Published on December 14, 2001 (66 FR 64751)

When we approved the Denver-Boulder metropolitan carbon monoxide (CO) area redesignation to attainment, maintenance plan and amendments to Colorado's Regulation No. 11, "Motor Vehicle Emissions Inspection Program," on December 14, 2001 (66 FR 64751), we inadvertently removed the appendices to Regulation No. 11. Specifically, we approved Regulation No. 11 at 40 CFR 52.320(c)(96)(i)(A) and indicated that Regulation No. 11, part A, part B, part C, part D, part E and part F, effective March 1, 2000, superseded and replaced all earlier versions of the Regulation. However, on March 10, 1997 (62 FR 10690), we approved revisions to Regulation No. 11, including Appendices A and B (see 40 CFR 52.320(c)(80)). The December 14, 2001, approval should not have superseded and replaced Appendices A and B of Regulation No. 11 approved on March 10, 1997, because the December 14, 2001, approved version of Regulation No. 11 did not contain revisions to Appendices A and B.

Therefore, we are correcting the introductory text of 40 CFR 52.320(c)(96) to indicate that the version of Regulation No. 11 being approved supersedes and replaces all earlier versions of Regulation No. 11 except for Appendices A and B to Regulation No. 11 as approved at 40 CFR 52.320(c)(80).

B. Correction to *Federal Register*

Document Published on April 25, 1999 (64 FR 46279)

On April 25, 1999 (64 FR 46279), we approved the Colorado Springs carbon monoxide area redesignation to attainment and maintenance plan. In the notice approving that plan we chronicled the history of **Federal Register** actions that had been completed for the Colorado Springs carbon monoxide area. Among other things we indicated that we approved the Clean Air Campaign into the SIP on May 30, 1989 (54 FR 22893), because of its underlying benefits for the area (see our April 25, 1999, document, 64 FR 46281, right column). However, in our April 25, 1999, document, we failed to mention that the maintenance plan being approved removes the Clean Air Campaign from the SIP. Therefore, we are correcting 40 CFR 52.349(c) to indicate that the Clean Air Campaign, approved at 40 CFR 52.320(c)(43)(i)(A), has been removed from the SIP.

C. Correction to *Federal Register*

Document Published on May 30, 1995 (60 FR 28055)

When we approved revisions to the Colorado Ozone State Implementation Plan (SIP) along with amendments to Regulation No. 7, "Regulation To Control Emissions of Volatile Organic Compounds," on May 30, 1995 (60 FR 28055), we inadvertently submitted extraneous pages for incorporation by reference into the SIP. Therefore, we are correcting this error by resubmitting the incorporation by reference material in 40 CFR 52.320(c)(70)(i)(A) to the Air and Radiation Docket and Information Center and the Office of the Federal Register. Additionally, the regulatory text in 40 CFR 52.320(c)(70)(i)(A) incorrectly referenced two state rules. The reference to "7.IX.N." and "7.IX.O." should have been "7.IX.M." and "7.IX.N." We are correcting the references to the state rules. This correction only impacts our May 30, 1995, approval and does not supersede subsequent actions on Regulation No. 7 that have been approved since May 30, 1995.

II. Statutory and Executive Order Review

Under Executive Order 12866 (58 FR 51735, October 4, 1993), this action is not a "significant regulatory action" and is therefore not subject to review by the Office of Management and Budget. This rule is not subject to Executive Order 13211, "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use" (66 FR 28355, May 22, 2001) because it is not a significant regulatory action under Executive Order 12866. Because the agency has made a "good cause" finding that this action is not subject to notice-and-comment requirements under the Administrative Procedure Act or any other statute as indicated in the Supplementary Information section above, it is not subject to the regulatory flexibility provisions of the Regulatory Flexibility Act (5 U.S.C 601 *et seq.*), or to sections 202 and 205 of the Unfunded Mandates Reform Act of 1995 (UMRA) (Pub. L. 104-4). In addition, this action does not significantly or uniquely affect small governments or impose a significant intergovernmental mandate, as described in sections 203 and 204 of UMRA. This rule also does not have a substantial direct effect on one or more Indian tribes, on the relationship between the Federal government and Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes, as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), nor will it have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132 (64 FR 43255, August 10, 1999). This rule also is not subject to Executive Order 13045 (62 FR 19885, April 23, 1997), because it is not economically significant.

This technical correction action does not involve technical standards; thus the requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) do not apply. The rule also does not involve special consideration of environmental justice related issues as required by Executive Order 12898 (59 FR 7629, February 16, 1994). In issuing this rule, EPA has taken the necessary steps to eliminate drafting errors and ambiguity, minimize potential litigation, and provide a clear legal standard for affected conduct, as required by section 3 of Executive Order 12988 (61 FR 4729, February 7, 1996). EPA has complied with Executive Order

12630 (53 FR 8859, March 15, 1998) by examining the takings implications of the rule in accordance with the "Attorney General's Supplemental Guidelines for the Evaluation of Risk and Avoidance of Unanticipated Takings" issued under the executive order. This rule does not impose an information collection burden under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*). EPA's compliance with these statutes and Executive Orders for the underlying rules are discussed in the December 14, 2001, rule approving the Denver-Boulder metropolitan carbon monoxide (CO) area redesignation to attainment, maintenance plan and amendments to Colorado's Regulation No. 11 "Motor Vehicle Emissions Inspection Program," the August 25, 1999, rule approving the Colorado Springs carbon monoxide area redesignation to attainment and maintenance plan, and the May 30, 1995, rule approving the Colorado Ozone State Implementation Plan (SIP) along with amendments to Regulation No. 7, "Regulation To Control Emissions of Volatile Organic Compounds."

The Congressional Review Act (5 U.S.C. 801 *et seq.*), as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. Section 808 allows the issuing agency to make a rule effective sooner than otherwise provided by the CRA if the agency makes a good cause finding that notice and public procedure is impracticable, unnecessary or contrary to the public interest. This determination must be supported by a brief statement. 5 U.S.C. 808(2). As stated previously, EPA has made such a good cause finding, including the reasons therefore, and established an effective date of July 17, 2003. EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. These corrections to the identification of plan for Colorado is not a "major rule" as defined by 5 U.S.C. 804(2).

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Carbon monoxide, Incorporation by reference, Intergovernmental relations, Lead, Nitrogen dioxide, Ozone, Particulate matter, Reporting and recordkeeping

requirements, Sulfur oxides, Volatile organic compounds.

Dated: May 16, 2003.

Robert E. Roberts,

Regional Administrator, Region 8.

■ 40 CFR part 52 is amended as follows:

PART 52—[CORRECTED]

■ 1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart G—Colorado

■ 2. Section 52.320 is amended in paragraph (c)(70)(i)(A) by revising "7.IX.N." to read "7.IX.M" and "7.IX.O." to read "7.IX.N." and by revising the introductory text of (c)(96) to read as follows:

§ 52.320 Identification of plan.

* * * * *

(c) * * *

(96) On May 10, 2000, the Governor of Colorado submitted SIP revisions to Colorado's Regulation No. 11 "Motor Vehicle Emissions Inspection Program" that supersede and replace all earlier versions of the Regulation (except Appendices A and B of Regulation No. 11 as approved in paragraph (c)(80)) and make several changes to the motor vehicle inspection and maintenance requirements including the implementation of a remote sensing device (RSD) program for the Denver metropolitan area. On May 10, 2000, the Governor also submitted SIP revisions to Colorado's Regulation No. 13 : "Oxygenated Fuels Program" that supersede and replace all earlier versions of the Regulation and modify the oxygenated fuel requirements for the Denver metropolitan area.

* * * * *

■ 3. Section 52.349 is amended by revising paragraph (c) to read as follows:

§ 52.349 Control strategy: Carbon monoxide.

* * * * *

(c) Revisions to the Colorado State Implementation Plan, Carbon Monoxide Redesignation Request and Maintenance Plan for Colorado Springs, as adopted by the Colorado Air Quality Control Commission on January 15, 1998, State effective March 30, 1998, and submitted by the Governor on August 19, 1998. The Maintenance Plan removes the Clean Air Campaign from the SIP. The Clean Air Campaign was approved into the SIP at 40 CFR 52.320(c)(43)(i)(A).

* * * * *

[FR Doc. 03-13715 Filed 6-16-03; 8:45 am]

BILLING CODE 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY**40 CFR Parts 60, 61, 62, and 63**

[FRL-7513-8]

Change of Address for Submission of Certain Reports; Technical Amendment**AGENCY:** Environmental Protection Agency (EPA).**ACTION:** Final rule; technical amendment.

SUMMARY: This document announces a technical amendment revising the address for submittal of certain air pollution control documents to EPA Region VII and Iowa and Kansas.

DATES: This document is effective June 17, 2003.

FOR FURTHER INFORMATION CONTACT: Wayne Kaiser, Environmental Protection Agency, Air Planning and Development Branch, 901 North 5th Street, Kansas City, Kansas 66101; (913) 551-7603; or by E-mail at kaiser.wayne@epa.gov.

SUPPLEMENTARY INFORMATION: The EPA is correcting addresses for Region VII and the states of Iowa and Kansas in 40 CFR parts 60, 61, 62, and 63. Certain provisions of these regulations require the submittal of reports, applications, and other documents to the EPA regional office and to the state air agencies. This technical amendment updates and corrects the mailing addresses for Region VII and the states of Iowa and Kansas.

List of Subjects in 40 CFR Parts 60, 61, 62, and 63

Environmental protection, Air pollution control, Reporting and recordkeeping requirements.

Dated: June 8, 2003.

James B. Gulliford,
Regional Administrator, Region 7.

■ Chapter I, title 40 of the Code of Federal Regulations is amended as follows:

PART 60—[AMENDED]

■ 1. The authority citation for part 60 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart A—General Provisions

■ 2. Section 60.4 is amended by revising the address for Region VII in paragraph (a) and paragraphs (b)(Q) and (b)(R) to read as follows:

§ 60.4 Address.

(a) * * *

Region VII (Iowa, Kansas, Missouri, Nebraska), Director, Air, RCRA, and Toxics Division, U.S. Environmental Protection Agency, 901 N. 5th Street, Kansas City, KS 66101.

* * * * *

(b) * * *

(Q) State of Iowa: Iowa Department of Natural Resources, Environmental Protection Division, Air Quality Bureau, 7900 Hickman Road, Suite 1, Urbandale, IA 50322.

(R) State of Kansas: Kansas Department of Health and Environment, Bureau of Air and Radiation, 1000 S.W. Jackson, Suite 310, Topeka, KS 66612-1366.

* * * * *

PART 61—[AMENDED]

■ 1. The authority citation for part 61 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart A—General Provisions

■ 2. Section 61.04 is amended by revising the address for Region VII in paragraph (a) and paragraphs (b)(Q) and (b)(R) to read as follows:

§ 61.04 Address.

(a) * * *

Region VII (Iowa, Kansas, Missouri, Nebraska), Director, Air, RCRA, and Toxics Division, U.S. Environmental Protection Agency, 901 N. 5th Street, Kansas City, KS 66101.

* * * * *

(b) * * *

(Q) State of Iowa: Iowa Department of Natural Resources, Environmental Protection Division, Air Quality Bureau, 7900 Hickman Road, Suite 1, Urbandale, IA 50322.

(R) State of Kansas: Kansas Department of Health and Environment, Bureau of Air and Radiation, 1000 S.W. Jackson, Suite 310, Topeka, KS 66612-1366.

* * * * *

PART 62—[AMENDED]

■ 1. The authority citation for part 62 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart A—General Provisions

■ 2. Section 62.10 is amended by revising the entry for Region VII to read as follows:

§ 62.10 Submission to Administrator.

* * * * *

Region and jurisdiction covered	Address
* * * * *	
VII—Iowa, Kansas, Missouri, Nebraska	Air, RCRA, and Toxics Division, 901 N. 5th Street, Kansas City, KS 66101.
* * * * *	

PART 63—[AMENDED]

■ 1. The authority citation for part 63 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart A—General Provisions

■ 2. Section 63.13 is amended by revising the address for Region VII in paragraph (a) to read as follows:

§ 63.13 Addresses of State air pollution control agencies and EPA Regional Offices.

(a) * * *

EPA Region VII (Iowa, Kansas, Missouri, Nebraska), Director, Air, RCRA, and Toxics Division, U.S. Environmental Protection Agency, 901 N. 5th Street, Kansas City, KS 66101.

* * * * *

[FR Doc. 03-15257 Filed 6-16-03; 8:45 am]

BILLING CODE 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY**40 CFR Part 86**

[FRL-7492-6]

RIN 2060-AJ77

Control of Air Pollution From New Motor Vehicles and New Motor Vehicle Engines; Modification of Federal On-Board Diagnostic Regulations for: Light-Duty Vehicles, Light-Duty Trucks, Medium Duty Passenger Vehicles, Complete Heavy Duty Vehicles and Engines Intended for Use in Heavy Duty Vehicles Weighing 14,000 Pounds GVWR or Less; Extension of Acceptance of California OBD II Requirements

AGENCY: Environmental Protection Agency.

ACTION: Direct final rule.

SUMMARY: EPA is taking direct final action to amend and revise certain requirements associated with the Federal on-board diagnostic (OBD) system regulations. EPA previously promulgated an OBD rulemaking on December 22, 1998 (63 FR 70681) which

indefinitely extended the provision allowing compliance with California OBD II requirements to satisfy federal OBD requirements. The California Air Resources Board (CARB) has recently revised their OBD II requirements and, accordingly, today's rulemaking promulgates appropriate revisions to Federal OBD regulations including: an update to the acceptable version of the California OBD II regulations that allows compliance with California OBD II regulations to satisfy Federal OBD regulations; inclusion of relevant sections pertaining to California OBD II catalyst monitoring requirements when accepting manufacturers' demonstration of compliance with California OBD II; an update of the incorporation by reference of standardized practices developed by the Society of Automotive Engineers (SAE) and the International Organization for Standardization (ISO) to incorporate recently published versions, while also incorporating by reference a new standardized protocol developed by the International Organization for Standardization (ISO) and establishing a future date by which this protocol will be the only acceptable protocol; and a technical amendment to the optional chassis certification requirements for heavy-duty (HD) vehicles weighing 14,000 pounds GVWR or less. OBD systems in general provide substantial benefits to the environment by diagnosing and alerting operators, vehicle inspection and maintenance (I/M) personnel, and service providers of deterioration or malfunction of emission related control systems.

DATES: This direct final rule becomes effective August 18, 2003 without further notice, unless we receive adverse comments by July 17, 2003 or we receive a request for a public hearing by July 2, 2003. Should EPA receive any adverse comments on this direct final rule, we will publish a subsequent action in the **Federal Register** withdrawing an amendment, paragraph, or section of this final rule. The incorporation by reference of certain publications listed in the rule is approved August 18, 2003.

ADDRESSES: All comments and materials relevant to today's action should be submitted to Public Docket No. A-2002-20 at the following address: EPA Docket Center (EPA/DC), Public Reading Room, Room B102, EPA West Building, 1301 Constitution Avenue, NW., Washington, DC. The EPA Docket Center Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, except on government holidays. You can reach the Reading Room by telephone at (202) 566-1742, and by facsimile at (202) 566-1741. The telephone number for the Air Docket is (202) 566-1742. You may be charged a reasonable fee for photocopying docket materials, as provided in 40 CFR part 2. A request for hearing should be made to the person noted in the **FOR FURTHER INFORMATION CONTACT** section.

FOR FURTHER INFORMATION CONTACT: Arvon L. Mitcham, Certification and Compliance Division, U.S. Environmental Protection Agency, 2000 Traverwood, Ann Arbor, Michigan 48105, Telephone 734-214-4522, or Internet e-mail at "mitcham.arvon@epa.gov."

SUPPLEMENTARY INFORMATION: EPA is publishing this direct final rule without prior proposal because we view this action as noncontroversial and anticipate no adverse comment. However, in the "Proposed Rules" section of today's **Federal Register** publication, we are publishing a separate document that will serve as the proposal to adopt the provisions in this direct final rule if adverse comments are filed. This rule will be effective on August 18, 2003 without further notice unless we receive adverse comment by July 17, 2003 or a request for a public hearing by July 2, 2003. If we receive adverse comment on one or more distinct amendments, paragraphs, or sections of this rulemaking, we will publish a timely withdrawal in the **Federal Register** indicating which provisions are being withdrawn due to adverse comment. We may address all adverse comments in a subsequent final rule based on the proposed rule. We will not institute a second comment period on this action. Any parties interested in commenting must do so at this time. Any distinct amendment, paragraph, or section of today's rulemaking for which we do not receive adverse comment will become effective on the date set out above, notwithstanding any adverse comment on any other distinct amendment, paragraph, or section of today's rule.

Regulated Entities

Entities potentially regulated by this action are those which manufacture new motor vehicles and engines.

Category	Examples of regulated entities	NAICS Codes ^a	SIC Codes ^b
Industry	New motor vehicle and engine manufacturers	33611, 336112, 336120	3711

^a North American Industry Classification System (NAICS) Code.

^b Standard Industrial Classification (SIC) System Code. This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities EPA is now aware could potentially be regulated by this action. Other types of entities not listed in the table could also be regulated. To determine whether your product is regulated by this action, you should carefully examine the applicability criteria in §§86.005-17, 86.1806-04, and 86.1806-05 of title 40 of the Code of Federal Regulations. If you have questions regarding the applicability of this action to a particular product, consult the person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

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I. Electronic Availability

Today's action is available electronically on the day of publication from EPA's **Federal Register** Internet Web site listed below. Electronic copies of this preamble, regulatory language, and other documents associated with today's direct final rule are available from the EPA Office of Transportation and Air Quality Web site listed below shortly after the rule is signed by the Administrator. This service is free of charge, except any cost that you already incur for connecting to the Internet.

EPA **Federal Register** Web site: <http://www.epa.gov/docs/fedrgstr/epa-air/>.

(Either select a desired date or use the Search feature.)

II. Introduction and Background

On February 19, 1993, pursuant to Clean Air Act (CAA) section 202(m), 42 U.S.C. 7521(m), EPA published a final rulemaking (58 FR 9468) requiring manufacturers of light-duty vehicles (LDVs) and light-duty trucks (LDTs) to install on-board diagnostic (OBD) systems on such vehicles beginning with the 1994 model year. The regulations promulgated in that final rulemaking require that manufacturers install OBD systems which monitor emission control components for any malfunction or deterioration causing exceedance of certain emission thresholds, and alert the vehicle operator to the need for repair. That rulemaking also requires that, when a malfunction occurs, diagnostic information must be stored in the vehicle's computer to assist the technician in diagnosis and repair.

Additionally, this original OBD regulation provided an allowance for manufacturers to satisfy federal OBD requirements through the 1998 model year by installing OBD systems satisfying the California OBD II requirements pertaining to those model years. On December 22, 1998 (63 FR 70681), EPA revised the federal OBD regulations such that the allowance of compliance with the California OBD II regulations (excluding anti-tampering provisions) extended indefinitely, rather than applying only through the 1998 model year. In addition, EPA updated the allowed version of the California OBD II regulations to the most recently published version, at that time, CARB Mail-Out #97-24 (December 9, 1997).

California has recently issued revisions to their OBD II requirements as described in CARB Mail-Out MSCD #02-11 (internet posting date October 7, 2002) and Attachment II, Modifications to Malfunction and Diagnostic System

Requirements for 2004 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines (OBD II), Section 1968.2, Title 13, California Code of Regulations. In today's action, EPA is revising the federal OBD regulations to update the allowed version of the California OBD II regulations to the most recently issued version noted above, such that the allowance of compliance with the California OBD II regulations (with the exclusion of certain provisions as noted below) continues to be accepted. EPA is making this revision, and continuing to allow manufacturers to demonstrate compliance with California's OBD regulations, to encourage broader OBD development and calibration efforts. EPA believes that the benefits of a robust OBD program outweigh the benefits of the unique requirements of the federal OBD regulations. EPA also believes, as was noted in an August 30, 1996 final rule (61 FR 45898), that the California OBD II program fully meets the requirements of the Clean Air Act (CAA) and fulfills the intent of the federal OBD program.

Today's action also updates the incorporation by reference of standardized practices developed by the Society of Automotive Engineers (SAE) and the International Organization for Standardization (ISO) to recently published versions. EPA believes that by including these standardized practices in our regulations we ensure continuity and uniformity in the design of OBD II systems, which was mandated in section 202(m)(4) of the CAA. As a result, changes and updates to these standardized practices must be recognized by revising our regulations to incorporate by reference the latest versions of these documents.

Today's action also incorporates a new, optional standardized communication protocol, ISO 15765-4.3:2001, December 14, 2001, "Road Vehicles-Diagnostics on Controller Area Network (CAN)—Part 4: Requirements for emission-related systems", that can be used by manufacturers to design OBD systems. The standardized communication protocols provide a uniform language structure that facilitates compatibility between OBD II equipped vehicles and OBD II-related equipment. Manufacturers are planning to implement this new protocol on vehicles as early as the 2004 MY. In addition, EPA is requiring that commencing in the 2008 model year the only allowable protocol will be this new communication protocol, ISO 15765-4.3. With the 2008 model year, the other, currently-accepted protocols: SAE J1850, ISO 9141-2 and ISO 14230-4;

will no longer be accepted and all manufacturers must implement OBD systems using only ISO 15765-4.3.

III. Requirements of the Direct Final Rule

Following are the provisions promulgated by this direct final rulemaking.

A. Update of Provision for Acceptance of California Air Resources Board (CARB) OBD II as Satisfying Federal OBD Requirements

EPA is revising the existing provisions that allow indefinite optional compliance with the California OBD II requirements, excluding the California OBD II anti-tampering provisions, as satisfying federal OBD. Although the existing allowances continue indefinitely, the referenced CARB mail-out (and corresponding regulation) has been revised by California and is thus outdated. Thus, rather than the currently allowed CARB Mail-Out #97-24 (December 9, 1997), the allowed version will be CARB's recently updated version contained in CARB Mail-Out MSCD #02-11 (internet posting date October 7, 2002) and Attachment II, Modifications to Malfunction and Diagnostic System Requirements for 2004 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines (OBD II), Section 1968.2, Title 13, California Code of Regulations. EPA recognizes that CARB may continue to make minor modifications to 13 CCR section 1968.2 before its full implementation. However, EPA believes it appropriate to revise its regulations at this time to reference the most recent version of CARB's requirements and EPA anticipates it will make the appropriate updated references by technical amendment or other appropriate rulemaking. Before such updated references occur, EPA believes that any changes made by CARB in its regulations would be minor and therefore the manufacturers will be able to utilize EPA's existing deficiency provisions in the rare circumstances where those CARB requirements that EPA references by today's action are more stringent than the OBD requirements met by the manufacturer under revised CARB regulations. Thus by today's rulemaking EPA is amending paragraph (j) as found respectively in 40 CFR 86.005-17 and 86.1806-05, to reflect CARB's most recent version of the OBD II requirements. In addition, because EPA's Tier 2 requirements commence in model year 2004, EPA is adding a new section (86.1806-04) to reflect the OBD requirements applicable

to LDVs, LDTs, and MDPVs for model year 2004, including an optional compliance provision to CARB's recent OBD II requirements.

It should be noted, for purposes of EPA's regulations (where the vehicle is certified to federal emission standards), manufacturers choosing the California OBD II demonstration option need not comply with portions of that regulation pertaining to vehicles certified to certain emission standards under California's Low Emission Vehicle Program (LEV I or LEV II), Title 13 CCR section 1961, as those standards are not federal emission standards. By operation of CARB's OBD II regulations, a manufacturer's demonstration of compliance with California OBD II, where the vehicle is certified to federal emission standards, requires a manufacturer to correlate their malfunction thresholds to the applicable federal emission standards, not California standards (see 13 CCR section 1968.2(c)(19) and (20)). Additionally, manufacturers choosing the California OBD II demonstration option need not comply with 13 CCR section 1968.2(e)(4.2.2)(C) which requires evaporative system leak detection monitoring down to a 0.02 inch diameter orifice and represents a level of stringency beyond that required for federal OBD compliance. In lieu of this requirement, EPA will continue its current requirement as found at 40 CFR 86.005–17(b)(4), 40 CFR 86.1806–01(b)(4) and 40 CFR 86.1806–05 (b)(4) that requires evaporative system leak detection monitoring of a 0.040 inch diameter orifice and is clarified by today's rulemaking. As with EPA's current OBD regulations, manufacturers choosing the California OBD II demonstration option need not comply with 13 CCR section 1968.2(d)(1.4) which contains the anti-tampering provisions of the California OBD II regulations. In today's rulemaking EPA also clarifies that demonstration of compliance with 13 CCR 1968.2(e)(16.2.1)(C), to the extent such provisions apply to verification of proper alignment between the camshaft and crankshaft, only applies to vehicles equipped with variable valve timing. The requirement in 13 CCR 1968.2(e)(16.2.1)(C) regarding circuit continuity and rationality malfunctions is applicable to all vehicles. Also, as with EPA's current OBD regulations, the deficiency fine provisions of 13 CCR section 1968.2(i) do not apply. Therefore, as a continuation of EPA's current requirements, the deficiency provisions at 40 CFR 86.005–17(i), 86.1806–01(i), and 1806–05(i) remain

applicable and are clarified by today's rulemaking.

B. Inclusion of California OBD II Catalyst Monitoring Requirements in Federal OBD Regulations When Accepting California OBD II Compliance

In EPA's rulemaking for heavy-duty engine and vehicle standards (65 FR 59896, October 6, 2000) (2004 HD Rule), EPA established new OBD system requirements for heavy-duty vehicles and engines, including aftertreatment monitoring requirements for all diesel-engine vehicles weighing 14,000 pounds GVWR or less regardless of whether the manufacturers demonstrated compliance with the Federal OBD requirements or with California's OBD requirements. Therefore, when accepting California OBD systems, it became necessary to exclude the particular section in the California OBD II regulations related to catalyst monitoring (Title 13, California Code of Regulations (CCR) 1968.1(b)(1.1.2)) because this regulation did not include requirements for aftertreatment of diesel-engines or complete vehicles. In California's recent OBD II revisions as described in CARB Mail-Out MSCD #02–11 (internet posting date October 7, 2002) and Attachment II, Modifications to Malfunction and Diagnostic System Requirements for 2004 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines (OBD II), Section 1968.2, Title 13, California Code of Regulations, provisions for aftertreatment monitoring on all diesel-engine vehicles weighing 14,000 pounds GVWR or less are included. As a result, it is no longer necessary to exclude Title 13, CCR 1968.1(b)(1.1.2) related to aftertreatment monitoring requirements when accepting California OBD II compliance. Thus, today's action removes the language requiring compliance with the federal aftertreatment requirements if demonstrating optional compliance with California's OBD requirements.

C. Technical Amendment to the Optional Chassis Certification Requirements for Heavy-duty (HD) Less Than 14,000 Pounds GVWR

In another final rule that revised EPA's heavy duty engine and vehicle standards and highway diesel fuel sulfur requirements beginning in the 2007 model year (66 FR 5002, January 18, 2001) (2007 HD Rule), we provided an option for manufacturers of HD diesel vehicles weighing 14,000 pounds GVWR or less to chassis certify to the HD vehicle standards (40 CFR Subpart S, 86.1863–07 for chassis certification). In § 86.1863–07(b), we state that diesel

vehicles certified under this chassis certification option are subject to the OBD requirements of 40 CFR 86.005–17, which is the section in subpart A containing the OBD requirements for engines. However, for chassis certification, we should have referenced 40 CFR 86.1806–05 of subpart S, which contains the chassis OBD requirements. This correction is consistent with the Agency's original intent as expressed in the preamble to the 2007 HD Rule at 66 FR 5002, at 5043. Therefore, today's action revises the language in 40 CFR 86.1863–07 (b) for optional chassis certification of diesel engines such that chassis OBD requirements in 40 CFR 86.1806–05 of subpart S are referenced.

D. Applicability

Today's revisions to: update the acceptable version of the California OBD II regulations; include California OBD II catalyst monitoring requirements when accepting CARB OBD II compliance, update the incorporation by reference of standardized practices developed by the Society of Automotive Engineers (SAE) and the International Organization for Standardization (ISO); incorporate by reference a new standardized protocol developed by the International Organization for Standardization (ISO) and establish a future date by which this protocol will be the only acceptable protocol; and amend the optional chassis certification requirements for heavy-duty (HD) vehicle weighing 14,000 pounds GVWR or less, apply to all 2004 and later model year light-duty vehicles, light-duty trucks, medium duty passenger vehicles, heavy-duty vehicles and otto-cycle engines intended for vehicles weighing less than 14,000 pounds GVWR where the manufacturer chooses to comply with Option 1 or 2 according to 40 CFR 86.005–01(c)(1) or (c)(2), and all 2005 and later model year heavy-duty diesel engines intended for vehicles weighing less than 14,000 pounds GVWR subject to the phase-in schedule for heavy-duty vehicles and engine OBD compliance in 40 CFR 86.005–17(k) and 86.1806–05(l).

E. Update of Materials Incorporated by Reference

Today's action includes the adoption of ISO 15765–4.3 (December 14, 2001): "Road Vehicles—Diagnostics on Controller Area Network (CAN)—Part 4: Requirements for emission-related systems," as an acceptable protocol for standardized on-board to off-board communications and is incorporated by reference in today's regulatory language. This standardized procedure contains a more up-to-date communication protocol than that contained in SAE

J1850/ISO 9141-2 and ISO 14230-4 which will remain referenced in the table at 40 CFR 86.1(b)(5). By today's action EPA is clarifying that ISO 14230-4 is acceptable for vehicles being certified today as well as vehicles certified through the 2007 model year. Adoption of ISO 15765-4.3 is also acceptable, in addition to ISO 14230-4, to all 2004 and later model year light-duty vehicles, light-duty trucks, medium duty passenger vehicles, heavy-duty vehicles and otto-cycle engines intended for vehicles weighing less than 14,000 pounds GVWR where the manufacturer chooses to comply with Option 1 or 2 according to 40 CFR 86.005-01(c)(1) or (c)(2), and all 2005 and later model year heavy-duty diesel engines intended for vehicles weighing less than 14,000 pounds GVWR. Beginning in the 2008 and later model year, ISO 15765-4.3 will be the only acceptable protocol used for standardized on-board to off-board communications. Thus a new entry is added to the table at § 86.1(b)(5) for ISO 15765-4.3 and is incorporated by reference into §§ 86.005-17, 86.1806-04, and 86.1806-05 and ISO 14230-4 contains new part 86 regulatory references (§§ 86.1806-01 and 86.1806-04) incorporated by reference.

Today's action also updates the incorporation by reference of several SAE standardized practices. Specifically, procedures J1850, J1962, J1979, and J2012. The existing references to these four SAE procedures within the table at § 86.1(b)(2) remain in effect along with the other SAE procedures already referenced in the table. The four SAE procedures noted here have been updated and thus shall apply beginning in model year 2004. Thus new entries are added to incorporate the updated J1850, J1962, J1979, and J2012 and are incorporated by reference into §§ 86.005-17, 86.1806-04, and 86.1806-05. In addition, today's action also incorporates SAE J1930 and SAE J1978 into the table found in § 86.1(b)(2). These new SAE procedures are incorporated by reference into §§ 86.005-17, 86.1806-04, and 86.1806-05. Lastly, the references to SAE J1939-11, J1939-13, J1939-21, J1939-71, J1931-73, and J1931-81 are modified to reflect that such procedures are applicable to all 2004 and later model year light-duty vehicles, light-duty trucks and medium-duty passenger vehicles and thus incorporate by reference the new regulatory provision at § 86.1806-04.

IV. Cost Effectiveness

This rulemaking alters an existing provision by allowing optional compliance with the most recently "revised" California OBD II requirements for the purposes of demonstrating compliance with federal OBD requirements. EPA believes that today's regulation will provide cost savings by eliminating the need to incur significant recalibration and/or retesting costs and efforts associated with having two sets of OBD regulations with which to comply. Because this rulemaking alters an existing provision that provides regulatory relief by means of optional compliance methods, and since most of the industry currently complies with the California OBD II requirements under our provisions for optional compliance and because industry may thus minimize resource requirements, EPA believes that continued cost savings will be achieved. No adverse environmental consequences are anticipated as EPA expects manufacturers with vehicles complying with the new California OBD II requirements, and which also seek anything but a California-only federal certificate, will have OBD systems calibrated to federal Tier 2 standards and thus will be as environmentally protective as systems calibrated to federal Tier 1 standards.

V. Statutory and Executive Order Reviews

A. Executive Order 12866: Regulatory Planning and Review

Under Executive Order 12866 (58 FR 51735, Oct. 4, 1993), the Agency is required to determine whether this regulatory action would be "significant" and therefore subject to review by the Office of Management and Budget (OMB) and the requirements of the Executive Order. The Order defines a "significant regulatory action" as any regulatory action that is likely to result in a rule that may: (1) Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or state, local, or tribal governments or communities; (2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency; (3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or, (4) Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or

the principles set forth in the Executive Order.

Pursuant to the terms of Executive Order 12866, we have determined that this final rule is not a "significant regulatory action."

B. Paperwork Reduction Act

Today's action does not impose any new information collection burden. The modifications noted above do not change the information collection requirements submitted to and approved by OMB in association with the OBD final rulemakings (58 FR 9468, February 19, 1993; and 59 FR 38372, July 28, 1994).

C. Regulatory Flexibility Act

EPA has determined that it is not necessary to prepare a regulatory flexibility analysis in connection with this direct final rule. After considering the economic impacts of today's direct final rule on small entities, EPA has determined that this action will not have a significant economic impact on a substantial number of small entities.

For purposes of assessing the impacts of today's direct final rule on small entities, small entity is defined as: (1) Those businesses meeting the definition provided by the Small Business Administration (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

This rulemaking will provide regulatory relief to both large and small volume automobile and heavy-duty vehicle and engine manufacturers by maintaining consistency with California OBDII requirements. This rulemaking will not have a significant impact on businesses that manufacture, rebuild, distribute, or sell automotive parts, nor those involved in automotive service and repair, as the revisions affect only requirements on automobile and heavy-duty truck and engine manufacturers. See *United Distribution Companies v. FERC*, 88 F. 3d 1005, 1170 (D.C. Cir. 1996). Most manufacturers have thus far chosen to reduce their costs by producing vehicle OBD systems to California specifications, thereby avoiding the necessity of developing significantly different OBD calibrations meeting the existing federal specifications for the non-California markets. Today's continuation of the optional compliance option to California's OBDII requirements continues this cost reduction.

D. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104-4, establishes requirements for federal agencies to assess the effects of their regulatory actions on state, local, and tribal governments, and the private sector. Under section 202 of the UMRA, we generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "federal mandates" that may result in expenditures to state, local, and tribal governments, in the aggregate, or to the private sector, of \$100 million or more for any single year. Before promulgating a rule for which a written statement is needed, section 205 of the UMRA generally requires us to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective, or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows us to adopt an alternative that is not the least costly, most cost-effective, or least burdensome alternative if we provide an explanation in the final rule of why such an alternative was adopted.

Before we establish any regulatory requirement that may significantly or uniquely affect small governments, including tribal governments, we must develop a small government plan pursuant to section 203 of the UMRA. Such a plan must provide for notifying potentially affected small governments, and enabling officials of affected small governments to have meaningful and timely input in the development of our regulatory proposals with significant federal intergovernmental mandates. The plan must also provide for informing, educating, and advising small governments on compliance with the regulatory requirements.

This rule contains no federal mandates for state, local, or tribal governments as defined by the provisions of Title II of the UMRA. The rule imposes no enforceable duties on any of these governmental entities. Nothing in the rule will significantly or uniquely affect small governments.

We have determined that this rule does not contain a federal mandate that may result in estimated expenditures of more than \$100 million to the private sector in any single year.

E. Executive Order 13132: Federalism

Executive Order 13132, entitled "Federalism" (64 FR 43255, August 10, 1999), requires us to develop an accountable process to ensure

"meaningful and timely input by state and local officials in the development of regulatory policies that have federalism implications." "Policies that have federalism implications" is defined in the Executive Order to include regulations that have "substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government."

Under Section 6 of Executive Order 13132, we may not issue a regulation that has federalism implications, that imposes substantial direct compliance costs, and that is not required by statute, unless the Federal Government provides the funds necessary to pay the direct compliance costs incurred by state and local governments, or we consult with state and local officials early in the process of developing the proposed regulation. We also may not issue a regulation that has federalism implications and that preempts state law, unless the Agency consults with state and local officials early in the process of developing the proposed regulation.

Section 4 of the Executive Order contains additional requirements for rules that preempt state or local law, even if those rules do not have federalism implications (*i.e.*, the rules will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government). Those requirements include providing all affected state and local officials notice and an opportunity for appropriate participation in the development of the regulation. If the preemption is not based on express or implied statutory authority, we also must consult, to the extent practicable, with appropriate state and local officials regarding the conflict between state law and federally protected interests within the Agency's area of regulatory responsibility.

This rule does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. This proposed rule updates provisions of an earlier rule that adopted national standards relating to OBD systems and the ability of manufacturers to demonstrate federal compliance based on demonstration of compliance with California OBD II regulations. The requirements of the

rule will be enforced by the federal government at the national level. Thus, the requirements of Section 6 of the Executive Order do not apply to this rule.

F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

Executive Order 13175, entitled "Consultation and Coordination with Indian Tribal Governments" (65 FR 67249, November 6, 2000), requires EPA to develop an accountable process to ensure "meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications." This final rule does not have tribal implications, as specified in Executive Order 13175. Today's rule does not uniquely affect the communities of American Indian tribal governments since the motor vehicle emission control system requirements in today's rule will have national applicability. Furthermore, today's rule does not impose any direct compliance costs on these communities and no circumstances specific to such communities exist that will cause an impact on these communities beyond those discussed in the other sections of today's document.

This rule does not significantly or uniquely affect the communities of Indian tribal governments. As noted above, this rule will be implemented at the federal level and imposes compliance obligations on private industry. Accordingly, the requirements of Executive Order 13084 do not apply to this rule.

G. Executive Order 13045: Protection of Children and Environmental Health & Safety Risks

Executive Order 13045, "Protection of Children from Environmental Health Risks and Safety Risks" (62 FR 19885, April 23, 1997) applies to any rule that (1) is determined to be "economically significant" as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that we have reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, section 5-501 of the Executive Order directs us to evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by us.

This rule is not subject to the Executive Order because it is not an economically significant regulatory action as defined by Executive Order 12866. Furthermore, this rule does not

concern an environmental health or safety risk that we have reason to believe may have a disproportionate effect on children.

H. Executive Order 13211: Actions That Significantly Affect Energy Supply, Distribution, or Use

This rule is not subject to Executive Order 13211, "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use" (66 FR 28355, May 22, 2001) because it is not a significant regulatory action under Executive Order 12866.

I. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA), Section 12(d) of Public Law 104-113, directs us to use voluntary consensus standards in our regulatory activities unless it would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) developed or adopted by voluntary consensus standards bodies. The NTTAA directs us to provide Congress, through OMB, explanations when we decide not to use

available and applicable voluntary consensus standards.

This rule references technical standards adopted by us through previous rulemakings. No new technical standards are established in today's rule.

J. Congressional Review Act

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as amended by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to Congress and the comptroller General of the United States. We will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A Major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is not a "major rule" as defined by 5 U.S.C. 804(2). This rule will be effective August 18, 2003.

Statutory and Legal Authority

Statutory authority for today's final rule comes from the Clean Air Act, 42 U.S.C. 7401 *et seq.*, in particular, section 202(m) of the Act (42 U.S.C. 7521(m)).

List of Subjects in 40 CFR Part 86

Environmental protection, Administrative practice and procedure, Incorporation by reference, Motor vehicle pollution, On-board diagnostics

Dated: April 25, 2003.

Christine Todd Whitman,
Administrator.

■ For the reasons set out in the preamble, part 86 of title 40 chapter I of the Code of Federal Regulations is amended as follows:

PART 86—CONTROL OF EMISSIONS FROM NEW AND IN-USE HIGHWAY VEHICLES AND ENGINES

■ 1. The authority citation for part 86 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

■ 2. Section 86.1 is amended as follows:

■ a. In the table to paragraph (b)(2) by adding the following entries to the end of the table.

■ b. In paragraph (b)(5) by revising the table.

The revisions and additions read as follows:

§ 86.1 Reference materials.

*	*	*	*	*
(b)	*	*	*	
(2)	*	*	*	

Document No. and name	40 CFR part 86 reference
* * * * *	* * * * *
SAE J1850, Class B Data Communication Network Interface. (Revised, May 2001)	86.005–17; 86.1806–04; 86.1806–05
SAE J1930, Electrical/Electronic Systems Diagnostic Terms, Definitions, Abbreviations, and Acronyms—Equivalent to ISO/TR 15031–2: April 30, 2002. (Revised, April 2002).	86.005–17; 86.1806–04; 86.1806–05
SAE J1939–11, Physical Layer—250K bits/s, Shielded Twisted Pair. (Revised, October 1999) ..	86.005–17; 86.1806–04; 86.1806–05
SAE J1939–13, Off-Board Diagnostic Connector. (July 1999)	86.005–17; 86.1806–04; 86.1806–05
SAE J1939–21, Data Link Layer. (Revised, April 2001)	86.005–17; 86.1806–04; 86.1806–05
SAE J1939–31, Network Layer. (Revised, December 1997)	86.005–17; 86.1806–04; 86.1806–05
SAE J1939–71, Vehicle Application Layer—J1939–71 (through 1999). (Revised, August 2002)	86.005–17; 86.1806–04; 86.1806–05
SAE J1939–73, Application Layer-Diagnostics. (Revised, June 2001)	86.005–17; 86.1806–04; 86.1806–05
SAE J1939–81, Recommended Practice for Serial Control and Communications Vehicle Network Part 81—Network Management. (July 1997).	86.005–17; 86.1806–04; —86.1806–05
SAE J1962, Diagnostic Connector—Equivalent to ISO/DIS 15031–3: December 14, 2001. (Revised, April 2002).	86.005–17; 86.1806–04; 86.1806–05
SAE J1978, OBD II Scan Tool—Equivalent to ISO/DIS 15031–4; December 14, 2001. (Revised, April 2002).	86.005–17; 86.1806–04; 86.1806–05
SAE J1979, E/E Diagnostic Test Modes—Equivalent to ISO/DIS 15031–5: April 30, 2002. (Revised, April 2002).	86.099–17; 86.005–17; 86.1806–01; 86.1806–04; 86.1806–05
SAE J2012, Diagnostic Trouble Code Definitions—Equivalent to ISO/DIS 15031–6: April 30, 2002. (Revised, April 2002.).	86.005–17; 86.1806–04; 86.1806–05

* * * * * (5) * * *

Document No. and name	40 CFR part 86 reference
ISO 9141–2, February 1, 1994, Road vehicles—Diagnostic systems—Part 2: CARB requirements for interchange of digital information.	86.099–17; 86.1806–01; 86.1806–04; 86.005–17; 86.1806–05
ISO 14230–4:2000(E) "Road vehicles—Diagnostic systems—KWP 2000 requirements for Emission-related systems", (June 1, 2000).	86.099–17; 86.1806–01; 86.1806–04; 86.005–17; 86.1806–05

Document No. and name	40 CFR part 86 reference
ISO 15765-4.3:2001, December 14, 2001, Road Vehicles—Diagnostics on Controller Area Network (CAN)—Part 4: Requirements for emission-related systems.	86.005-17; 86.1806-04; 86.1806-05

■ 3. Section 86.005-17 is amended by revising paragraphs (h) and (j) to read as follows:

§ 86.005-17 On-board diagnostics.

* * * * *

(h) Reference materials. The OBD system shall provide for standardized access and conform with the following Society of Automotive Engineers (SAE) standards and/or the following International Standards Organization (ISO) standards. The following documents are incorporated by reference, see § 86.1:

(1) SAE material. Copies of these materials may be obtained from the Society of Automotive Engineers, Inc., 400 Commonwealth Drive, Warrendale, PA 15096-0001.

(i) SAE J1850 “Class B Data Communication Network Interface,” (Revised, May 2001) shall be used as the on-board to off-board communications protocol. All emission related messages sent to the scan tool over a J1850 data link shall use the Cyclic Redundancy Check and the three byte header, and shall not use inter-byte separation or check sums.

(ii) Basic diagnostic data (as specified in § 86.094-17(e) and (f)) shall be provided in the format and units in SAE J1979 “E/E Diagnostic Test Modes—Equivalent to ISO/DIS 15031-5: April 30, 2002”, (Revised, April 2002).

(iii) Diagnostic trouble codes shall be consistent with SAE J2012 “Diagnostic Trouble Code Definitions—Equivalent to ISO/DIS 15031-6: April 30, 2002”, (Revised, April 2002).

(iv) The connection interface between the OBD system and test equipment and diagnostic tools shall meet the functional requirements of SAE J1962 “Diagnostic Connector—Equivalent to ISO/DIS 15031-3: December 14, 2001” (Revised, April 2002).

(v) All acronyms, definitions and abbreviations shall be formatted according to SAE J1930 “Electrical/Electronic Systems Diagnostic Terms, Definitions, Abbreviations, and Acronyms” Equivalent to ISO/TR 15031-2: April 30, 2002”, (Revised, April 2002).

(vi) All equipment used to interface, extract and display OBD-related information shall meet SAE J1978 “OBD II Scan Tool” Equivalent to ISO 15031-4: December 14, 2001”, (Revised, April 2002).

(vii) As an alternative to the above standards, heavy-duty vehicles may conform to the specifications of the SAE J1939 series of standards (SAE J1939-11, J1939-13, J1939-21, J1939-31, J1939-71, J1939-73, J1939-81).

(2) ISO materials. Copies of these materials may be obtained from the International Organization for Standardization, Case Postale 56, CH-1211 Geneva 20, Switzerland.

(i) ISO 9141-2 “Road vehicles—Diagnostic systems—Part 2: CARB requirements for interchange of digital information,” (February 1, 1994) may be used as an alternative to SAE J1850 as the on-board to off-board communications protocol.

(ii) ISO 14230-4:2000(E) “Road vehicles—Diagnostic systems—KWP 2000 requirements for Emission-related systems”, (June 1, 2000) may also be used as an alternative to SAE J1850.

(iii) ISO 15765-4.3:2001 “Road Vehicles-Diagnostics on Controller Area Network (CAN)—Part 4: Requirements for emission-related systems”, (December 14, 2001) may also be used as an alternative to SAE J1850.

(3) Beginning with the 2008 model year and beyond, ISO 15765-4.3:2001 “Road Vehicles-Diagnostics on Controller Area Network (CAN)—Part 4: Requirements for emission-related systems”, (December 14, 2001) shall be the only acceptable protocol used for standardized on-board to off-board communications. At this time, all other standardized on-board to off-board communications protocols: SAE J1850 “Class B Data Communication Network Interface,” (Revised, May 2001) in paragraph (h)(1)(i) of this section, ISO 9141-2 “Road vehicles—Diagnostic systems—Part 2: CARB requirements for interchange of digital information,” (February 1, 1994) in paragraph (h)(2)(i) of this section, and ISO 14230-4 “Road vehicles—Diagnostic systems—KWP 2000 requirements for Emission-related systems”, (June 1, 2000) in paragraph (h)(2)(ii) of this section will no longer be accepted.

* * * * *

(j) California OBDII compliance option. For heavy-duty engines weighing 14,000 pounds GVWR or less, demonstration of compliance with California OBD II requirements (Title 13 California Code of Regulations § 1968.2 (13 CCR 1968.2)), as modified pursuant

to CARB Mail-Out MSCD #02-11 (internet posting date October 7, 2002), shall satisfy the requirements of this section, except that compliance with 13 CCR 1968.2(e)(4.2.2)(C), pertaining to 0.02 inch evaporative leak detection, and 13 CCR 1968.2(d)(1.4), pertaining to tampering protection, are not required to satisfy the requirements of this section. Also, the deficiency provisions of 13 CCR 1968.2(i) do not apply. The deficiency provisions of paragraph (i) of this section and the evaporative leak detection requirement of paragraph (b)(4) of this section apply to manufacturers selecting this paragraph for demonstrating compliance. In addition, demonstration of compliance with 13 CCR 1968.2(e)(16.2.1)(C), to the extent it applies to the verification of proper alignment between the camshaft and crankshaft, applies only to vehicles equipped with variable valve timing.

* * * * *

■ 4. A new § 86.1806-04 is added to subpart S to read as follows:

§ 86.1806-04 On-board diagnostics.

This § 86.1806-04 includes text that specifies requirements that differ from § 86.1806-01. Where a paragraph in § 86.1806-01 is identical and applicable to § 86.1806-04 this may be indicated by specifying the corresponding paragraph and the statement “[Reserved]. For guidance see § 86.1806-01.”

(a)-(g). [Reserved]. For guidance see § 86.1806-01.

(h) Reference materials. The OBD system shall provide for standardized access and conform with the following Society of Automotive Engineers (SAE) standards and/or the following International Standards Organization (ISO) standards. The following documents are incorporated by reference, see § 86.1:

(1) SAE material. (i) SAE J1850 “Class B Data Communication Network Interface,” (Revised, May 2001) shall be used as the on-board to off-board communications protocol. All emission related messages sent to the scan tool over a J1850 data link shall use the Cyclic Redundancy Check and the three byte header, and shall not use inter-byte separation or check sums.

(ii) Basic diagnostic data (as specified in §§ 86.094-17(e) and (f)) shall be provided in the format and units in SAE

J1979 "E/E Diagnostic Test Modes—Equivalent to ISO/DIS 15031–5:April 30, 2002", (Revised, April 2002).

(iii) Diagnostic trouble codes shall be consistent with SAE J2012 "Diagnostic Trouble Code Definitions—Equivalent to ISO/DIS 15031–6:April 30, 2002", (Revised, April 2002).

(iv) The connection interface between the OBD system and test equipment and diagnostic tools shall meet the functional requirements of SAE J1962 "Diagnostic Connector—Equivalent to ISO/DIS 15031–3:December 14, 2001" (Revised, April 2002).

(v) All acronyms, definitions and abbreviations shall be formatted according to SAE J1930 "Electrical/Electronic Systems Diagnostic Terms, Definitions, Abbreviations, and Acronyms" Equivalent to ISO/TR 15031–2:April 30, 2002", (Revised, April 2002).

(vi) All equipment used to interface, extract and display OBD-related information shall meet SAE J1978 "OBD II Scan Tool" Equivalent to ISO 15031–4:December 14, 2001", (Revised, April 2002).

(vii) As an alternative to the above standards, heavy-duty vehicles may conform to the specifications of the SAE J1939 series of standards (SAE J1939–11, J1939–13, J1939–21, J1939–31, J1939–71, J1939–73, J1939–81).

(2) ISO materials. Copies of these materials may be obtained from the International Organization for Standardization, Case Postale 56, CH–1211 Geneva 20, Switzerland.

(i) ISO 9141–2 "Road vehicles—Diagnostic systems—Part 2: CARB requirements for interchange of digital information," (February 1, 1994) may be used as an alternative to SAE J1850 as the on-board to off-board communications protocol.

(ii) ISO 14230–4:2000(E) "Road vehicles—Diagnostic systems—KWP 2000 requirements for Emission-related systems", (June 1, 2000) may also be used as an alternative to SAE J1850.

(iii) ISO 15765–4.3:2001 "Road Vehicles-Diagnostics on Controller Area Network (CAN)—Part 4: Requirements for emission-related systems", (December 14, 2001) may also be used as an alternative to SAE J1850.

(i) [Reserved]. For guidance see § 86.1806–01.

(j) *California OBDII compliance option*. For light-duty vehicles and light-duty trucks, demonstration of compliance with California OBD II requirements (Title 13 California Code § 1968.2 (13 CCR 1968.2)), as modified pursuant to CARB Mail-Out MSCD #02–11 (internet posting date October 7, 2002), shall satisfy the requirements of

this section, except that compliance with 13 CCR 1968.2(e)(4.2.2)(C), pertaining to 0.02 inch evaporative leak detection, and 13 CCR 1968.2(d)(1.4), pertaining to tampering protection, are not required to satisfy the requirements of this section. Also, the deficiency fine provisions of 13 CCR 1968.2(i) does not apply. The deficiency provisions of paragraph (i) of this section and the evaporative leak detection requirement of paragraph (b)(4) of this section apply to manufacturers selecting this paragraph for demonstrating compliance. In addition, demonstration of compliance with 13 CCR 1968.2(e)(16.2.1)(C), to the extent it applies to the verification of proper alignment between the camshaft and crankshaft, applies only to vehicles equipped with variable valve timing.

(k) [Reserved]. For guidance see § 86.1806–01.

■ 5. Section 86.1806–05 is amended by revising paragraphs (h) and (j) to read as follows:

§ 86.1806–05 On-board diagnostics.

* * * * *

(h) Reference materials. The OBD system shall provide for standardized access and conform with the following Society of Automotive Engineers (SAE) standards and/or the following International Standards Organization (ISO) standards. The following documents are incorporated by reference, see § 86.1:

(1) *SAE material*. Copies of these materials may be obtained from the Society of Automotive Engineers, Inc., 400 Commonwealth Drive, Warrendale, PA 15096–0001.

(i) SAE J1850 "Class B Data Communication Network Interface," (Revised, May 2001) shall be used as the on-board to off-board communications protocol. All emission related messages sent to the scan tool over a J1850 data link shall use the Cyclic Redundancy Check and the three byte header, and shall not use inter-byte separation or checksums.

(ii) Basic diagnostic data (as specified in §§ 86.094–17(e) and (f)) shall be provided in the format and units in SAE J1979 "E/E Diagnostic Test Modes—Equivalent to ISO/DIS 15031–5:April 30, 2002", (Revised, April 2002).

(iii) Diagnostic trouble codes shall be consistent with SAE J2012 "Diagnostic Trouble Code Definitions—Equivalent to ISO/DIS 15031–6: April 30, 2002", (Revised, April 2002).

(iv) The connection interface between the OBD system and test equipment and diagnostic tools shall meet the functional requirements of SAE J1962 "Diagnostic Connector—Equivalent to

ISO/DIS 15031–3:December 14, 2001" (Revised, April 2002).

(v) All acronyms, definitions and abbreviations shall be formatted according to SAE J1930 "Electrical/Electronic Systems Diagnostic Terms, Definitions, Abbreviations, and Acronym" Equivalent to ISO/TR 15031–2:April 30, 2002", (Revised, April 2002).

(vi) All equipment used to interface, extract and display OBD-related information shall meet SAE J1978 "OBD II Scan Tool" Equivalent to ISO 15031–4:December 14, 2001", (Revised, April 2002).

(vii) As an alternative to the above standards, heavy-duty vehicles may conform to the specifications of the SAE J1939 series of standards (SAE J1939–11, J1939–13, J1939–21, J1939–31, J1939–71, J1939–73, J1939–81).

(2) ISO materials. Copies of these materials may be obtained from the International Organization for Standardization, Case Postale 56, CH–1211 Geneva 20, Switzerland.

(i) ISO 9141–2 "Road vehicles—Diagnostic systems—Part 2: CARB requirements for interchange of digital information," (February 1, 1994) may be used as an alternative to SAE J1850 as the on-board to off-board communications protocol.

(ii) ISO 14230–4:2000(E) "Road vehicles—Diagnostic systems—KWP 2000 requirements for Emission-related systems", (June 1, 2000) may also be used as an alternative to SAE J1850.

(iii) ISO 15765–4.3:2001 "Road Vehicles-Diagnostics on Controller Area Network (CAN)—Part 4: Requirements for emission-related systems", (December 14, 2001) may also be used as an alternative to SAE J1850.

(3) Beginning with the 2008 model year and beyond, ISO 15765–4.3:2001 "Road Vehicles-Diagnostics on Controller Area Network (CAN)—Part 4: Requirements for emission-related systems", (December 14, 2001) will be the only shall be the only acceptable protocol used for standardized on-board to off-board communications protocols: SAE J1850 "Class B Data Communication Network Interface," (Revised, May 2001) in paragraph (h)(1)(i), ISO 9141–2 "Road vehicles—Diagnostic systems—Part 2: CARB requirements for interchange of digital information," (February 1, 1994) in (h)(2)(i), and ISO 14230–4 "Road vehicles—Diagnostic systems—KWP 2000 requirements for Emission-related systems", (June 1, 2000) in paragraph (h)(2)(ii) of this section will no longer be accepted

* * * * *

(j) *California OBDII compliance option*. For light-duty vehicles, light-duty trucks, and heavy-duty vehicles weighing 14,000 pounds GVWR or less, demonstration of compliance with California OBD II requirements (Title 13 California Code § 1968.2 (13 CCR 1968.2)), as modified pursuant to CARB Mail-Out MSCD #02-11 (internet posting date October 7, 2002), shall satisfy the requirements of this section, except that compliance with 13 CCR 1968.2(e)(4.2.2)(C), pertaining to 0.02 inch evaporative leak detection, and 13 CCR 1968.2(d)(1.4), pertaining to tampering protection, are not required to satisfy the requirements of this section. Also, the deficiency fine provisions of 13 CCR 1968.2(i) does not apply. The deficiency provisions of paragraph (i) of this section and the evaporative leak detection requirement of paragraph (b)(4) of this section apply to manufacturers selecting this paragraph for demonstrating compliance. In addition, demonstration of compliance with 13 CCR 1968.2(e)(16.2.1)(C), to the extent it applies to the verification of proper alignment between the camshaft and crankshaft, applies only to vehicles equipped with variable valve timing.

* * * * *

■ 6. Section 86.1863-07 is amended by revising paragraphs (a) and (b) to read as follows:

§ 86.1863-07 Optional chassis certification for diesel vehicles.

(a) A manufacturer may optionally certify heavy-duty diesel vehicles weighing 14,000 pounds GVWR or less, to the standards specified in § 86.1816-08. Such vehicles must meet all requirements of Subpart S of this part that are applicable to Otto-cycle vehicles, except for evaporative, refueling, and OBD requirements where the diesel specific OBD requirements would apply.

(b) For OBD, diesel vehicles optionally certified under this section are subject to the OBD requirements of § 86.1806-05.

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[FR Doc. 03-14569 Filed 6-16-03; 8:45 am]

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DEPARTMENT OF HOMELAND SECURITY

Coast Guard

46 CFR Parts 10 and 15

[USCG 1999-6224]

RIN 1625-AA15

Licensing and Manning for Officers of Towing Vessels

AGENCY: Coast Guard, DHS.

ACTION: Final rule.

SUMMARY: This final rule amends the rules on licensing and manning for officers of towing vessels. It makes final, minor revisions in response to comments to the several interim rules that preceded it. It will help mariners obtain the appropriate licenses and so it will increase the competence of mariners and the safety of navigation.

DATES: This final rule is effective September 15, 2003.

ADDRESSES: Comments and material received from the public, as well as documents mentioned in this preamble as being available in the docket, are part of docket USCG 1999-6224 and are available for inspection or copying at the Docket Management Facility, U.S. Department of Transportation, room PL-401, 400 Seventh Street, SW., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. You may also find this docket on the Internet at <http://dms.dot.gov>.

FOR FURTHER INFORMATION CONTACT: If you have questions on this rule, call Lieutenant Commander Luke Harden, Office of Operating and Environmental Standards (G-MSO), Coast Guard, telephone 202-267-0229. If you have questions on viewing or submitting material to the docket, call Dorothy Beard, Chief, Dockets, Department of Transportation, telephone 202-366-5149.

SUPPLEMENTARY INFORMATION:

Background and Purpose

On November 19, 1999, we published a first interim rule with request for comments (64 FR 63213). It established updates to the licensing and manning for officers of towing vessels and the qualifications of those officers. We had chosen an interim rule to provide the towing industry further opportunity for comment; to answer comments received on the Supplemental Notice of Proposed Rulemaking (SNPRM) (62 FR 55548 (October 27, 1997)); to address concerns received at public meetings; and to

provide the public an opportunity to respond to changes reflected in the SNPRM. On October 27, 2000, we published a second interim rule (65 FR 64388), which delayed the implementation of the first interim rule until May 21, 2001. Delaying the rule gave us the opportunity and time to clarify this rule through a third interim rule, which we published on April 26, 2001 (66 FR 20931), and to issue guidelines implementing it.

This final rule constitutes an essential part of a comprehensive initiative to improve navigational safety for towing vessels. (Although the Coast Guard shifted from the Department of Transportation to the Department of Homeland Security on March 1, 2003, by authority of subsection 103(c) of the Homeland-Security Act of 2002 (Pub. L. 107-296), the current Secretary shares the judgment of the former that this rulemaking constitutes such an essential part.) You can glean the full background of the final rule from the preambles to the notice of proposed rulemaking (NPRM) (61 FR 31332 (June 19, 1996)); to the SNPRM; and to the first and third interim rules (64 FR 63213 (November 19, 1999) and 66 FR 20931 (April 26, 2001), respectively). The following are separate sections on Discussion of Comments for those two interim rules.

We now list and discuss comments from the first interim rule, treated together in groups by alphabetical order of topics:

Discussion of Comments on Interim Rule of November 19, 1999, Advancement Gap

Three comments stated that the interim rule would greatly disrupt the towing industry since steersmen's licenses would not be issued for 18 months and masters' licenses for 48 months after the effective date. The Coast Guard acknowledges a reduction in the number of mariners initially licensed as masters; however, we disagree that a gap will last 48 months. Further, in the third interim rule and in this final rule, we have also reduced these impacts by allowing unlicensed mariners with service on towing vessels before May 21, 2001, to seek licenses under the rules in place before that date.

Apprentice Mate (Steersman)

One comment asked whether we consider an apprentice mate (steersman) to be an officer of a towing vessel. As we stated in previous preambles, we do not.

One comment supported the concept of a steersman license, but recommended reducing the service time from 12 months to 6 months. Even

though some apprentice mates (steersmen) may be able to meet these requirements within 6 months in specific locations, this final rule sets the minimum requirements that apply to all apprentice mates (steersmen), in all locations.

One comment asked that the Coast Guard grandfather time spent in training for steersmen before the implementation date. The Coast Guard sees this as a reasonable request, and has already taken the appropriate action to accommodate it.

One comment suggested reducing the training time for intra-coastal canals, noting that towing on the Western Rivers may require 12 months training but that training on the Intra-Coastal Waterway does not require so much training. It is the Coast Guard's opinion that reducing training would be inconsistent with the spirit and intent of this rule: to ensure its appropriateness to all mariners in all locations.

Assessment

One comment asked whether direct supervision by a licensed master or mate (pilot) required that officer to be physically present. Yes, it means physically present and more directly supervising the apprentice mate (steersman).

One comment stated that it would take significant work to establish the guidance, standards, and procedures necessary to effect an orderly transition to the new system. The Coast Guard recognizes this issue and agrees. We published the second interim rule delaying implementation just so we could develop such guidance, which is available in the form of Navigation and Vessel Inspection Circular (NVIC) 4-01.

Assistance Towing

Two comments recommended limiting the length of disabled vessels to not more than 100 feet for assistance towing. It is beyond the scope of this final rule to redefine "assistance towing".

One comment stated that the definition of a "disabled vessel," which excludes a barge or any other vessel not regularly operated under its own power, would cause a hardship on the assistance-towing industry and would eliminate the exemptions on marine-assistance vessels. The comment also recommended a limit on the size of small work-barges used in assistance towing. The Coast Guard disagrees; 46 U.S.C. 8904(b) lays down a specific requirement for us to license those persons involved in towing disabled vessels for consideration. Rules already cover the towing of vessels that are not

disabled, and barges are not disabled vessels unless they cannot be used for their intended purpose.

One comment suggested that the rule let the Captain of the Port (COTP) grant exemptions to the towing rules applied to assistance-towing vessels. The COTPs already have this authority in emergencies. It would be inconsistent with extant Federal rules, which for good reason prohibit the practice of the towing of a vessel that is not disabled by an individual licensed for assistance towing.

One comment stated that assistance-towing time should count toward a license as master of towing vessels. The crediting of assistance towing or other service, except as noted in 46 CFR 10.466, toward a license as master or mate (pilot) of towing vessels for commercial towing, has never been contemplated in this rulemaking or discussed in previous forms of this rule.

One comment stated that assistance towing comprises assisting not only pleasure vessels but also commercial vessels and non-self-propelled barges. The Coast Guard agrees that assistance towing is limited to assisting disabled vessels. A disabled vessel can be a commercial vessel; however, the test in this case is whether such a vessel is disabled and is in need of assistance.

One comment stated that the rules on licensure in towing are inappropriate for the work done by the assistance-towing industry. This rule does not revise the rules that apply to assistance towing, it merely clarifies the definition of "disabled vessel".

Companies' Responsibility

One comment stated that companies should have to reply to requests for service letters. 46 CFR 10.211 requires the documenting of sea service. This final rule provides another method for mariners' own documenting through a Towing Officers' Assessment Record (TOAR).

One comment read 46 CFR 10.464(f) and 10.465(f) to require that all companies ensure 30 days of observation and training for new hires before releasing them to work under the authority of their licenses as members of the wheelhouse complement. The Coast Guard agrees.

Two comments believed it is the responsibility of companies, only, to make sure that mariners are competent. The Coast Guard disagrees; the responsibility is also incumbent upon the Coast Guard as well as, in the first instance, upon the mariner himself or herself.

One comment asked whether companies should ensure that their

vessels are under the direction and control of persons with appropriate experience on the water. The answer to this question is yes, as required under 46 CFR 15.401.

Consistency

One comment asked how the Coast Guard intends to ensure that the training and evaluation of mariners are consistent. The Coast Guard establishes the minimum acceptable standards for assessment, training, and courses. This arrangement allows industry the freedom to develop programs within a wide spectrum, while maintaining at least these standards.

Cost

One comment suggested that the Coast Guard actively and personally solicit the views of smaller towing companies rather than those of the larger companies. That was the purpose of two of the interim rules—to receive comments from all interested parties.

One comment stated that the nominal cost neglects both the loss of licensed mariners who are unwilling to submit to the stringent regimen of this final rule through early retirement and the training of replacements. The Coast Guard disagrees with the comment since current towing-vessel operators are grandfathered and need only meet minimal added requirements.

Definitions

Four comments stated that the definition of "disabled vessel" is unduly restrictive to the assistance-towing industry, because it excludes the towing of a barge or any other vessel not regularly operated under its own power of any length, and voids our rules' own exemption for marine-assistance vessels. We disagree, as we stated in our response to the third comment under "Assistance Towing". Furthermore, our rules do not provide an exemption for assistance-towing vessels; rather, they cover assistance-towing endorsements under a specific rule, 46 CFR 10.482. And, finally, the definition was developed in concert with Congressional staff members, assistance-towing companies, and the U.S. Coast Guard.

One comment asked whether the term "Western Rivers" should apply to pilots of towing vessels. The term applies as intended. Inland routes include Great Lakes and Western Rivers.

Demonstration of Proficiency

Three comments disagreed with a requirement of check rides for persons already doing the job (licensed commercial towing). The Coast Guard

agrees in part. Only those mariners who fail to provide documentation of proficiency, and those who have had their licenses suspended, will need to demonstrate proficiency.

Two comments questioned the duration of the demonstration of proficiency: Whether the demonstration would be a short-term evaluation or conducted over the full period of training. It is the Coast Guard's opinion that the demonstration should extend over the full period of training; except that, in the case of a mariner returning from the suspension of his or her license, that demonstration may be short-term.

One comment sought clarification on what documentation of proficiency the Regional Examination Centers (RECs) would require before license renewal, and on the meaning of "current license". The Coast Guard clarified this issue in NVIC 4-01. The "current license" mentioned in the preamble refers to the license the mariner held before May 21, 2001.

One comment stated that the check-ride requirement for license renewal might unfairly affect a small business without a Designated Examiner (DE) and might result in increased expense. The Coast Guard disagrees. Check rides are necessary only when a mariner lacks other documentation of training and service at renewal. Although this requirement may affect businesses, the process of developing DEs should allow every company, regardless of size, to have a DE.

One comment asked whether the decision requiring a check ride at the time of renewal would belong to a license evaluator instead of a higher authority. The evaluator should be the person best able to identify whether there is sufficient information within an application package. Although a check ride is available for the REC to use, this process is only for those cases when the mariner is unable to furnish documentary evidence that he or she obtained training and service during the preceding licensed period.

One comment identified a need for objectives and assessment criteria for the DE to use when conducting check rides. The Coast Guard agrees. The objectives should be based upon the TOAR published in NVIC 4-01. The assessment criteria are before the Towing Safety Advisory Committee (TSAC) and will become available in the **Federal Register**.

Designated Examiner (DE)

Three comments stated that the term "designated examiner" (DE) needs further clarification in regard to

qualifications and expectations. The term and what it entails are fully explained in NVICs 4-01 and 6-97.

One comment stated that any process for developing DEs must be smooth and that the requirements must use common sense. The commenter also suggested that the process contemplated by this rulemaking draws too much from the International Convention on Standards of Training, Certification, and Watchkeeping for Seafarers (STCW), as amended, and is inconsistent with towing on inland rivers and the Western Rivers. There is no compelling rationale to remove the requirement; however, the Coast Guard eased the process for obtaining the letter of designation as a DE, which it describes in NVIC 4-01.

One comment stated that qualifications for DEs are a point of controversy in the offshore industry, and that the towing industry should expect similar controversy. With or without controversy, the Coast Guard must ensure that DEs are adequately trained and qualified.

One comment asked that the final rule clearly reflect that the same person may both instruct and evaluate a candidate. There is nothing in this rule or previous rules prohibiting a person from both instructing and evaluating a candidate.

One comment asked whether any liability attaches to the DE for his or her recommendations. If evidence exists demonstrating that the DE is not ensuring the proficiency of the candidates, the Coast Guard may withdraw his or her designation. The DE is able to determine only that a candidate is competent at the time of assessment.

One comment stated that mariners, who are already overworked and in short supply, would face an added workload by participating in the program for Qualified Instructors (QIs) and DEs. The commenter also stated that mariners who are retired, disabled, or otherwise inactive, even if not holding licenses, should be eligible to be QIs and DEs. The Coast Guard disagrees. The process establishes that a mariner must hold a valid license to become a DE. If a mariner holding a license chooses to become a DE, he or she may do so; however, he or she must still comply with the watch-hour requirements of 46 CFR 15.705.

One comment stated that the rule overlooks the fact that a DE should expect payment for his services. The commenter also stated that an employer could use coercion to gain a favorable evaluation, "while the threat of a Coast Guard subpoena could cause stress, anxiety, and embarrassment for the Designated Examiner." There are

numerous ways a DE could receive payment. Coercion could occur, but we don't believe it is a substantial concern. Although our authority to issue subpoenas might intimidate some, there are too many personalities involved to determine why or when, or to prevent coercion in all cases.

One comment asked why the Coast Guard does not see a DE's administering check rides for his employer as a conflict of interest. Our opinion is that no conflict of interest arises since it is in both the employer's and the DE's best interest to ensure that a mariner receiving certification can safely complete his or her duties.

One comment stated that maritime educators and marine-membership organizations need leeway to effectively deal with rehabilitating mariners and returning them to service. The comment asked whether the Coast Guard had fully considered that a mariner returning from a suspension of a license might be unemployed and not have access to a vessel for his or her testing, and whether the Coast Guard would let a mariner get a job, return to work, and then arrange for his or her check ride. Our rules state that no mariner may return to work in a position requiring a license if his or her license is suspended; yet nothing in those rules or this rule limits his or her ability to work in an unlicensed position.

Equivalents

One comment asked whether tonnage restrictions contained in 46 CFR 15.910 would persist. No. The tonnage restrictions that existed in § 15.910 until May 21, 2001, no longer exist, since this final rule effectively removes the equivalent provision on licensure.

General

Two comments stated that the most critical challenge is implementing the final rule. They suggested that the best way to meet the challenge is through an ongoing consultative process involving the industry, the Coast Guard, and licensed operators. The Coast Guard agrees with this comment and has been working with the TSAC on implementing the rule.

One comment stated that the rule should differentiate between licenses for towing on oceans and near-coastal waters and those for towing on inland waters and Western Rivers, since these two methods of towing are extremely different. That was the rule's main intent—to separate the types of towing. The TOARs fit the methods of towing in the areas of operation and the routes sought.

One comment asked whether mariners currently operating towing vessels would have to obtain towing-vessel endorsements after the final rule became effective but before their licenses expired. No, they would not need the endorsement until their first renewal after the rule became effective.

One comment suggested that the rule allow a mariner to obtain a towing-vessel endorsement on a license as master of steam and motor vessels of not more than 200 gross register tons (GRT). This would allow a mariner to operate towing vessels after only 12 months of sea service. The Coast Guard disagrees. This rule seeks to improve safety through increased service and training. Acceptance of this suggestion would result in decreasing the level of service and training throughout the fleet.

One comment questioned the phrase "oceans (domestic trade)." This phrase persists from the current rules. This is due, in part, to restricting operators of uninspected towing vessels (OUTVs) to domestic trade only.

One comment stated that the changes are superficial because they merely codify standard practice. The Coast Guard disagrees. Many companies still lack established training programs.

One comment stated that pilots should not have to be trained just to be in the good graces of a company. The purpose of this rule is to increase safety on towing vessels, not to influence personnel management within a company.

One comment asked whether 46 CFR 15.910 contradicts 46 CFR 15.610. No, it does not. Section 15.910 removes the provision on equivalents in the rules effective before May 21, 2001, and restates the manning requirements in § 15.610.

One comment raised three questions about 100-ton licenses: whether mariners holding such licenses and operating towing vessels could continue that service, whether other mariners could undertake that service, and whether the license would show tonnage under the International Tonnage Convention (ITC). Mariners legally operating towing vessels could continue operating them under the current restrictions of their licenses. Mariners without experience operating towing vessels before May 21, 2001, even if they held licenses authorizing service on vessels of less than 200 GRT, could not get towing endorsements, unless they went through the training outlined in the rules. If mariners want their licenses to show tonnage under the ITC, we will place GT (gross tons) instead of GRT on their licenses.

One comment recommended that we use Table 10.910–2, instead of the list in § 10.465(g), to ensure the adequacy of approved training courses. We agree and will institute that change.

One comment asked whether waters specified by 33 CFR 89.25 are inland waters rather than Western Rivers. Yes, 33 CFR 89.25 prescribes inland rules 9(a)(ii), 14(d), and 15(b) for specific, named waterways. By contrast, 46 CFR 10.103 identifies inland waters in general (with reference to the Boundary Lines described elsewhere).

One comment asked about the scope of limited exams in 46 CFR 10.418(b) and 10.426(a)(2). These exams remain the same as those in place before May 21, 2001.

One comment asked about the scope of the exam for apprentice mate (steersman). It is the same as the scope of the exam required for OUTVs before May 21, 2001. (See Table 46 CFR 10.910, columns 11 and 12.)

One comment asked which exam a mariner takes when moving from mate of inspected steam vessels (not more than 200 GRT) to mate of towing vessels. Moving between these vessel types as described is impermissible under this rule.

One comment opposed the two-watch system for offshore towing vessels. The Coast Guard acknowledges the comment, but notes that this standard is statutory and is not the subject of this or any other regulatory process.

One comment wanted the Department of Transportation to clamp down on employers who knowingly hire, and entrust their vessels to, unlicensed personnel. (We take this comment to apply with equal force to the Department of Homeland Security, or DHS.) The Coast Guard and DHS need the assistance of all hands in the industry, both corporate and private, to identify such wrongdoing for appropriate investigation.

One comment questioned "time-and-a-half" as it affects straight 12-hour shifts. This issue is a matter of policy and sometimes of collective-bargaining agreements but not a subject of this rule.

One comment wanted to see passenger-vessel combinations, of any type, operated by masters of inspected vessels of appropriate route and tonnage, and passenger-carrying tug-barge combinations, operated by masters of towboats or of passenger barges at the owners' option. The Coast Guard agrees, and has provided guidance to the local Officers in Charge, Marine Inspection, by way of Navigation and Vessel Inspection Circular (NVIC) 4–01, when determining the manning of such vessels.

Grandfathering of Licenses

Five comments asked whether the final rule would affect licensed routes. We do not intend to remove any routes currently on any license. Each mariner would keep any routes he or she holds on his or her license.

Two comments asked for a clearer definition of "recent towing service." The Coast Guard will accept (and expect) evidence of service on towing vessels within the last 90 days, before it will confer the initial towing-vessel endorsement.

One comment suggested that the TSAC determine the procedures for grandfathering mariners. The Coast Guard disagrees, as we established the grandfathering of mariners in the third interim rule.

One comment recommended that the final rule allow the grandfathering of persons licensed as masters of vessels of 100 GRT, mates of vessels of 200 GRT, or first-class pilots whose licenses were issued before the effective date. The Coast Guard disagrees, and maintains that a towing endorsement requires towing experience.

One comment suggested grandfathering persons with current licenses endorsed for assistance towing. The Coast Guard disagrees for the reasons set forth in the fourth paragraph under "Assistance Towing".

One comment asked whether a mariner grandfathered as a master of towing vessels could work on an integrated tug and barge (ITB). Yes, that mariner could work on any towing vessel unless his or her license held a limit or a route inconsistent with the operation of the ITB.

Harbor Assist

One comment asked how the license for master (harbor assist) would fit in ports where several different types of towing take place. That license has been merged with the license for master (limited local area) by this rulemaking.

One comment requested that the Coast Guard adjust the service time for master (harbor assist) by reducing the time to 36 months, which would become possible if it reduced the service time for apprentice mate from 30 months to 18 months. Again, the Coast Guard has combined this master's license with the license for master (limited local area) and removed the license as mate (pilot) of towing vessels (limited). The total service time already stands at 36 months.

Inland Waters: Definition

Two comments stated that altering the definition of "inland waters" potentially

reaches every license-holder. We have revised the definition to reach only masters and mates (pilots) of towing vessels on the Western Rivers.

One comment stated that inland waters currently comprise the Gulf Intracoastal Waterway and Western Rivers, and that separating those two would create work for the mariner. The Coast Guard agrees; however by request of industry and the public during the comment periods on the NPRM and the SNPRM, the two were separated, and will remain distinct.

One comment stated that the interim rule would affect all mariners with ocean and near-coastal routes when they entered waters designated as Western Rivers. The Coast Guard agrees, but the rule would not affect currently licensed mariners able to document service on the Western Rivers. In this final rule we have taken further action to mitigate the effects.

Integrated Tugs and Barges

Two comments expressed concern that the Coast Guard has neither shown the rationale for changing the manning of ITBs being used as passenger vessels nor shown that the masters of such vessels have different criteria to consider in operating the vessels. The comments asked the Coast Guard to withdraw the portion of the rules that apply to ITBs involving passenger vessels. The Coast Guard acknowledges the comments. This final rule does not change the rules on the manning of inspected passenger vessels; this responsibility still resides with the local OCMI. NVIC 4-01 provides specific information and non-binding guidance to assist the OCMI in determining the manning of towing vessels.

One comment stated that the interim rule imposes added requirements on personnel holding unlimited licenses for masters and mates on Great Lakes with pilotage, and is a needless burden. The Coast Guard deems this burden minor, whether to those with towing experience on the Great Lakes or to those with unlimited licenses.

One comment stated that the rule does not consider the nature of ITBs and their similarity to standard vessels, and that changing the rule would bar, from operating ITBs, those masters currently operating vessels before their conversion to ITBs. The Coast Guard disagrees. Mariners with licenses for vessels greater than 200 GRT may operate such vessels once they have completed 30 days of familiarization and their TOARs. Further, this situation is rare and would be best for the local OCMI to handle case by case.

One comment stated that the preamble said ITBs must be operated by mariners who hold towing-vessel licenses. This rule establishes a wholly independent process for obtaining such licenses and vacates the practice of allowing a superior license to subsume the "lesser included authority". The Coast Guard, through this rule, recognizes the special skills required to operate towing vessels and requires a training program for mariners to achieve those skills.

License Evaluations

One comment stated that every evaluator should go through training at Yorktown, Virginia, and that this training should be available to maritime educators. Like the towing industry, the Coast Guard runs on-the-job training for its own evaluators, similar to those for private-sector evaluators under the TOAR program. The training of marine educators is not part of this rulemaking.

License Renewals

Two comments stated that the renewal process should let the employer submit a letter attesting to the competence of a mariner, instead of practical demonstration or a TOAR. The Coast Guard agrees. The letter would need to meet the requirements of 46 CFR 10.211 and contain specific information about the mariner's competence, completed training, drills conducted, and so forth. The intent is to document competence and training over time, and to provide alternative methods for documenting them.

One comment stated that mariners who document service on their license, without incurring administrative action against the license, should be able to renew the license without completing practical demonstrations before DEs. The Coast Guard agrees. The primary purpose of the TOAR is assessing mariners' service between apprentice mate (steersman) and mate (pilot) of towing vessels, or between other adjacent points in their career, as required by these rules.

Limited Local Area

One comment asked whether a geographically limited license had to be renewed where it was issued. The answer is "yes", since a limited license is issued to a mariner who does not meet all of the requirements for a "full" or non-limited license. A geographically limited license is issued at the discretion of the cognizant OCMI if, in the opinion of that OCMI, the mariner possesses the skills, knowledge, and experience to safely operate within the restrictions of the license. Because this

determination requires local knowledge of a particular geographic area, and because conditions in that area may change, we feel the cognizant OCMI should have the opportunity to re-evaluate the candidate when the license is renewed. Geographically limited licenses, whether original or renewal, are best considered and issued by the REC for the area in which the mariner will operate.

One comment stated that 46 CFR 10.464-3 requires enough total service to adversely affect the availability of properly licensed operators of harbor tugs now and for the coming years, as well as impose a significant impact on small entities. The intent of this rule is to increase the training and experience (indicated by service) of mariners operating towing vessels; however, we have reduced the total service required for harbor assist towing vessels and are streamlining the process.

Outer Continental Shelf, Activities

Two comments asked whether the Coast Guard would continue to exempt towing vessels involved in activities on the Outer Continental Shelf from these rules. The Coast Guard notes that 46 U.S.C. 8905(b) remains in effect, and is beyond the scope of this rulemaking.

Pilot vs. Mate

One comment asked why the definition of "pilot of towing vessels" is limited to Inland routes. During the development of this project, the Western Rivers towing industry did not like using the term "mate", a term commonly used to indicate a deckhand rather than an officer in charge of navigating the towing vessel. The definition of the term "pilot of towing vessels" is limited to operating only on inland routes to avoid the confusion with first-class pilot and various state pilot licenses.

One comment asked whether the choice of the title of a mate (pilot) license, as appropriate, would belong to the mariner and also whether any nation-wide guidance would be forthcoming. Yes, the choice would belong to the mariner, although such guidance would state that personnel of RECs should ensure that the mariner understands that changing the title of the license might result in extra fees. The guidance appears in NVIC 4-01.

Public Meetings

Five comments sought public meetings at various locations so affected mariners could provide further comments, including the need for a general meeting on the Upper Mississippi River and another to discuss

recency of towing service. The Coast Guard deemed that mariners have had adequate opportunity for comment during the five public meetings previously held. In addition, the Coast Guard has conducted public outreach on all issues throughout the towing industry since the publication of the first interim rule.

Recency

One comment received showed concern about the loss of licensed routes if a mariner is unable to show recency on a segment of a waterway. There is nothing in this final rule that would remove routes from a license for failure to maintain recency.

One comment asked about the recency requirement for towing service at the time of renewal. This rule has not changed this requirement. A mariner would have to show recency of service on towing vessels and ongoing training at time of renewal.

Regional Examination Centers (RECs)

Three comments stated that this rule, as proposed, would significantly increase the workload at RECs. The Coast Guard acknowledges that it would increase the workload; however, the increased workload is acceptable for the expected gains from this rule.

Responsibility of the Master

Two comments disagreed that the master should be responsible for what occurs when he or she is not on watch. The Coast Guard partly agrees, and points to the SNPRM's preamble, where the issue is discussed. A master is not responsible for the negligence or misconduct of the mate (pilot) of towing vessels on watch.

Route Endorsements

Two comments stated it was unclear whether there would be a Great Lakes inland route and a Western Rivers route. Yes, there will be distinct Great Lakes inland and Western Rivers routes.

One comment sought clarification on the application of route-observation days for the towing endorsements on licenses for vessels over 200 GRT, as those days affect pilotage rules. This rulemaking does not address or revise the pilotage rules. The route-observation days in this rulemaking are specific to observation on a towing vessel while a candidate completes a TOAR.

One comment stated that a towing endorsement on a license over 200 GRT should be based on 30 days of total observation and be inclusive of all subordinate routes without necessitating service on each route. The Coast Guard agrees; however, throughout this

rulemaking, the towing industry has emphasized the need to ensure that officers are familiar with the Western Rivers. That route will not be included without 90 days of observation on it.

One comment recommended consolidating two routes—the Western Rivers and the Great Lakes inland—and authorizing those licensed for the latter to operate on the Western Rivers. The Coast Guard acknowledges the comment, but the recommendation is not consistent with either the majority of input received on this issue or with the sounder policy on it.

One comment stated that the requirement of 90 days observation and training for Western Rivers would make it extremely difficult to obtain the proper endorsement for a mariner sailing on periodic ocean voyages but entering Western Rivers. The Coast Guard agrees, and maintains that this endorsement should be based on observation and training on Western Rivers, and not based on convenience. However, a process has been created for such a mariner to obtain an endorsement only for the Lower Mississippi River.

One comment asked whether there would be a fee for removing the restricted endorsement issued under 46 CFR 10.466(b). Yes, there will be a fee imposed under 46 CFR 10.109, since removal constitutes another transaction at a REC.

One comment agrees that geographic endorsements are a good idea, but recommends allowing a company to post a licensed mariner for a reasonable time without the cost of training the mariner. The Coast Guard disagrees. Having a mariner unfamiliar with a waterway operate the vessel, as distinct from having him or her train aboard it under supervision, does not make sense, even if he or she holds a license. A mariner must hold a license endorsed for the appropriate route to operate the vessel. A mariner may also, after completing an exam, hold a restricted endorsement for mate (pilot) of towing vessels and, after completing 90 days of service on the new route, have that route added to his or her license.

Sea-Going Tows

One comment stated that we should distinguish between oceans and near-coastal routes only in the exam, and, in the exam, only on such topics as celestial navigation. The Coast Guard disagrees. The two routes differ in two important respects: the practical assessment of mariners on STCW, and firefighting. This has not changed the exam requirements for the two routes.

Sea Service

Two comments urged that a mariner should be able to make a statement concerning his or her service in regard to his or her experience. For the first renewal after May 21, 2001, there should be some evidence, within the file on the license, describing where a mariner has completed towing service. The Coast Guard would need documentary evidence, provided by the mariner, if nothing existed within the file for certain routes.

One comment asked about the minimum towing service required for renewal within the 12 months of service. The towing service required for renewal remains the same except for added training.

One comment asked how seasonal operators' time would count for vessels visiting multiple limited construction areas over 12 months of service. Service time would count the same as it does under current practices.

One comment argued that, unless an uninspected towing vessel has a separate engine department, all the service should count toward engine or deck, as requested by the mariner. This rule does not modify the treatment of service, whether deck or engineering. Service will continue to count—or not—according to rule and policy.

One comment asked that we identify the civil penalties that apply to violations of these particular rules by either the company or the mariner. The commenter also asked where all current civil-penalty cites pertaining to violations of 46 CFR part 10 are compiled and available for public viewing. A list of these cites is available from: Commandant (G-LMI), U.S. Coast Guard Headquarters, 2100 Second Street, SW., Washington, DC 20593-0001. Actual cases may be requested from the Coast Guard under the Freedom of Information Act (FOIA). Specify cases under 46 U.S.C. 8906 and 46 CFR 15.610.

One comment stated that a company's withholding records would now become critically important to the mariner because these records, now, not only would cover service but also might cover training. The Coast Guard agrees. That is why the TOAR provides another method for documenting training and competency, as well as service.

Simulators

One comment requested that simulators be one method of demonstrating proficiency under 46 CFR 10.209(c)(6)(i). The Coast Guard agrees and notes that full mission simulators, approved by the National

Maritime Center, would meet the intent of the paragraph, within this final rule.

One comment stated that using a simulator would be an expensive way for an unemployed mariner, after a suspension of license, to demonstrate proficiency. The Coast Guard agrees; however, this rule provides many ways to demonstrate proficiency, of which using a simulator is just one.

One comment asked why tonnage calculated under the ITC does not figure in the rule. There is no clear conversion between ITC and domestic tonnage, for licensing. We hold vessels of 200 GRT equivalent to those of 500 GT (ITC).

STCW Endorsements

One comment asked whether we would charge a user's fee for an STCW endorsement. No, the Coast Guard does not intend to charge user fees. Please see Table 10.109 of this title.

Tables

One comment stated that Figure 10.403 does not include licenses for Offshore Supply Vessels. This rule applies only to OUTVs. It revises Figure 10.403 only as necessary for them.

One comment discovered errors in the footnotes to the tables: "COTP" in place of "OCMI", and "Training" in place of "Towing". The Coast Guard appreciates the comment and has corrected the errors.

One comment asked whether an exam exists for each route referred to in the footnote regarding routes. Yes, the exams for routes are those where differences arise for "Rules of the Road", such as changes to the International Regulations for Preventing Collisions at Sea, or to navigational requirements, such as a requirement of celestial navigation.

Tonnage Restrictions

Two comments argued that we should strike the use of tonnage or any other limiting criteria as they apply to the licenses for officers of towing vessels. The Coast Guard agrees, with the exception of "inspected vessels"—defined by tonnage—whose officers must meet requirements on licenses, experience, and training beyond the normal requirements for towing vessels.

One comment insisted that tonnage limits on towing-vessel licenses are not appropriate and were not recommended by the TSAC. The third interim rule provided tonnage limitations for those mariners operating towing vessels under the equivalence provision existing before May 21, 2001. That interim rule continues to limit those mariners to the tonnage listed on the face of their

license, if it was 200 GRT or less. This rule maintains this provision.

Two comments likewise challenged 46 CFR 10.464(d) and 10.465(b) in the first interim rule regarding the placement of tonnage limits on licenses for oceans and near-coastal waters. The Coast Guard agrees, and has revised those paragraphs by removing the reference to such limits.

Towing Officers' Assessment Record (TOAR)

Two comments stated that there is no reason why a Training Record Book (TRB) for the STCW cannot serve in place of the TOAR, as long as the TRB contains all the information required by the TOAR. The Coast Guard agrees. The use of a TRB will be permissible as long as the mariner accounts for any differences between the TOAR and the TRB, and documents the training beyond the TRB.

One comment stated that the TSAC should draft the NVIC and the TOAR for this rule to ensure uniformity. The TSAC was involved in the process and developed the TOAR incorporated in NVIC 4-01. The TSAC may be likewise involved with the next NVIC.

One comment requested that no mariner's photo appear in the TOAR. The Coast Guard disagrees. It is necessary for both the Coast Guard and the DE to be able to identify the mariner holding the TOAR. The photograph provides the most efficient method of this identification.

One comment asked whether the Coast Guard plans to tell the RECs, but not the mariners, what assessment records to maintain for renewal. The TOAR is not necessary for those mariners first renewing their license between May 21, 2001, and May 21, 2006.

One comment asked where a mariner can obtain a TOAR. An example accompanies NVIC 4-01, which is available on the Internet at www.uscg.mil/hq/g-m/nvic/4-01/n4-01.pdf.

One comment asked whether, since 95 percent of mariners affected choose to maintain TOARs, it would not be sensible for the Coast Guard to promote uniformity by making the necessary forms available free of charge. The Coast Guard is publishing an example in NVIC 4-01, which mariners may print from the Internet and use.

One comment stated that the interim rule is not clear whether the TOAR is going to be required at the first renewal after implementation. The TOAR will not be required for those mariners currently operating towing vessels.

One comment stated that the interim rule fails to provide sufficient details regarding the assessment records—including specific objectives and criteria on which to base assessments. NVIC 4-01 provides the details not covered in the rule.

Towing Vessel Limited

One comment asked whether the limit of 200 GRT covers all routes. No, the limit of 200 GRT covers routes over limited local areas.

Training Requirements

One comment recommended that the Coast Guard create the position of course evaluator, who could rule that a course meets a defined minimum standard and approve the course; otherwise, the Coast Guard needs to streamline the process. The Coast Guard agrees, and has course evaluators assigned at the National Maritime Center.

One comment sought clarification on the applicability of the requirement for masters and mates in 46 CFR 10.205(g)(2) to have training in firefighting when they serve on towing vessels over 200 GRT. The comment declared that that requirement would exceed the current one for OUTVs. A requirement for training in firefighting existed for OUTVs operating on oceans routes before May 21, 2001. Another, similar requirement persists in 46 CFR 10.205(g)(3) for certain masters and mates (pilots) of towing vessels. As the comment observed, § 10.205(g)(3) addresses this training. That paragraph expressly notes that its requirement applies only to masters and mates (pilots) of towing vessels in ocean service. However, its requirement would apply to officers of towing vessels if they were operating vessels of over 200 GRT in near-coastal service as well, by virtue of the rules implementing the STCW.

One comment stated that the requirements in 46 CFR 10.465(g), effective on May 21, 2001, for an approved training course go beyond those that are the subject of exams in Table 10.910-2. The commenter added that requirements must be consistent. The Coast Guard disagrees. The approved training course replaces completion of the TOAR, not the exam. All apprentice mates (steersmen) will have taken the exam, and may then choose either to take the approved training course or to complete their TOARs.

One comment alleged that the interim rule presents a problem: That few, if any, towboat operators have received formal training in firefighting. The

comment further alleged that there is good reason to require such training for licensed officers of towing vessels. The Coast Guard agrees in part. Officers who would receive ocean endorsements on their licenses must receive such training.

Transition Period

One comment recommended language to grandfather candidates who anticipate completing training within three months of the interim rule's effective date. The Coast Guard accepts this recommendation.

Western Rivers

One comment stated that the 90-day requirement would make it extremely difficult for a mariner, entering the Western Rivers on periodic ocean voyages, to obtain the proper endorsement. The Coast Guard agrees; and maintains that that endorsement should be based on observation and training on Western Rivers, and not based on convenience. However, a process has been created in this final rule to allow a mariner operating periodically on the Western Rivers to obtain an endorsement for the "pilotage waters of the Lower Mississippi River", in less than the 90 days required for a Western Rivers endorsement.

One comment asked whether adding an endorsement for Western Rivers to an existing license would entail an exam. No, all that would be necessary would be proof of service.

One comment saw no need for the Coast Guard to start issuing endorsements for the Western Rivers again. We disagree: the desirability of issuing licenses for the Western Rivers arises precisely from the responses to the SNPRM.

One comment asked what the differences are between the Western Rivers and other rivers. Unlike other waterways, the Western Rivers have huge tows operating on them.

Comments Beyond the Scope of the Rulemaking

There were four comments beyond the scope of this rulemaking. We will not discuss them here.

Comments Specific to the Third Interim Rule

We will, however, discuss here comments on the third interim rule (66 FR 20931 (April 26, 2001)), in alphabetical order. There were seven of them, in three letters.

Definition of Disabled Vessel

One comment challenged our decision not to change the definition of

"disabled vessel" in 46 CFR 10.103 of the third interim rule. The comment stated that, unchanged, the definition would not clarify confusion caused, and not lessen the burdens imposed, by that rule. The commenter added that the definition would leave a "tremendous burden on a large number of marine assistance firms," and be "unduly restrictive because towing a barge or any other vessel not regularly operated under its own power of any length" would void the exemption for marine-assistance vessels. The Coast Guard reiterates that such towing very well should void the exemption. The rule for assistance towing established this license precisely for those mariners providing assistance to pleasure vessels. The rule also addressed head-on both the towing of barges and inter-marina towing, both of which the Coast Guard had found inconsistent with the intent of Congress.

License Stipulations

Two comments expressed concern over the stipulation that the license for officers of towing vessels would not authorize foreign voyages, or even domestic voyages, of towing vessels over 200 GT. The Coast Guard agrees with this concern and, in this final rule, allows mariners licensed under this rule to operate all towing vessels of less than 300 GRT on domestic voyages on oceans and near-coastal waters, and, if they satisfy international requirements, on foreign voyages.

Service on Lower Mississippi River

Two comments suggested that mariners seeking authority to operate on the Lower Mississippi River, above mile 304.1, have to obtain endorsements for Western Rivers by completing the TOAR for those Rivers—but equally that those mariners with endorsements for oceans, near-coastal service, or Great Lakes inland service seeking to operate below mile 304.1 should not have either to obtain the endorsement or to complete the TOAR. The Coast Guard agrees. However, we have chosen to use, instead of mile 304.1, mile 234, which is already established by rule as pilotage waters.

Single Track for Licensing

Two comments stated there should be a single track for licensing, to meet the unique needs of coastal harbor tugs, inland fleet boats, and other craft of such limited operations. They urged us to combine the tracks for "harbor assist" and "limited local area" in a single "limited" licensing-progression: Apprentice mate or steersman (limited) and master (limited). The Coast Guard

agrees, and has combined the tracks in this final rule.

Comments Received Outside of the Comment Period

After the comment period closed, on July 25, 2001, the American Waterways Operators (AWO) and other towing-industry representatives identified an apparent inconsistency in the third interim rule. In that rule, mariners who began service and training on towing vessels before May 21, 2001, could continue training under the process in place then and obtain the license as master of towing vessels by May 21, 2004. After May 21, 2004, the requirements of this rule must be met. The apparent inconsistency arises in that such mariners are not also able to obtain the license as mate (pilot) of towing vessels.

In the development of that rule, the Coast Guard determined that the predominant licensing transaction for towing vessels was the obtaining of a license as an OUTV. That license corresponded directly to one as master of towing vessels. The license that corresponded to one as mate (pilot) of towing vessels was the 2nd-class operator's license—a license rarely issued even before May 21, 2001. Because of this rarity, the third interim rule did not include a provision to allow a mariner to obtain a license as mate (pilot) of towing vessels following the requirement for the 2nd-class operator's license. The Coast Guard agrees that an inconsistency exists and, in this final rule, allows a mariner to obtain the license as mate (pilot) of towing vessels, until November 21, 2003, using the process for a 2nd-class operator's license. This provides a more gradual implementation of this rule, as well as aligns the treatment of the licenses for master and mate (pilot) of towing vessels.

Regulatory Evaluation

This final rule is not a "significant regulatory action" under section 3(f) of Executive Order 12866, Regulatory Planning and Review, and does not require an assessment of potential costs and benefits under section 6(a)(3) of that Order. The Office of Management and Budget (OMB) has not reviewed it under that Order. It is not "significant" under the regulatory policies and procedures of the Department of Homeland Security (DHS)(44 FR 11040 (February 26, 1979)).

There were no comments on this section in response to the third interim rule (66 FR 20931 (April 26, 2001)), though the rule did invite comments.

We expect the economic impact of this rule to be so minimal that a full

Regulatory Evaluation under paragraph 10e of the regulatory policies and procedures of DOT is unnecessary.

Assessment

This rule will amend the licensing and manning for officers of towing vessels by making minor revisions to the third interim rule. This rule will help mariners obtain the appropriate licenses for such officers.

This rule makes changes or updates of technical information and reflects comments to both the first interim rule (64 FR 63213 (November 19, 1999)) and the third interim rule. These changes or updates will not impose any new costs on the towing industry.

There are around 5,400 documented towing vessels in the United States. We presented estimates of the aggregate costs of this set of rulemakings in the third interim rule. Below are the estimates as presented there.

The annual costs—including costs for new entrants into the industry and monetary costs due to industry's paperwork burden—of compliance total \$1,310,644. The 10-year present value of cost to industry, from 2001 up to 2010, discounted at 7 percent to 2000, totals \$9,205,414.

The annual costs to the Federal Government comprise the time and resources of the Coast Guard to review the documentation of ongoing training and drills such as TOARs for serving mariners, as well as the service records, applications, and check-ride results of entering mariners. We estimated the total costs to the Government at \$70,464 a year. The 10-year present value of these costs, discounted at 7 percent to 2000, totals \$494,910.

We estimate that the 10-year present value, discounted at 7 percent to 2000, of costs to industry and Government are \$9,700,324.

Benefits to Industry

This final rule will improve navigational safety for towing vessels and will clarify the requirements for obtaining appropriate licenses imposed by the amendments of the third interim rule. It will combine the licenses for "harbor assist" and "limited local area" into a single progression toward a limited license: Apprentice mate (steersman) (limited) and master (limited) for consistency.

This rule will also provide mariners with flexibility when seeking authority for service on the Lower Mississippi River, and when seeking to operate uninspected towing vessels on domestic voyages as long as they meet international requirements on foreign voyages.

We presented estimates of the aggregate benefits of this set of rulemakings in the third interim rule. Below are the estimates as presented there.

The annual benefits from preventing deaths range from \$2,430,000 to \$5,130,000, while those from preventing property damage range from \$1,158,987 to \$2,546,694. The 10-year present value of total benefits ranges from \$25,207,543 to \$53,917,886. Therefore, the 10-year benefit-cost ratio of this rule ranges from 2.60 to 5.56 with the average being 4.08.

Small Entities

Under the Regulatory Flexibility Act (5 U.S.C. 601–612), we have considered whether this final rule will have a significant economic impact on a substantial number of small entities. The term "small entities" comprises small businesses, not-for-profit organizations that are independently owned and operated and are not dominant in their fields, and governmental jurisdictions with populations of less than 50,000. (It does not include individual mariners.) This final rule will not impose any new costs on the towing industry beyond the costs imposed by the interim rule(s).

There are 1,252 small businesses operating towing vessels, and none will suffer under this rule. We previously presented for public comment the effect of the set of rulemakings on small entities. We received no comments regarding that effect.

Therefore, the Coast Guard certifies under 5 U.S.C. 605(b) that this rule will not have a significant economic impact on a substantial number of small entities.

Assistance for Small Entities

Under section 213(a) of the Small Business Regulatory Enforcement Fairness Act of 1996 (Public Law 104–121), we offered to assist small entities in understanding the rulemaking so that they could better evaluate its effects on them and participate in it. We have consistently provided small entities a point of contact for assistance in understanding this rule. We have also completed a number of outreach activities that provided small entities added opportunities to seek clarification on the rule (from the project officer).

Small businesses may send comments on the actions of Federal employees who enforce, or otherwise determine compliance with, Federal regulations to the Small Business and Agriculture Regulatory Enforcement Ombudsman and the Regional Small Business Regulatory Fairness Boards. The Ombudsman evaluates these actions

annually and rates each agency's responsiveness to small business. If you wish to comment on actions by employees of the Coast Guard, call 1–888–REG–FAIR (1–888–734–3247).

Collection of Information

This final rule calls for no new collection of information under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501–3520).

The first and third interim rules did call for a collection of information. As required by 44 U.S.C. 3507(d), we submitted a copy of those rules to the OMB for its review of the collection of information. The OMB has approved the collection for two parts. The part numbers are 46 CFR parts 10 and 15, and the corresponding approval number is OMB Control Number 2115–0623, which expires on May 31, 2004.

You need not respond to a collection of information unless it displays a currently valid Control Number.

Federalism

A rule has implications for federalism under Executive Order 13132, Federalism, if it has a substantial direct effect on State or local governments and would either preempt State law or impose a substantial direct cost of compliance on them. We have analyzed this final rule under that Order and have determined that it does not have implications for federalism.

Unfunded Mandates Reform Act

The Unfunded Mandates Reform Act of 1995 (2 U.S.C. 1531–1538) requires Federal agencies to assess the effects of their discretionary regulatory actions. In particular, the Act addresses actions that may result in the expenditure by a State, local, or tribal government, in the aggregate, or by the private sector of \$100,000,000 or more in any one year. Though this final rule will not result in such an expenditure, we do discuss the effects of this rule elsewhere in this preamble.

Taking of Private Property

This final rule will not effect a taking of private property or otherwise have taking implications under Executive Order 12630, Governmental Actions and Interference with Constitutionally Protected Property Rights (53 FR 8859 (March 15, 1988)).

Reform of Civil Justice

This final rule meets applicable standards in sections 3(a) and 3(b)(2) of Executive Order 12988, Civil Justice Reform, to minimize litigation, eliminate ambiguity, and reduce burden.

Protection of Children

We have analyzed this final rule under Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks. This rule is not an economically significant rule and does not concern an environmental risk to health or risk to safety that may disproportionately affect children.

Consultation and Coordination With Indian Tribal Governments

This final rule will not have tribal implications; will not impose substantial direct compliance costs on Indian tribal governments; and will not preempt tribal law. Therefore, it is exempt from the consultation requirements of Executive Order 13175. If we had identified tribal implications during the comment period, we would have undertaken appropriate consultations with the affected Indian tribal officials.

Energy Effects

We have analyzed this final rule under Executive Order 13211, Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use. We have

determined that it is not a “significant energy action” under that Order, because it is not a “significant regulatory action” under Executive Order 12866 and is not likely to have a significant adverse effect on the supply, distribution, or use of energy. It has not been designated by the Administrator of the Office of Information and Regulatory Affairs of the OMB as a significant energy action. Therefore, it does not require a Statement of Energy Effects under Executive Order 13211.

Environment

We have considered the environmental impact of this final rule and concluded that, under section 6(a) of the “Appendix to National Environmental Policy Act: Coast Guard Procedures for Categorical Exclusions, Notice of Final Agency Policy” (67 FR 48244 (July 23, 2002)), this rule is categorically excluded from further environmental documentation. Under section 6(a), this exclusion is appropriate for rules that are “editorial or procedural, such as those updating addresses or establishing application procedures.” A Determination of Categorical Exclusion is available in the

docket where indicated under **ADDRESSES**.

List of Subjects

46 CFR Part 10

Penalties, Reporting and recordkeeping requirements, Schools, Seamen.

46 CFR Part 15

Reporting and recordkeeping requirements, Seamen, Vessels.

■ For the reasons discussed in the preamble, the Coast Guard amends 46 CFR parts 10 and 15 as follows:

PART 10—LICENSING OF MARITIME PERSONNEL

■ 1. Revise the authority citation for part 10 to read as follows:

Authority: 14 U.S.C. 633; 31 U.S.C. 9701; 46 U.S.C. 2101, 2103, and 2110; 46 U.S.C. chapter 71; 46 U.S.C. 7502, 7505, 7701, and 8906; Department of Homeland Security Delegation 0170. Section 10.107 is also issued under the authority of 44 U.S.C. 3507.

■ 2. In § 10.403, revise Figure 10.403 to read as shown:

§ 10.403 Structure of deck licenses.

* * * * *

■ 3. In § 10.463—

■ a. Remove paragraphs (a), (b)(2), and (b)(7);

■ b. Redesignate the introductory language of paragraph (b) and paragraphs (b)(1), (b)(3), (b)(4), (b)(5), (b)(6), (b)(8), (c), and (d) as the introductory language of paragraph (a) and as paragraphs (a)(1), (a)(2), (a)(3), (a)(4), (a)(5), (a)(6), (b), and (c), respectively; and

■ c. In newly redesignated paragraph (b) remove the words “not restricted to harbor assist and”.

■ 4. In § 10.464—

■ a. Remove paragraph (b) and remove Table 10.464–3;

■ b. Redesignate paragraphs (c), (d), (e), (f), (g), (g)(1), (g)(2), (g)(2)(i), (g)(2)(ii), (h), (h)(1), (h)(1)(i), (h)(1)(ii), (h)(1)(iii), (h)(2), (h)(2)(i), and (h)(2)(ii) as paragraphs (b), (c), (d), (e), (f)(1), (f)(2), (f)(2)(i), (f)(2)(ii), (g), (g)(1), (g)(1)(i), (g)(1)(ii), (g)(1)(iii), (g)(2), (g)(2)(i), and (g)(2)(ii), respectively;

■ c. In newly redesignated paragraph (f)(2)(ii), remove the last sentence; and

■ d. Revise paragraph (a), revise Table 10.464–1, revise newly redesignated paragraph (b), revise Table 10.464–2, and

add new paragraph (f)(3) to read as follows:

§ 10.464 Requirements for licenses as master of towing vessels.

(a) If you would like to obtain a license as master of towing vessels endorsed with a route listed in column 1 of Table 10.464–1, then you must complete the service requirements indicated in columns 2 through 5. You may serve on the subordinate routes listed in column 6, without further endorsement.

TABLE 10.464-1--REQUIREMENTS FOR LICENSE AS MASTER OF TOWING VESSELS¹

¹ ROUTE ENDORSED	² TOTAL SERVICE ²	³ TOS ³ ON TV AS MATE (PILOT)	⁴ TOS ³ ON TV AS MATE (PILOT) NOT AS HARBOR ASSIST	⁵ TOS ³ ON PARTICULAR ROUTE	⁶ SUB- ORDINATE ROUTE AUTHORIZED
(1) OCEANS (O)	48	18 of 48	12 of 18	3 of 18	NC, GL-I,
(2) NEAR- COASTAL (NC)	48	18 of 48	12 of 18	3 of 18	GL-I,
(3) GREAT LAKES- INLAND (GL-I)	48	18 of 48	12 of 18	3 of 18	
(4) WESTERN RIVERS (WR)	48	18 of 48	12 of 18	3 of 18	

1 If you hold a license as master of towing vessels you may have an endorsement--as mate (pilot) of towing vessels for a route superior to your current route on which you have no operating experience--placed on your license after passing an examination for that additional route. After you complete 90 days of experience and complete a TOAR on that route, we will add it to your license as master of towing vessels and remove the one for mate (pilot) of towing vessels.

2 Service is in months.

3 TOS is time of service.

(b) If you would like to obtain a license as master of towing vessels (limited), then you must complete the requirements listed in columns 2 through 5 of Table 10.464-2.

TABLE 10.464-2--REQUIREMENTS FOR LICENSE AS MASTER OF TOWING VESSELS (LIMITED)

1 ROUTE ENDORSEMENT	2 TOTAL SERVICE ¹	3 TOS ² ON TV/ AS LIMITED APPRENTICE MATE (STEERSMAN)	4 TOAR ³ OR AN APPROVED COURSE	5 TOS ² ON PARTICULAR ROUTE
LIMITED LOCAL AREA (LLA)	36	18 of 36	YES	3 of 18

1 Service is in months.
2 TOS is time of service.
3 Towing Officers' Assessment Record

(f) * * *

(3) Your license does not need a towing endorsement if you hold a TOAR or complete a TOAR.

* * * * *

■ 5. In § 10.465—

■ a. In paragraph (a) remove the words “harbor assist or”, remove Table 10.465-2 and remove paragraph (d);

■ b. Redesignate paragraphs (e) and (f) as paragraphs (d) and (e), respectively; and

■ c. Revise Table 10.465-1, revise newly redesignated paragraph (e) and add new paragraph (f) to read as follows:

§ 10.465 Requirements for licenses as mate (pilot) of towing vessels.

* * * * *

TABLE 10.465-1--REQUIREMENTS FOR LICENSE AS MATE (PILOT¹) OF TOWING VESSELS

¹ ROUTE ENDORSED	² TOTAL SERVICE ²	³ TOS ³ ON TV AS APPRENTICE MATE (STEERSMAN)	⁴ TOS ³ ON PARTICULAR ROUTE	⁵ TOAR ⁴ OR AN APPROVED COURSE	⁶ 30 DAYS OF OBSERVATION AND TRAINING WHILE HOLDING MASTER (LIMITED) AND PASS A LIMITED EXAMINATION	⁷ SUBORDINATE ROUTE AUTHORIZED
(1) OCEANS (O)	30	12 of 30	3 of 12	YES	YES	NC, GL-I
(2) NEAR- COASTAL (NC)	30	12 of 30	3 of 12	YES	YES	GL-I,
(3) GREAT LAKES-INLAND (GL-I)	30	12 of 30	3 of 12	YES	YES	
(5) WESTERN RIVERS (WR)	30	12 of 30	3 of 12	YES	NO (90 days service required)	

¹ For all inland routes, as well as Western Rivers, the license as pilot of towing vessels is equivalent to that as mate of towing vessels. All qualifications and equivalencies are the same.

² Service is in months unless otherwise indicated

³ TOS is time of service.

⁴ TOAR is Towing Officers' Assessment Record.

* * * * *

(e) An approved training course for mate (pilot) of towing vessels must include formal instruction and practical demonstration of proficiency either on board a towing vessel or at a shoreside

training facility before a designated examiner, and must cover the material (dependent upon route) required by § 10.910-2 for apprentice mate (steersman), towing vessels on ocean and near coastal routes; apprentice mate

(steersman), towing vessels on Great Lakes and inland routes; or, steersman, towing vessels on Western Rivers routes.

(f) If you began your service or training before May 21, 2001, you may

receive a license as mate of towing vessels if before November 21, 2003, you complete the examination required by § 10.903(a)(18)(i) and meet the requirements in either paragraph (f)(1)(i) or (f)(1)(ii) of this section:

(1) You must have served at least 18 months on deck, including 12 months on towing vessels. This service must have included—

(i) At least 3 months of training or duty in the wheelhouse of towing vessels, and 3 months of service in each

particular geographic area for which you seek endorsement on the license; and

(ii) At least 6 months on towing vessels while holding a merchant mariner's document endorsed as able seaman unlimited, able seaman limited, or able seaman special, including 3 months in each particular geographic area for which you seek an endorsement; and either—

(A) Two months of training or duty in the wheelhouse; or

(B) One month of training or duty in the wheelhouse combined with completion of a course of training as towboat operator approved by the Commanding Officer, National Maritime Center, under subpart C of this part.

6. In § 10.466, revise Table 10.466–1 to read as follows:

§ 10.466 Requirements for licenses as apprentice mate (steersman) of towing vessels.

* * * * *

TABLE 10.466-1--REQUIREMENTS FOR LICENSE AS APPRENTICE MATE (STEERSMAN) OF TOWING VESSELS

¹ LICENSE TYPE	² ROUTE ENDORSED	³ TOTAL SERVICE ¹	⁴ TOS ² ON TV	⁵ TOS ² ON PARTICULAR ROUTE	⁶ PASS EXAMINATION ³
(1) APPRENTICE MATE (STEERSMAN)	OCEANS (O)	18	12 of 18	3 of 18	YES
	NEAR- COASTAL (NC)	18	12 of 18	3 of 18	YES
	GREAT LAKES- INLAND (GL-I)	18	12 of 18	3 of 18	YES
	WESTERN RIVERS (WR)	18	12 of 18	3 of 18	YES
(2) APPRENTICE MATE (STEERSMAN) (LIMITED) ⁴	NOT APPLICABLE	18	12 of 18	3 of 18	YES

¹ Service is in months.

² TOS is time of service.

³ The examination for apprentice mate is specified in subpart I of this part. The examination for apprentice mate (limited) is a limited examination.

⁴ For all inland routes, as well as Western Rivers, the license as steersman is equivalent to that as apprentice mate. All qualifications and equivalencies are the same.

* * * *

■ 7. In § 10.903—

■ a. Remove paragraph (a)(18)(ii) and redesignate paragraph (a)(18)(iii) as paragraph (a)(18)(ii);

■ b. Redesignate paragraphs (c)(7) through (c)(18) as paragraphs (c)(8) through (c)(19), respectively; and

■ c. Add paragraph (c)(7) to read as follows:

§ 10.903 Licenses requiring examinations.

* * * *

(c) * * *

(7) Master or mate of towing vessels of over 200 gross tons, oceans and near-coastal.

* * * * *

PART 15—MANNING REQUIREMENTS

■ 8. Revise the authority citation for part 15 to read as follows:

Authority: 46 U.S.C. 2101, 2103, 3306, 3703, 8101, 8102, 8104, 8105, 8301, 8304, 8502, 8503, 8701, 8702, 8901, 8902, 8903, 8904, 8905(b), 8906, and 9102; and Department of Homeland Security Delegation 0170.

■ 9. In § 15.610—

■ a. In paragraph (b)(1)(ii) following the words “of towing vessels” remove the words “(Harbor assist) or”; and

■ b. Add paragraph (d) to read as follows:

§ 15.610 Master and mate (pilot) of towing vessels.

* * * * *

(d) Any towing vessel operating in the pilotage waters of the Lower Mississippi River must be under the control of an officer who holds a first-class pilot's license or endorsement for that route, or meets the requirements of either paragraph (d)(1) or paragraph (d)(2) of this section as applicable:

(1) To operate a towing vessel with tank barges, or a tow of barges carrying hazardous materials regulated under part N or O of this subchapter, an officer in charge of the towing vessel must have completed 12 round trips over this route as an observer, with at least 3 of those trips during hours of darkness, and at least 1 round trip of the 12 within the last 5 years.

(2) To operate a towing vessel without barges, or a tow of uninspected barges, an officer in charge of the towing vessel must have completed at least four round trips over this route as an observer, with at least one of those trips during hours of darkness, and at least one round trip of the 12 within the last 5 years.

Dated: April 14, 2003.

Paul J. Pluta,

Assistant Commandant for Marine Safety, Security and Environmental Protection.

[FR Doc. 03-15225 Filed 6-16-03; 8:45 am]

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FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 76

[CS Docket No. 97-80; FCC 03-89]

Commercial Availability of Navigation Devices

AGENCY: Federal Communications Commission.

ACTION: Final rule.

SUMMARY: This document amends the Commission's rules to extend the January 1, 2005 ban on integrated navigation devices until July 1, 2006. This extension is needed since the state of the navigation devices market will be significantly impacted by ongoing industry negotiations for a bidirectional specification for digital cable receivers and products, rendering compliance with the existing January 1, 2005 ban impracticable. This action is taken pursuant to Section 629 of the Communications Act which directs the Commission to adopt regulations to assure the commercial availability of navigation devices equipment used by consumers to access services from multichannel video programming distributors.

DATES: Effective July 17, 2003.

FOR FURTHER INFORMATION CONTACT: Susan Mort, 202-418-1043.

SUPPLEMENTARY INFORMATION:

1. In the Order and Further Notice of Proposed Rulemaking adopted April 14, 2003 and released April 25, 2003, we amend the Commission's Rules to extend the January 1, 2005 ban on integrated navigation devices until July 1, 2006. A synopsis of the Order follows.

Synopsis of the Order

2. Section 629 of the Communications Act directs the Commission to adopt regulations to assure the commercial availability of navigation devices equipment used by consumers to access services from multichannel video programming distributors (“MVPDs”). Pursuant to this directive, the Commission issued the Report and Order in the above-captioned proceeding establishing, inter alia, a January 1, 2005, deadline for MVPDs to cease deploying new navigation devices that perform both conditional access functions and other functions in a single integrated device. The Commission adopted the requirement to separate the conditional access function from the basic navigation device (the “host device”) in order to permit unaffiliated manufacturers, retailers, and other vendors to commercially market host devices while allowing MVPDs to retain control over their system security. The Commission later issued a Further Notice of Proposed Rulemaking and Declaratory Ruling (“Further Notice and Declaratory Ruling”), 65 FR 58255, September 28, 2000, that sought comment on the effectiveness of the Commission's navigation device rules,

including the 2005 prohibition on integrated devices.

3. Since Section 629 and the Commission's rules were adopted, the cable and consumer electronics industries have made, and continue to make, significant progress in the development of technical standards in this area. However, the commercial market for navigation devices used in conjunction with the distribution of digital video programming remains in its infancy. In an effort to spur the transition to digital television, the cable and consumer electronics industry recently reached a Memorandum of Understanding (“MOU”) on a cable compatibility standard for a unidirectional digital cable television receiver with host device functionality, as well as other unidirectional digital cable products. This standard would allow consumers to directly attach their DTV receivers to cable systems using a point of deployment (“POD”) module and receive one-way cable television services without the need for an external navigation device. The Commission issued a Further Notice of Proposed Rulemaking (“FNPRM”), 68 FR 2278, January 16, 2003, seeking public comment on the MOU issued in the above-captioned proceeding and in the Compatibility Between Cable Systems and Consumer Electronics Equipment proceeding.

4. In its earlier Further Notice and Declaratory Ruling, the Commission had already sought comment, inter alia, on whether the 2005 date for the phase-out of integrated boxes remains appropriate, on what, if any, incentives the requirement creates for the development of a commercial retail market for navigation devices, and on the economic impacts and costs associated with the requirement. In response, the cable industry and set-top box manufacturers generally urged that the 2005 deadline should be eliminated in favor of the continued offering of integrated navigation devices for rent to consumers. Other equipment manufacturing and retail interests urged that the date should be advanced to ensure the timely development of a retail market in host devices. Given the equipment ordering and manufacturing cycles involved, it is necessary at this point to provide guidance as to the Commission's expectations with respect to the 2005 date. Other issues raised in the Further Notice and Declaratory Ruling will be addressed separately at a later time.

5. Commission action in response to the FNPRM could have a significant impact upon the development of a commercial market in separate host

devices. In addition, the cable and consumer electronic industries are in the midst of negotiations on specifications for bidirectional digital cable receivers and products which would permit the receipt of advanced cable television services by direct connection to cable systems. This ongoing process, which we are hopeful will produce results in the near term, could impact the development of technical specifications relating to host devices and POD modules. In light of the ongoing notice and comment cycle relating to the FNPRM, the evolving nature of technical specifications relating to navigation devices, and the imminent business ordering and manufacturing cycles facing MVPDs and consumer electronics manufacturers in anticipation of the pending 2005 prohibition, we hereby extend the deadline concerning the prohibition on integrated devices until July 1, 2006.

6. This eighteen month extension should provide adequate time for the parties to complete their ongoing negotiations and for the Commission to make a more knowledgeable decision as to any further changes in the compliance date. By January 1, 2005, the Commission shall complete a reassessment of the state of the navigation devices market and determine whether the designated time frame remains appropriate or whether the ban on integrated devices will no longer be necessary. In the interim, the cable and consumer electronics industries are requested to provide the Commission with status reports on their negotiations on specifications for bidirectional digital cable receivers and products at 90, 180 and 270 day intervals following release of this Order. Following submission of the last status report to the Commission, the public shall have thirty days to submit comments on the status reports and whether any further changes in the phase-out date for integrated devices are warranted.

7. Based upon the record in the above-captioned proceeding and ongoing industry developments, we have concluded that a limited deferral of the date is consistent with the ultimate objectives of this proceeding and our statutory directive to act "in consultation with appropriate industry standard-setting organizations." We are not persuaded at this point to eliminate the prohibition on integrated devices since future developments in both the marketplace and ongoing industry negotiations may yet dictate a need for this requirement in order to achieve the objectives of Section 629. However, the conclusion of the unidirectional MOU,

as well as the ongoing negotiations towards a bidirectional agreement, do reflect progress towards the development of a retail market for consumer electronics equipment with navigation device functionality. As such, we do not believe that advancing the prohibition date, as previously suggested by a number of equipment manufacturing and retail interests, is necessary to further these objectives or would provide sufficient lead time for ordering and manufacturing prior to completion of the next phase of the standardization process.

8. *Authority.* This document is issued pursuant to authority contained in Sections 4(i), 303(r), and 629 of the Communications Act of 1934, as amended.

9. *Accessibility Information.* Accessible formats of this Order (computer diskettes, large print, audio recording and Braille) are available to persons with disabilities by contacting Brian Millin, of the Consumer & Governmental Affairs Bureau, at (202) 418-7426, TTY (202) 418-7365, or at bmillin@fcc.gov.

10. *Paperwork Reduction Act of 1995 Analysis.* This Order does not contain information collection(s) subject to the Paperwork Reduction Act of 1995 ("PRA"), Public Law 104-13.

11. *Regulatory Flexibility Act.* As required by the Regulatory Flexibility Act, the Commission has prepared a Final Regulatory Flexibility Analysis ("FRFA") relating to this Order. The FRFA is set forth further.

12. Accordingly, part 76 of the Commission's rules, set forth in Title 47 of the Code of Federal Regulations, is amended.

Final Regulatory Flexibility Analysis

13. As required by the Regulatory Flexibility Act of 1980, as amended ("RFA") an Initial Regulatory Flexibility Analysis ("IRFA") was incorporated in the Further Notice of Proposed Rulemaking and Declaratory Ruling ("Further Notice and Declaratory Ruling") The Commission sought written public comment on the proposals in the Further Notice and Declaratory Ruling, including comment on the IRFA. No comments were received on the IRFA. This present Final Regulatory Flexibility Analysis ("FRFA") conforms to the RFA.

15. *Need for, and Objectives of, the Order.* Section 629 of the Communications Act of 1934, as amended, requires the Commission to develop rules to assure competitive availability of navigation devices used in conjunction with services provided by multichannel video programming

distributors ("MVPDs"). The statutory objective of Section 629 is to assure that navigation devices used by consumers to access a particular MVPD's programming are available to consumers from manufacturers, retailers and other vendors not affiliated with that MVPD. To this end, the Commission adopted a January 1, 2005, deadline for MVPDs to cease deploying new navigation devices that perform both conditional access functions and other functions in a single integrated device. Requiring MVPDs to separate the conditional access function from the basic navigation device (the "host device") was intended to permit unaffiliated manufacturers, retailers, and other vendors to commercially market host devices while allowing MVPDs to retain control over their system security. In the Further Notice and Declaratory Ruling, the Commission indicated that it would reassess the need for the 2005 separation deadline in light of the evolving marketplace for navigation devices. In response, the cable industry and set-top box manufacturers generally urged that the 2005 deadline should be eliminated in favor of the continued offering of integrated navigation devices for rent to consumers. Other equipment manufacturing and retail interests urged that the date should be advanced to ensure the timely development of a retail market in host devices. Since the Further Notice and Declaratory Ruling was issued, the cable and consumer electronics industries have reached a Memorandum of Understanding ("MOU") on a cable compatibility standard for a unidirectional digital cable television receiver with host device functionality, as well as other unidirectional digital cable products. This standard, which is the subject of a pending Further Notice of Proposed Rulemaking ("FNPRM"), would allow consumers to directly attach their DTV receivers to cable systems using a point of deployment ("POD") module and receive one-way cable television services without the need for an external navigation device. The cable and consumer electronic industries are also in the midst of negotiations on specifications for bidirectional digital cable receivers and products which would permit the receipt of advanced cable television services by direct connection to cable systems. This ongoing process, which may produce results in the near term, could impact the development of technical specifications relating to host devices and POD modules. In light of the ongoing notice and comment cycle relating to the FNPRM, the evolving

nature of technical specifications relating to navigation devices, and the imminent business ordering and manufacturing cycles facing MVPDs and consumer electronics manufacturers in anticipation of the pending 2005 prohibition, the present Order extends the prohibition on integrated devices until July 1, 2006. This limited deferral of the prohibition date is consistent with the ultimate objectives of this proceeding and our statutory directive to act "in consultation with appropriate industry standard-setting organizations."

16. *Summary of Significant Issues Raised by Public Comments in Response to the IRFA.* There were no comments filed that specifically addressed the rules and policies proposed in the IRFA.

17. *Description and Estimate of the Number of Small Entities to Which Rules Will Apply.* The RFA directs the Commission to provide a description of and, where feasible, an estimate of the number of small entities that will be affected by the rules adopted herein. The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction." In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act. A "small business concern" is one which: (1) Is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration ("SBA").

18. *Cable and Other Program Distribution.* The SBA has developed a small business size standard for cable and other program distribution services, which includes all such companies generating \$12.5 million or less in revenue annually. This category includes, among others, cable operators, direct broadcast satellite ("DBS") services, home satellite dish ("HSD") services, multipoint distribution services ("MDS"), multichannel multipoint distribution service ("MMDS"), Instructional Television Fixed Service ("ITFS"), local multipoint distribution service ("LMDS"), satellite master antenna television ("SMATV") systems, and open video systems ("OVS"). According to the Census Bureau data, there are 1,311 total cable and other pay television service firms that operate throughout the year of which 1,180 have less than \$10 million in revenue. We address below each service individually to provide a more precise estimate of small entities.

19. *Cable Operators.* The Commission has developed, with SBA's approval, our own definition of a small cable system operator for the purposes of rate regulation. Under the Commission's rules, a "small cable company" is one serving fewer than 400,000 subscribers nationwide. We last estimated that there were 1,439 cable operators that qualified as small cable companies. Since then, some of those companies may have grown to serve over 400,000 subscribers, and others may have been involved in transactions that caused them to be combined with other cable operators. Consequently, we estimate that there are fewer than 1,439 small entity cable system operators that may be affected by our action.

20. The Communications Act, as amended, also contains a size standard for a small cable system operator, which is "a cable operator that, directly or through an affiliate, serves in the aggregate fewer than 1% of all subscribers in the United States and is not affiliated with any entity or entities whose gross annual revenues in the aggregate exceed \$250,000,000." The Commission has determined that there are 68,500,000 subscribers in the United States. Therefore, an operator serving fewer than 685,000 subscribers shall be deemed a small operator if its annual revenues, when combined with the total annual revenues of all of its affiliates, do not exceed \$250 million in the aggregate. Based on available data, we find that the number of cable operators serving 685,000 subscribers or less totals approximately 1,450. Although it seems certain that some of these cable system operators are affiliated with entities whose gross annual revenues exceed \$250,000,000, we are unable at this time to estimate with greater precision the number of cable system operators that would qualify as small cable operators under the definition in the Communications Act.

21. *Direct Broadcast Satellite ("DBS") Service.* Because DBS provides subscription services, DBS falls within the SBA-recognized definition of cable and other program distribution services. This definition provides that a small entity is one with \$12.5 million or less in annual receipts. There are four licensees of DBS services under part 100 of the Commission's Rules. Three of those licensees are currently operational. Two of the licensees that are operational have annual revenues that may be in excess of the threshold for a small business. The Commission, however, does not collect annual revenue data for DBS and, therefore, is unable to ascertain the number of small DBS licensees that could be impacted by

these proposed rules. DBS service requires a great investment of capital for operation, and we acknowledge, despite the absence of specific data on this point, that there are entrants in this field that may not yet have generated \$12.5 million in annual receipts, and therefore may be categorized as a small business, if independently owned and operated.

22. *Home Satellite Dish ("HSD") Service.* Because HSD provides subscription services, HSD falls within the SBA-recognized definition of cable and other program distribution services. This definition provides that a small entity is one with \$12.5 million or less in annual receipts. The market for HSD service is difficult to quantify. Indeed, the service itself bears little resemblance to other MVPDs. HSD owners have access to more than 265 channels of programming placed on C-band satellites by programmers for receipt and distribution by MVPDs, of which 115 channels are scrambled and approximately 150 are unscrambled. HSD owners can watch unscrambled channels without paying a subscription fee. To receive scrambled channels, however, an HSD owner must purchase an integrated receiver-decoder from an equipment dealer and pay a subscription fee to an HSD programming package. Thus, HSD users include: (1) Viewers who subscribe to a packaged programming service, which affords them access to most of the same programming provided to subscribers of other MVPDs; (2) viewers who receive only non-subscription programming; and (3) viewers who receive satellite programming services illegally without subscribing. Because scrambled packages of programming are most specifically intended for retail consumers, these are the services most relevant to this discussion.

23. *Multipoint Distribution Service ("MDS"), Multichannel Multipoint Distribution Service ("MMDS"), Instructional Television Fixed Service ("ITFS") and Local Multipoint Distribution Service ("LMDS").* MMDS systems, often referred to as "wireless cable," transmit video programming to subscribers using the microwave frequencies of the MDS and ITFS. LMDS is a fixed broadband point-to-multipoint microwave service that provides for two-way video telecommunications.

24. In connection with the 1996 MDS auction, the Commission defined small businesses as entities that had annual average gross revenues of less than \$40 million in the previous three calendar years. This definition of a small entity in the context of MDS auctions has been approved by the SBA. The MDS auctions resulted in 67 successful

bidders obtaining licensing opportunities for 493 Basic Trading Areas ("BTAs"). Of the 67 auction winners, 61 met the definition of a small business. MDS also includes licensees of stations authorized prior to the auction. As noted, the SBA has developed a definition of small entities for pay television services, which includes all such companies generating \$12.5 million or less in annual receipts. This definition includes multipoint distribution services, and thus applies to MDS licensees and wireless cable operators that did not participate in the MDS auction. Information available to us indicates that there are approximately 850 of these licensees and operators that do not generate revenue in excess of \$12.5 million annually. Therefore, for purposes of this analysis, we find there are approximately 850 small MDS providers as defined by the SBA and the Commission's auction rules.

25. The SBA definition of small entities for cable and other program distribution services, which includes such companies generating \$12.5 million in annual receipts, seems reasonably applicable to ITFS. There are presently 2,032 ITFS licensees. All but 100 of these licenses are held by educational institutions. Educational institutions are included in the definition of a small business. However, we do not collect annual revenue data for ITFS licensees, and are not able to ascertain how many of the 100 non-educational licensees would be categorized as small under the SBA definition. Thus, we tentatively conclude that at least 1,932 licensees are small businesses.

26. Additionally, the auction of the 1,030 LMDS licenses began on February 18, 1998, and closed on March 25, 1998. The Commission defined "small entity" for LMDS licenses as an entity that has average gross revenues of less than \$40 million in the three previous calendar years. An additional classification for "very small business" was added and is defined as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding calendar years. These regulations defining "small entity" in the context of LMDS auctions have been approved by the SBA. There were 93 winning bidders that qualified as small entities in the LMDS auctions. A total of 93 small and very small business bidders won approximately 277 A Block licenses and 387 B Block licenses. On March 27, 1999, the Commission re-auctioned 161 licenses; there were 40 winning bidders. Based on this information, we conclude that the

number of small LMDS licenses will include the 93 winning bidders in the first auction and the 40 winning bidders in the re-auction, for a total of 133 small entity LMDS providers as defined by the SBA and the Commission's auction rules.

27. In sum, there are approximately a total of 2,000 MDS/MMDS/LMDS stations currently licensed. Of the approximate total of 2,000 stations, we estimate that there are 1,595 MDS/MMDS/LMDS providers that are small businesses as deemed by the SBA and the Commission's auction rules.

28. *Satellite Master Antenna Television ("SMATV") Systems.* The SBA definition of small entities for cable and other program distribution services includes SMATV services and, thus, small entities are defined as all such companies generating \$12.5 million or less in annual receipts. Industry sources estimate that approximately 5,200 SMATV operators were providing service as of December 1995. Other estimates indicate that SMATV operators serve approximately 1.5 million residential subscribers as of July 2001. The best available estimates indicate that the largest SMATV operators serve between 15,000 and 55,000 subscribers each. Most SMATV operators serve approximately 3,000–4,000 customers. Because these operators are not rate regulated, they are not required to file financial data with the Commission. Furthermore, we are not aware of any privately published financial information regarding these operators. Based on the estimated number of operators and the estimated number of units served by the largest ten SMATVs, we believe that a substantial number of SMATV operators qualify as small entities.

29. *Open Video Systems ("OVS").* Because OVS operators provide subscription services, OVS falls within the SBA-recognized definition of cable and other program distribution services. This definition provides that a small entity is one with \$12.5 million or less in annual receipts. The Commission has certified 25 OVS operators with some now providing service. Affiliates of Residential Communications Network, Inc. ("RCN") received approval to operate OVS systems in New York City, Boston, Washington, D.C. and other areas. RCN has sufficient revenues to assure us that they do not qualify as small business entities. Little financial information is available for the other entities authorized to provide OVS that are not yet operational. Given that other entities have been authorized to provide OVS service but have not yet begun to generate revenues, we conclude that at

least some of the OVS operators qualify as small entities.

30. *Electronics Equipment Manufacturers.* Rules adopted in this proceeding could apply to manufacturers of DTV receiving equipment and other types of consumer electronics equipment. The SBA has developed definitions of small entity for manufacturers of audio and video equipment as well as radio and television broadcasting and wireless communications equipment. These categories both include all such companies employing 750 or fewer employees. The Commission has not developed a definition of small entities applicable to manufacturers of electronic equipment used by consumers, as compared to industrial use by television licensees and related businesses. Therefore, we will utilize the SBA definitions applicable to manufacturers of audio and visual equipment and radio and television broadcasting and wireless communications equipment, since these are the two closest NAICS Codes applicable to the consumer electronics equipment manufacturing industry. However, these NAICS categories are broad and specific figures are not available as to how many of these establishments manufacture consumer equipment. According to the SBA's regulations, an audio and visual equipment manufacturer must have 750 or fewer employees in order to qualify as a small business concern. Census Bureau data indicates that there are 554 U.S. establishments that manufacture audio and visual equipment, and that 542 of these establishments have fewer than 500 employees and would be classified as small entities. The remaining 12 establishments have 500 or more employees; however, we are unable to determine how many of those have fewer than 750 employees and therefore, also qualify as small entities under the SBA definition. Under the SBA's regulations, a radio and television broadcasting and wireless communications equipment manufacturer must also have 750 or fewer employees in order to qualify as a small business concern. Census Bureau data indicates that there 1,215 U.S. establishments that manufacture radio and television broadcasting and wireless communications equipment, and that 1,150 of these establishments have fewer than 500 employees and would be classified as small entities. The remaining 65 establishments have 500 or more employees; however, we are unable to determine how many of those have fewer than 750 employees

and therefore, also qualify as small entities under the SBA definition. We therefore conclude that there are no more than 542 small manufacturers of audio and visual electronics equipment and no more than 1,150 small manufacturers of radio and television broadcasting and wireless communications equipment for consumer/household use.

31. *Description of Projected Reporting, Recordkeeping and other Compliance Requirements.* The amended rule does not impose any additional reporting or recordkeeping requirements. To the extent that compliance may require the manufacture and purchase of non-integrated host devices by multichannel video programming distributors ("MVPDs") by July 1, 2006, the present action does not impose any new requirements on consumer electronics equipment manufacturers or MVPDs, but rather extends the existing compliance date by eighteen months. We believe that the resulting impact on small entities is favorable to the extent that it provides them with additional time to come into compliance with the prohibition on integrated devices.

32. *Steps Taken to Minimize Significant Impact on Small Entities, and Significant Alternatives Considered.* The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): (1) The establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.

33. To the extent that compliance with the amended prohibition deadline may require the manufacture and purchase of non-integrated host devices by multichannel video programming distributors ("MVPDs") by July 1, 2006, the present action does not impose any new requirements on consumer electronics equipment manufacturers or MVPDs, but rather extends the existing compliance date by eighteen months. We believe that the resulting impact on small entities is favorable to the extent that it provides them with additional time to come into compliance with the prohibition on integrated devices. When the original prohibition deadline was adopted, we noted, inter alia, that

Section 629 includes provisions which may lessen compliance impact on small entities, including Section 629(c), which specifies that the Commission shall waive its implementing regulations when necessary for an MVPD to develop new or improved services, and Section 629(e), which requires the Commission to sunset its implementing rules when certain conditions are met.

34. *Report to Congress:* The Commission will send a copy of the Order ("Order"), including this FRFA, in a report to be sent to Congress pursuant to the Congressional Review Act. In addition, the Commission will send a copy of the Order, including this FRFA, to the Chief Counsel for Advocacy of the SBA. A copy of the Order and FRFA (or summaries thereof) will also be published in the **Federal Register**.

List of Subjects in 47 CFR Part 76

Cable television.

Federal Communications Commission.

Marlene H. Dortch,
Secretary.

■ For the reasons stated in the preamble, The Federal Communications Commission amends 47 CFR part 76 as follows:

PART 76— MULTICHANNEL VIDEO AND CABLE TELEVISION SERVICE

■ 1. The authority citation for part 76 continues to read as follows:

Authority: 47 U.S.C. 151, 152, 153, 154, 301, 302, 303, 303a, 307, 308, 309, 312, 315, 217, 325, 503, 521, 522, 531, 532, 534, 535, 536, 537, 543, 544, 544a, 545, 548, 549, 552, 554, 556, 558, 560, 561, 571, 572, 573.

■ 2. Section 76.1204 is amended by revising paragraph (a)(1) to read as follows:

§ 76.1204 Availability of equipment performing conditional access or security functions.

(a)(1) A multichannel video programming distributor that utilizes navigation devices to perform conditional access functions shall make available equipment that incorporates only the conditional access functions of such devices. Commencing on July 1, 2006, no multichannel video programming distributor subject to this section shall place in service new navigation devices for sale, lease, or use that perform both conditional access and other functions in a single integrated device.

* * * * *

[FR Doc. 03-15187 Filed 6-16-03; 8:45 am]

BILLING CODE 6712-01-P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 635

[I.D. 061103B]

Atlantic Highly Migratory Species; Bluefin Tuna Catch Limit Adjustments

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Adjustment of Angling and General Category Retention Limits

SUMMARY: NMFS adjusts the daily retention limit for the Angling and General category fisheries for Atlantic bluefin tuna (BFT) for the 2003 fishing year that began June 1, 2003, and ends May 31, 2004. Vessels permitted in the Atlantic Highly Migratory Species (HMS) Angling and the Atlantic HMS Charter/Headboat categories are eligible to land BFT under the BFT Angling category quotas. Vessels permitted in the Atlantic tunas General category and Atlantic HMS Charter/Headboat categories are eligible to land BFT under the BFT General category quotas. The seasonal adjustments to the daily retention limit for each BFT size class are specified in the **DATES** and **SUPPLEMENTARY INFORMATION** sections of this document. This action is being taken to provide increased fishing opportunities in all areas without risking overharvest in each category.

DATES: Effective June 15 through October 31, 2003, the daily recreational retention limit for vessels fishing under the Angling category quota in all areas is one BFT per person, measuring 27 to less than 73 inches (69 to less than 185 cm) curved fork length, with a maximum limit of six BFT per vessel. Effective August 15 through October 31, 2003, the daily recreational retention limit for headboats in all areas is one BFT per passenger (not including Captain and crew), measuring 27 to less than 73 inches (69 to less than 185 cm) curved fork length, with a maximum of 35 BFT per vessel. This limit applies to all headboats defined as a vessel that possess an Atlantic HMS Charter/Headboat permit and that are inspected and licensed by the Coast Guard to carry more than six passengers. Effective November 1, 2003 through May 31, 2004, the daily recreational retention limit is one large school, or small medium BFT, measuring 47 to less than 73 inches (119 to less than 185 cm) curved fork length, per vessel for all

vessels fishing under the Angling category quota in all areas.

Effective June 15, 2003 through August 31, 2003, the General category daily retention limit in all areas will be adjusted to two large medium or giant BFT, measuring 73 inches (185 cm) or larger, for all vessels fishing under the General category quota.

FOR FURTHER INFORMATION CONTACT: Brad McHale, (978) 281-9260.

SUPPLEMENTARY INFORMATION:

Regulations implemented under the authority of the Atlantic Tunas Convention Act (16 U.S.C. 971 *et seq.*) and the Magnuson-Stevens Conservation and Management Act (16 U.S.C. 1801 *et seq.*) governing the harvest of BFT by persons and vessels subject to U.S. jurisdiction are found at 50 CFR part 635. Section 635.27 subdivides the U.S. BFT quota recommended by the International Commission for the Conservation of Atlantic Tunas (ICCAT) among various domestic fishing categories, and General category effort controls (including time-period subquotas and restricted fishing days (RFDs)) are specified annually under 50 CFR 635.23(a) and 635.27(a).

Implementing regulations for the Atlantic tuna fisheries at § 635.23 set the daily retention limits for BFT and allow for adjustments to the daily retention limits in order to provide for maximum utilization of the quota over the longest possible period of time. NMFS may increase or reduce the per angler retention limit for any size class BFT or may change the per angler limit to a per boat limit or the per boat limit to a per angler limit. Size class categories of BFT are defined as follows: school size BFT measure 27 to less than 47 inches (69 to less than 119 cm) curved fork length (CFL); large school BFT measure 47 to less than 59 inches (119 to less than 150 cm) CFL; small medium BFT measure 59 to less than 73 inches (150 to less than 185 cm) CFL; large medium BFT measure 73 to less than 81 inches (185 to less than 206 cm) CFL; and giant BFT measure 81 inches or greater (206 cm or greater) CFL.

Angling Category Retention Limit

A recommendation of ICCAT requires that NMFS limit the catch of school BFT to no more than eight percent by weight of the total domestic landings quota over each four-consecutive-year period. NMFS is implementing this ICCAT recommendation through annual and inseason adjustments to the school BFT retention limits, as necessary, and through the establishment of a school BFT reserve (64 FR 29090, May 28, 1999; 64 FR 29806, June 3, 1999).

The ICCAT recommendation allows for interannual adjustments for overharvests and underharvests, provided that the eight percent landings limit is not exceeded over the applicable 4-consecutive-year period. The 2003 fishing year is the first year in the current accounting period. This multi-year block quota approach provides NMFS with the flexibility to enhance fishing opportunities and to collect information on a broad range of BFT size classes.

Regulations at 50 CFR 635.23(b) restrict vessels fishing under the BFT Angling category quota to one BFT per vessel per day, which may be from the school, large school, or small medium category and, in addition, one large medium or giant BFT per vessel per year. This retention limit is subject to adjustment to provide for maximum utilization of the quota and enhanced fishing opportunities over the range of the recreational fisheries.

In 2002, NMFS increased the Angling category daily retention limit to four school, large school, or small medium BFT from June 15 through October 31, which is when recreational-sized BFT are on the fishing grounds, and then reduced it to one large school, or small medium BFT for November 1, 2002 through May 31, 2003 (67 FR 39869, June 11, 2002). The 2002 fishing year ended on May 31, 2003, and there is quota carry-over in the Angling category. Because of the large amount of quota available this year in the Angling category (over 499.2 metric tons (mt), 231 of which is carry-over from 2002) NMFS has determined that it is appropriate to adjust the recreational retention limit.

Since June 1, 2003, the retention limit of one school, large school or small medium as specified at 50 CFR 635.23(b) has been in effect. Effective June 15 through October 31, 2003, NMFS adjusts the daily retention limit for all areas to one BFT per person with a maximum of six BFT per vessel, in any combination of the school, large school, or small medium size classes. This limit applies to all vessels permitted in the Atlantic HMS Angling category and to vessels permitted in the Atlantic HMS Charter/Headboat category.

Headboat Retention Limit

Over the last several years NMFS has also received comments that a recreational retention limit of three or four BFT per vessel per day does not provide reasonable fishing opportunities for headboats, which may carry up to 40 passengers on a tuna fishing trip. Headboats are defined as vessels that

possess an Atlantic HMS Charter/Headboat category permit and that are inspected and licensed by the Coast Guard to carry more than six passengers. Headboat operators have requested a modified retention limit for their vessels that recognizes the high numbers of passengers they carry. On December 18, 2002, NMFS published a final rule that clarified the procedures to set differential BFT retention limits to provide equitable fishing opportunities for all types of fishing vessels (67 FR 77434). As noted above, the 2002 season closed on May 31, 2003, and there is quota carry-over from 2002. Because of the large amount of quota available this year in the Angling category (over 499.2 metric tons (mt), 231 mt of which is carry-over from 2002), NMFS has determined that it is appropriate to implement an alternative retention limit for headboats.

Effective August 15, 2003, which is when headboats normally target BFT, the daily recreational retention limit for headboats in all areas will be one BFT per passenger (not including Captain and crew), measuring 27 to less than 73 inches curved fork length, with a maximum of 35 BFT per vessel. This limit applies to all headboats defined as vessels that possess an Atlantic HMS Charter/Headboat permit and that are inspected and licensed by the Coast Guard to carry more than six passengers.

Monitoring and Reporting

From November 1, 2003, through May 31, 2004, the daily retention limit for all vessels fishing under the Angling category quota is one large school or small medium BFT per vessel. Regardless of the length of the trip, no more than a single day's allowable catch may be possessed or retained.

NMFS selected the daily retention limits and the duration of the daily retention limit adjustments after examining past catch and effort rates and the available quota for the 2003 fishing year. NMFS will continue to monitor the Angling category fishery closely through the Automated Landings Reporting System, the state harvest tagging programs in North Carolina and Maryland, and the Large Pelagics Survey. Depending on the level of fishing effort and catch rates of BFT, NMFS may determine that an interim closure or an additional retention limit adjustment is necessary to enhance scientific data collection from, and fishing opportunities in, all geographic areas. Additionally, NMFS may determine that an allocation from the school BFT reserve is warranted to further fishery management objectives.

Closures or subsequent adjustments to the daily retention limit, if any, will be published in the **Federal Register**. In addition, anglers may call the Atlantic Tunas Information Line at (888) 872-8862 or (978) 281-9305 for updates on quota monitoring and retention limit adjustments. Anglers aboard Atlantic HMS Charter/Headboat category vessels, when engaged in recreational fishing for school, large school, and small medium BFT, are subject to the same rules as anglers aboard Angling category vessels. All BFT landed under the Angling category quota must be reported within 24 hours of landing to the NMFS Automated Landings Reporting System via toll-free phone at (888)872-8862; or the Internet (www.nmfspermits.com); or, if landed in the states of North Carolina or Maryland, to a reporting station prior to offloading. Information about these state harvest tagging programs, including reporting station locations, can be obtained in North Carolina by calling (800) 338-7804, and in Maryland by calling (410) 213-1531.

In addition, anglers aboard permitted vessels may continue to tag and release BFT of all sizes under a tag-and-release program, provided the angler tags all BFT so caught, regardless of whether previously tagged, with conventional

tags issued or approved by NMFS, returns such fish to the sea immediately after tagging with a minimum of injury, and reports the tagging, and, if the BFT was previously tagged, the information on the previous tag (50 CFR 635.26).

General Category Retention Limits

Based on current and historical General category landings rates in the June through August time-period, it is highly unlikely that the June through August subquota will be filled in the remaining fishing days, which would result in unused quota being added to the September subquota. During the 2001 and 2002 fishing years, 156 mt and 182 mt were carried over from the June through August to the September time-period subquotas, respectively. Under § 635.23 (a)(4), NMFS may increase or decrease the daily retention limit of large medium and giant BFT over a range from zero (on restricted fishing days) to a maximum of three per vessel to allow for maximum utilization of the BFT quota. Based on a review of dealer reports, current and historical daily landing trends, and the availability of BFT on the fishing grounds, NMFS has determined that an increase of the daily retention limit in the General category is necessary in order to provide an opportunity to harvest the June through

August subquota in its designated time period. Therefore, effective June 15 through August 31, 2003, the first quota subperiod, NMFS adjusts the daily retention limit to two large medium or giant BFT per vessel.

The intent of this adjustment is to allow for maximum utilization of the June through August subquota (specified under § 635.27(a)) by General category participants in order to help achieve optimum yield in the General category fishery, to collect a broad range of data for stock monitoring purposes, and to be consistent with the objectives of the Fishery Management Plan for Atlantic tunas, swordfish, and sharks (HMS FMP).

Classification

This action is taken under 50 CFR 635.23 (a)(4) and (b)(3). This action is exempt from review under Executive Order 12866.

Authority: 16 U.S.C. 971 *et seq.* and 1801 *et seq.*

Dated: June 12, 2003.

Bruce C. Morehead,

Acting Director, Office of Sustainable Fisheries, National Marine Fisheries Service.
[FR Doc. 03-15287 Filed 6-12-03; 3:52 pm]

BILLING CODE 3510-22-S

Proposed Rules

Federal Register

Vol. 68, No. 116

Tuesday, June 17, 2003

This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

DEPARTMENT OF AGRICULTURE

Agricultural Marketing Service

7 CFR Part 1220

[No. LS-03-03]

Soybean Promotion and Research: Amend the Order To Adjust Representation on the United Soybean Board

AGENCY: Agricultural Marketing Service, USDA.

ACTION: Proposed rule.

SUMMARY: This proposed rule would adjust the number of members for certain States on the United Soybean Board (Board) to reflect changes in production levels that have occurred since the last time the Board was reapportioned in 2000. These adjustments are required by the Soybean Promotion and Research Order (Order). The results of the adjustments would be an additional member for Maryland and Michigan. New York would no longer be part of the Eastern Region unit. The State has sufficient soybean production to qualify as a separate State unit with one representative on the Board. New Jersey would be merged into the Eastern Region unit. The State no longer has sufficient soybean production to be a separate State unit. As a result of these changes, the total Board membership would increase from 62 members to 64 members. These changes to the Board would be effective with the Secretary's 2004 appointments.

DATES: Written comments on this proposed rule must be received by August 18, 2003.

ADDRESSES: Send two copies of comments to Kenneth R. Payne, Chief, Marketing Programs Branch, Livestock and Seed Program, Agricultural Marketing Service (AMS), USDA, Room 2638-S, STOP 0251, 1400 Independence Avenue, SW., Washington, DC 20250-0251. Comments may also be sent by e-mail to soybeancomments@usda.gov or by fax to 202/720-1125. State that your

comment refers to Docket No. LS-03-03. Comments received may be inspected at this location between 8 a.m. and 4:30 p.m., Monday through Friday, except holidays or on the Internet at www.ams.usda.gov/lsg/mpb/rp-soy.htm.

FOR FURTHER INFORMATION CONTACT:

Marlene M. Betts, Agricultural Marketing Specialist, Marketing Programs Branch on 202/720-1115, fax 202/720-1125, or by e-mail at marlene.betts@usda.gov.

SUPPLEMENTARY INFORMATION:

Executive Order 12866

The Office of Management and Budget (OMB) has waived the review process required by Executive Order 12866 for this action.

Executive Order 12988

This proposed rule has been reviewed under Executive Order 12988, Civil Justice Reform. This proposed rule is not intended to have a retroactive effect. This proposed rule would not preempt any State or local laws, regulations, or policies unless they present an irreconcilable conflict with this proposed rule.

The Soybean Promotion, Research, and Consumer Information Act (Act) provides that administrative proceedings must be exhausted before parties may file suit in court. Under § 1971 of the Act, a person subject to the Order may file a petition with the Secretary stating that the Order, any provision of the Order, or any obligation imposed in connection with the Order, is not in accordance with law and requesting a modification of the Order or an exemption from the Order. The petitioner is afforded the opportunity for a hearing on the petition. After a hearing, the Department of Agriculture (USDA) would rule on the petition. The Act provides that the district courts of the United States in any district in which such person is an inhabitant, or has their principal place of business, has jurisdiction to review USDA's ruling on the petition, if a complaint for this purpose is filed within 20 days after the date of the entry of the ruling.

Regulatory Flexibility Act

The Administrator of AMS has determined that this proposed rule will not have a significant economic impact on a substantial number of small entities

as defined by the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*), because it merely adjusts representation on the Board to reflect changes in production levels that have occurred since the Board was reapportioned in 2000. As such, these changes will not have an impact on those persons subject to the program. There are an estimated 600,813 soybean producers who pay assessments and an estimated 10,000 first purchasers who collect assessments, most of whom would be considered small entities under the criteria established by the Small Business Administration (13 CFR 121.201).

Paperwork Reduction Act

In accordance with OMB regulations (5 CFR part 1320), which implements the Paperwork Reduction Act of 1995 (44 U.S.C. chapter 35), the information collection requirements and recordkeeping requirements contained in the Order have been previously approved by OMB under OMB control number 0581-0093.

Background and Proposed Changes

The Act (7 U.S.C. 6301-6311) provides for the establishment of a coordinated program of promotion and research designed to strengthen the soybean industry's position in the marketplace, and to maintain and expand domestic and foreign markets and uses for soybeans and soybean products. The program is financed by an assessment of 0.5 percent of the net market price of soybeans sold by producers. Pursuant to the Act, an Order was made effective July 9, 1991. The Order established a Board of 60 members. For purposes of establishing the Board, the United States was divided into 31 geographic units. Representation on the Board from each unit was determined by the level of production in each unit. The Secretary appointed the initial Board on July 11, 1991. The Board is composed of domestic soybean producers.

Section 1220.201(c) of the Order provides that at the end of each 3-year period, the Board shall review soybean production levels in the geographic units throughout the United States. The Board may recommend to the Secretary modification in the levels of production necessary for Board membership for each unit. At its March 2003 meeting the Board decided not to recommend

any changes to the levels of production necessary for Board membership for each unit.

Section 1220.201(d) of the Order provides that at the end of each 3-year period, the Secretary must review the volume of production of each unit and adjust the boundaries of any unit and the number of Board members from each such unit as necessary to conform with the criteria set forth in § 1220.201(e): (1) To the extent practicable, States with annual average soybean production of less than 3,000,000 bushels shall be grouped into geographically contiguous units, each of which has a combined production level equal to or greater than 3,000,000 bushels, and each such group shall be entitled to at least one member on the Board; (2) units with at least 3,000,000 bushels, but fewer than 15,000,000 bushels shall be entitled to one Board member; (3) units with 15,000,000

bushels or more but fewer than 70,000,000 bushels shall be entitled to two Board members; (4) units with 70,000,000 bushels or more but fewer than 200,000,000 bushels shall be entitled to three Board members; and (5) units with 200,000,000 bushels or more shall be entitled to four Board members.

Current representation on the Board (62), and the number of geographical units (30), have been based on average production levels for the years 1995–1999 (excluding crops in years that production was the highest and that production was the lowest) as reported by USDA's National Agricultural Statistics Service (NASS).

Proposed representation on the Board (64) is based on average production levels for the years 1998–2002 (excluding crops in years that production was the highest and that production was the lowest) as reported by NASS.

The results of the reapportionment based on the 1998–2002 production levels would be an additional member for Maryland and Michigan. New York would no longer be part of the Eastern Region unit because the State has sufficient soybean production to qualify as a separate State unit with one representative on the Board. New Jersey would lose its only member because the State no longer has sufficient soybean production to be a separate State unit. It is proposed that New Jersey merge with the Eastern Region unit, and be represented on the Board by the Eastern Region's representative. There are no adjustments to the other States or regions.

The number of geographical units would remain at 30. This proposed rule would adjust representation on the Board as follows:

State	1998–2002 Average production level (bushels)	Current representation	Proposed representation
Maryland	16,568,000	1	2
Michigan	74,797,000	2	3
New York	4,503,000	0	1
New Jersey	2,882,000	1	0

Board adjustment as proposed by this rulemaking would be effective with the 2004 nominations and appointments.

List of Subjects in 7 CFR Part 1220

Administrative practice and procedure, Advertising, Agricultural research, Marketing agreements, Soybeans and soybean products, Reporting and recordkeeping requirements.

For the reasons set forth in the preamble, it is proposed that title 7, part 1220 be amended as follows:

PART 1220—SOYBEAN PROMOTION, RESEARCH, AND CONSUMER INFORMATION

1. The authority citation for 7 CFR part 1220 continues to read as follows:

Authority: 7 U.S.C. 6301–6311.

2. In § 1220.201, the table in paragraph (a) is revised to read as follows:

§ 1220.201 Membership of board.

(a) * * *

Unit	Number of members
Illinois	4
Iowa	4
Minnesota	4

Unit	Number of members	Unit	Number of members
Indiana	4	Western Region (Montana, Wyoming, Colorado, New Mexico, Idaho, Utah, Arizona, Washington, Oregon, Nevada, California, Hawaii, and Alaska)	1
Missouri	3	* * * * *	
Ohio	3	Dated: June 11, 2003.	
Arkansas	3	Kenneth C. Clayton,	
Nebraska	3	<i>Acting Administrator, Agricultural Marketing Service.</i>	
South Dakota	3	[FR Doc. 03–15270 Filed 6–16–03; 8:45 am]	
Kansas	3	BILLING CODE 3410–02–P	
Michigan	3		
Mississippi	2		
Louisiana	2		
Tennessee	2		
North Carolina	2		
Kentucky	2		
North Dakota	2		
Wisconsin	2		
Maryland	2		
Virginia	1		
Georgia	1		
South Carolina	1		
Alabama	1		
Delaware	1		
Texas	1		
Pennsylvania	1		
Oklahoma	1		
New York	1		
Eastern Region (New Jersey, Massachusetts, Connecticut, Florida, Rhode Island, Vermont, New Hampshire, Maine, West Virginia, District of Columbia, and Puerto Rico)	1		

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2003–NE–09–AD]

RIN 2120–AA64

Airworthiness Directives; Pratt & Whitney Canada PT6A–60A and PT6A–65B Turboprop Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to adopt a new airworthiness directive (AD) for Pratt & Whitney Canada (PWC) PT6A-60A and PT6A-65B turboprop engines. This proposed AD would require replacing Woodward propeller governor assemblies, part number (P/N) 8210-212H. This proposed AD is prompted by six incidents during airplane acceptance flight testing where directional control of the airplane was difficult to maintain during landing. The actions specified in this proposed AD are intended to prevent loss of directional control and damage to the airplane.

DATES: We must receive any comments on this proposed AD by August 18, 2003.

ADDRESSES: Use one of the following addresses to submit comments on this proposed AD:

- *By mail:* Federal Aviation Administration (FAA), New England Region, Office of the Regional Counsel, Attention: Rules Docket No. 2003-NE-09-AD, 12 New England Executive Park, Burlington, MA 01803-5299.

- *By fax:* (781) 238-7055.

- *By e-mail:* 9-ane-adcomment@faa.gov.

You may get the service information identified in this proposed AD from Pratt & Whitney Canada, 1000 Marie-Victorin, Longueuil, Quebec, Canada J4G1A1.

You may examine the AD docket at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA.

FOR FURTHER INFORMATION CONTACT: Ian Dargin, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803-5299; telephone (781) 238-7178; fax (781) 238-7199.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to submit any written relevant data, views, or arguments regarding this proposal. Send your comments to an address listed under **ADDRESSES**. Include "AD Docket No. 2003-NE-09-AD" in the subject line of your comments. If you want us to acknowledge receipt of your mailed comments, send us a self-addressed, stamped postcard with the docket number written on it; we will date-stamp your postcard and mail it back to you. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the proposed AD. If a person contacts us

through a nonwritten communication, and that contact relates to a substantive part of this proposed AD, we will summarize the contact and place the summary in the docket. We will consider all comments received by the closing date and may amend the proposed AD in light of those comments.

We are reviewing the writing style we currently use in regulatory documents. We are interested in your comments on whether the style of this document is clear, and your suggestions to improve the clarity of our communications that affect you. You may get more information about plain language at <http://www.plainlanguage.gov>.

Examining the AD Docket

You may examine the AD Docket (including any comments and service information), by appointment, between 8 a.m. and 4:30 p.m., Monday through Friday, except Federal holidays. See **ADDRESSES** for the location.

Discussion

Transport Canada, which is the airworthiness authority for Canada, recently notified the FAA that an unsafe condition may exist on PWC PT6A-60A and PT6A-65B turbofan engines. Transport Canada advises the FAA that there have been six reports from the airplane manufacturer that it was difficult to maintain directional control of the airplane during landing. These events were reported to have occurred during airplane acceptance flight testing. Certain governors that incorporate propeller control units (PCUs) with thicker O-rings on the Beta valve shafts of the PCUs may not set the appropriate ground idle blade angle when the airplane lands. If this happens on one engine only, a substantial and unexpected asymmetric thrust condition will occur.

The introduction of a thicker O-ring on the Beta valve shaft of the PCU addressed a nuisance oil leakage issue. A side effect of fitting this thicker O-ring is that a slightly higher input force is required to move the Beta valve to the ground idle position. On the installations using the PT6A-60A and PT6A-65B engines, the airframe installations have a solenoid system that relies on the force of an internal spring within the Beta valve to move the valve to the ground idle command position. The force of this spring is insufficient to overcome the increased friction of the thicker O-ring and ensure that the valve consistently and promptly moves to the ground idle position. As a result, the pilot may experience directional control problems during landing. There have

been no reports of in-service incidents to date. The actions specified in this proposed AD are intended to prevent loss of directional control and damage to the airplane.

This proposed AD is not applicable to engine models operating with the Woodward propeller governor, P/N 8210-212J, since they operate with a push-pull rod mechanism to move the Beta valve. That arrangement provides ample force to overcome the O-ring's frictional resistance.

Relevant Service Information

PWC has issued Service Bulletin (SB) PT6A-72-13354, dated July 6, 2001. That SB provides information for the removal, replacement, or modification of Woodward propeller governor assembly, P/N 8210-212H. Transport Canada classified this SB as mandatory and issued airworthiness directive CF-2002-02, dated January 15, 2002, in order to ensure the airworthiness of these PWC engines in Canada.

Differences Between This Proposed AD and the Manufacturer's Service Information

Although the SB recommends the removal, replacement or modification of Woodward propeller governor assemblies, P/N 8210-212H, when the engine is disassembled and access is available to the necessary subassembly (i.e. module, accessories, components, or build groups), this proposed AD would require compliance at the next access or within six months after the effective date of this AD, whichever occurs first.

FAA's Determination and Requirements of the Proposed AD

These PT6A-60A and PT6A-65B engine models, manufactured in Canada, are type-certificated for operation in the United States under the provisions of section 21.29 of the Federal Aviation Regulations (14 CFR 21.29) and the applicable bilateral airworthiness agreement. Pursuant to this bilateral airworthiness agreement, Transport Canada has kept us informed of the situation described above. We have examined Transport Canada's findings, reviewed all available information, and determined that AD action is necessary for products of this type design that are certificated for operation in the United States. Therefore, we are proposing this AD, which would require replacing Woodward propeller governor assemblies, P/N 8210-212H.

Changes to 14 CFR Part 39—Effect on the Proposed AD

On July 10, 2002, we published a new version of 14 CFR part 39 (67 FR 47997, July 22, 2002), which governs the FAA's AD system. This regulation now includes material that relates to altered products, special flight permits, and alternative methods of compliance. This material previously was included in each individual AD. Since this material is included in 14 CFR part 39, we will not include it in future AD actions.

Costs of Compliance

There are approximately 73 Pratt & Whitney Canada PT6A–60A and PT6A–65B turboprop engines of the affected design in the worldwide fleet. We estimate that 70 engines installed on airplanes of U.S. registry would be affected by this proposed AD. We also estimate that it would take approximately 2 work hours per engine to perform the proposed actions, and that the average labor rate is \$60 per work hour. Required parts would cost approximately \$24,228 per engine. Based on these figures, the total cost of the proposed AD to U.S. operators is estimated to be \$1,704,360. PWC has informed the FAA that it may provide the parts and labor to the operators at no cost, thereby substantially reducing the cost impact of this proposed rule.

Regulatory Findings

We have determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that the proposed regulation:

1. Is not a "significant regulatory action" under Executive Order 12866;
2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and
3. Would not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a summary of the costs to comply with this proposal and placed it in the AD Docket. You may get a copy of this summary by sending a request to us at the address listed under

ADDRESSES. Include "AD Docket No. 2003–NE–09–AD" in your request.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the Federal Aviation Administration proposes to amend 14 CFR part 39 as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

Pratt and Whitney Canada: Docket No. 2003–NE–09–AD.

Comments Due Date: (a) The Federal Aviation Administration (FAA) must receive comments on this airworthiness directive (AD) action by August 18, 2003.

Affected ADs: (b) None.

Applicability: (c) This AD is applicable to Pratt & Whitney Canada (PWC) PT6A–60A and PT6A–65B turboprop engines that have Woodward propeller governor assemblies, part number, (P/N) 8210–212H, installed. These engines are installed on, but not limited to, Raytheon Super Beech King Air 300/350 and Raytheon Beech 1900/1900C airplanes.

Unsafe Condition: (d) This AD was prompted by six incidents during airplane acceptance flight testing, whereby directional control of the airplane was difficult to maintain during landing. The actions specified in this AD are intended to prevent loss of directional control and damage to the airplane.

Compliance: (e) Compliance with this AD is required as indicated, unless already done.

Removal of Woodward Propeller Governor Assemblies

(f) Replace Woodward propeller governor assemblies, P/N 8210–212H, at the next access to the governor or within six months after the effective date of this AD, whichever occurs earlier. Information on replacing the Woodward propeller governor assembly can be found in Pratt & Whitney Canada Service Bulletin PT6A–72–13354, dated July 6, 2001.

(g) After the effective date of this AD, do not install any Woodward propeller governor assembly, P/N 8210–212H, on any engine.

Alternative Methods of Compliance

(h) Alternative methods of compliance must be requested in accordance with 14 CFR part 39.19, and must be approved by the Manager, Engine Certification Office, FAA.

Material Incorporated by Reference

- (i) None

Related Information

(j) The subject of this AD is addressed in Transport Canada airworthiness directive CF–2002–02, dated January 15, 2002.

Issued in Burlington, Massachusetts, on June 9, 2003.

Francis A. Favara,

Acting Manager, Engine and Propeller Directorate, Aircraft Certification Service.
[FR Doc. 03–15224 Filed 6–16–03; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF THE TREASURY

Internal Revenue Service

26 CFR Part 49

[REG–141097–02]

RIN 1545–BB18

Excise Taxes; Communications Services, Distance Sensitivity; Hearing

AGENCY: Internal Revenue Service (IRS), Treasury.

ACTION: Notice of public hearing on proposed rulemaking.

SUMMARY: This document contains a notice of public hearing on proposed regulations relating to the definition of toll telephone service for purposes of the communications excise tax.

DATES: The public hearing is being held on September 10, 2003, at 10 a.m. The IRS must receive outlines of the topics to be discussed at the hearing by July 15, 2003.

ADDRESSES: The public hearing is being held in room 4718, Internal Revenue Building, 1111 Constitution Avenue, NW., Washington, DC. Send submissions to: CC:PA:RU (REG–141097–02), room 5226, Internal Revenue Service, POB 7604, Ben Franklin Station, Washington, DC 20044. Submissions may be hand delivered between the hours of 8 a.m. and 4 p.m. to CC:PA:RU (REG–141097–02), Couriers Desk, Internal Revenue Service, 1111 Constitution Avenue NW., Washington, DC. Alternatively, taxpayers may submit electronic outlines of oral comments directly to the IRS Internet site at <http://www.irs.gov/regs>.

FOR FURTHER INFORMATION CONTACT: Concerning the regulations, Cynthia McGreevy (202) 622–3130; concerning submissions, LaNita Van Dyke (202) 622–7180 (not toll free numbers).

SUPPLEMENTARY INFORMATION: The subject of the public hearing is the notice of proposed regulations (REG–141097–02) that was published in the

Federal Register on Tuesday, April 1, 2003 (68 FR 15690).

The rules of 26 CFR 601.601(a)(3) apply to the hearing.

Persons who wish to present oral comments at the hearing that submitted written comments by June 30, 2003, must submit an outline of the topics to be discussed and the amount of time to be devoted to each topic (signed original and eight (8) copies).

A period of 10 minutes is allotted to each person for presenting oral comments.

After the deadline for receiving outlines has passed, the IRS will prepare an agenda containing the schedule of speakers. Copies of the agenda will be made available, free of charge, at the hearing.

Because of access restrictions, the IRS will not admit visitors beyond the immediate entrance area more than 30 minutes before the hearing starts. For information about having your name placed on the building access list to attend the hearing, see the **FOR FURTHER INFORMATION CONTACT** section of this document.

Cynthia E. Grigsby,
Chief, Regulations Unit, Associate Chief Counsel, (Procedure and Administration).
[FR Doc. 03-15283 Filed 6-16-03; 8:45 am]
BILLING CODE 4830-01-P

NATIONAL ARCHIVES AND RECORDS ADMINISTRATION

36 CFR Part 1280

RIN 3095-AB22

NARA Facilities; Hours of Operation for the Exhibition Hall

AGENCY: National Archives and Records Administration (NARA).

ACTION: Proposed rule.

SUMMARY: The National Archives and Records Administration proposes to modify the extended hours that the Exhibition Hall in the National Archives Building in Washington, DC, is open from April 1 through the Friday before Memorial Day. The Exhibition Hall would close at 7 p.m. instead of 9 p.m. during this period. We are proposing to limit the extended hours during this period to be more cost-effective and because this is when attendance is the lightest. NARA's Exhibition Hall would still have the longest hours of any Washington museum on the National Mall. The proposed change does not affect the research room hours stated in part 1253 in any manner. This proposed rule affects the public.

DATES: Comments are due by August 18, 2003.

ADDRESSES: Comments must be sent to Regulation Comments Desk (NPOL), Room 4100, Policy and Communications Staff, National Archives and Records Administration, 8601 Adelphi Road, College Park, MD 20740-6001. They may be faxed to 301-837-0319. Electronic comments may be submitted through Regulations.gov. You may also comment via e-mail to comments@nara.gov. Please see the **SUPPLEMENTARY INFORMATION** section of the preamble for additional information on e-mail submissions.

FOR FURTHER INFORMATION CONTACT: Kim Richardson at telephone number 301-837-2902, or fax number 301-837-0319.

SUPPLEMENTARY INFORMATION: NARA's Exhibition Hall, which contains the Declaration of Independence, the Constitution, and other exhibits, is closed for renovation. When it reopens, we are proposing to close it at 7 p.m. instead of 9 p.m., from April 1 through the Friday before Memorial Day. Before renovation, the Exhibition Hall closed at 9 p.m. during this period. The closing times for the remainder of the months is unchanged. The Exhibition Hall opens at 10 a.m. the entire year and this also remains unchanged.

On September 18, 2003, the first phase of the new National Archives Experience, the rededicated "Rotunda for the Charters of Freedom", opens to the general public. Over the course of the year that follows, three additional galleries and a new theater will open as well. There will be additional costs for providing security, maintenance, and visitor services as public spaces are expanded more than three-fold.

Building occupation during the extended hours of 7 p.m. to 9 p.m. is not typically as heavy as during daytime hours, particularly in the spring when all other museums on the National Mall close at 5:30 p.m. Given increased costs of operation, a careful review was made of whether it was prudent to keep the extended hours.

A distinction was made between the period from April 1 to Memorial Day weekend, and the period from Memorial Day weekend to Labor Day, because during the latter period we have more family visitors and some Mall museums have extended evening hours.

This proposed rule does not affect the research room hours at the National Archives Building in Washington, DC, stated in part 1253.

If you submit comments via e-mail, please submit the comments within the body of your email message or attachment avoiding the use of any form

of encryption. Please also include "Attn: 3095-AB22" and your name and return address in your e-mail message. If you do not receive a confirmation that we have received your email message, contact the Regulation Comment Desk at 301-837-2902.

This proposed rule is not a significant regulatory action for the purposes of Executive Order 12866 and has been reviewed by the Office of Management and Budget. As required by the Regulatory Flexibility Act, I certify that this proposed rule will not have a significant impact on a substantial number of small entities. This regulation does not have any federalism implications.

List of Subjects in 36 CFR Part 1280

Federal buildings and facilities.

For the reasons set forth in the preamble, NARA proposes to amend part 1280 of title 36, Code of Federal Regulations, chapter XII, as follows:

PART 1280—PUBLIC USE OF NARA FACILITIES

1. The authority citation for part 1280 continues to read as follows:

Authority: 44 U.S.C. 2104(a).

2. Revise § 1280.62 to read as follows:

§ 1280.62 When is the Exhibition Hall open?

(a) The Exhibition Hall is open to the public during the following hours:

(1) The day after Labor Day through March 31, hours are 10 a.m. to 5:30 p.m.

(2) April 1 through the Friday before Memorial Day, hours are 10 a.m. to 7 p.m.

(3) Memorial Day weekend through Labor Day, hours are 10 a.m. to 9 p.m.

(b) The Archivist of the United States reserves the authority to close the Exhibition Hall to the public at any time for special events or other purposes. The building is closed on December 25.

Dated: June 10, 2003.

Lewis J. Bellardo,

Deputy Archivist of the United States.

[FR Doc. 03-15190 Filed 6-16-03; 8:45 am]

BILLING CODE 7515-01-P

ENVIRONMENTAL PROTECTION AGENCY**40 CFR Part 86**

[FRL-7492-7]

RIN 2060-AJ77

Control of Air Pollution From New Motor Vehicles and New Motor Vehicle Engines; Modification of Federal On-Board Diagnostic Regulations for: Light-Duty Vehicles, Light-Duty Trucks, Medium-Duty Passenger Vehicles, Complete Heavy-Duty Vehicles and Engines Intended for Use in Heavy-Duty Vehicles Weighing 14,000 Pounds GVWR or Less; Extension of Acceptance of California OBD II Requirements**AGENCY:** Environmental Protection Agency (EPA).**ACTION:** Notice of proposed rulemaking.

SUMMARY: EPA is proposing to amend and revise certain requirements associated with the federal on-board diagnostic (OBD) system regulations. EPA previously promulgated an OBD rulemaking on December 22, 1998 (63 FR 70681), which indefinitely extended the provision allowing compliance with California OBD II requirements to satisfy federal OBD requirements. The California Air Resources Board (CARB) has recently revised their OBD II requirements. Accordingly, today's action proposes appropriate revisions to federal OBD regulations including: updating the reference to the allowed version of the California OBD II regulations to the most recently adopted version such that compliance with the recently revised California OBD II requirements will satisfy certain federal OBD requirements; allowing compliance with California OBD II catalyst monitoring requirements; updating the incorporation by reference of several recommended practices developed by the Society of Automotive Engineers (SAE) and the International Organization for Standardization (ISO) to incorporate recently published

versions, while also incorporating by reference a new standardized protocol developed by the International Organization for Standardization (ISO) and establishing a future date by which this protocol will be the only acceptable protocol; and issuing a technical amendment to the optional heavy-duty (HD) vehicle weighing 14,000 pounds GVWR or less chassis certification requirements. OBD systems in general provide substantial benefits to the environment by diagnosing and alerting operators, vehicle inspection and maintenance (I/M) personnel, and service providers to deterioration or malfunction of emission control related systems.

DATES: Written comments must be received by July 17, 2003, and requests for a public hearing must be received by July 2, 2003. If EPA receives a request for a public hearing then the hearing will take place on July 17, 2003, and the written comment period will then close on September 2, 2003. By July 14, 2003, any person who plans to attend the hearing should call Arvon Mitcham at (734) 214-4522 to learn if the hearing will be held. If EPA receives a request for a public hearing, EPA will hold the public hearing in the first floor conference room at 501 3rd Street, NW., Washington, DC.

ADDRESSES: *Comments:* All comments and materials relevant to today's action should be submitted to Public Docket No. A-2002-20 at EPA's Air and Radiation Docket and Information Center (Air Docket) at the following address: EPA Docket Center (EPA/DC), Public Reading Room, Room B102, EPA West Building, 1301 Constitution Avenue, NW., Washington, DC 20460. Dockets may be inspected from 8:30 a.m. to 4:30 p.m., Monday through Friday, except on government holidays. You can reach the Air Docket by telephone at (202) 566-1742 and by facsimile at (202) 566-1741. You may be charged a reasonable fee for photocopying docket materials, as provided in 40 CFR part 2.

FOR FURTHER INFORMATION CONTACT:

Arvon Mitcham, U.S. EPA, National Vehicle and Fuels Emission Laboratory, Certification and Compliance Division, 2000 Traverwood, Ann Arbor MI 48105; telephone (734) 214-4522, e-mail mitcham.arvon@epa.gov.

SUPPLEMENTARY INFORMATION: This document concerns proposed amendments and revisions to EPA's OBD regulations. In the "Rules and Regulations" section of today's **Federal Register**, we are approving these amendments and revisions as a direct final rule without a prior proposal because we view this as a noncontroversial action and anticipate no adverse comment. We have explained our reasons for this approval in the preamble to the direct final rule. This proposal incorporates by reference all of the reasoning, explanation and regulatory text from the direct final rule. For further information, including the regulatory text for this proposal, please refer to the direct final rule. If we receive no adverse comment, we will not take further action on this proposed rule. If we receive adverse comment on one or more distinct amendments, paragraphs, or sections of this rulemaking, we will publish a timely withdrawal in the **Federal Register** indicating which provisions are being withdrawn due to adverse comment. We may address all adverse comments in a subsequent final rule based on this proposed rule. We will not institute a second comment period on this action. Any parties interested in commenting must do so at this time. Any distinct amendment, paragraph, or section of today's rulemaking for which we do not receive adverse comment will become effective on August 18, 2003, notwithstanding any adverse comment on any other distinct amendment, paragraph, or section of today's rule.

Regulated Entities

Entities potentially regulated by this action are those which manufacture new motor vehicles and engines.

Category	Examples of regulated entities	NAICS codes ^a	SIC codes ^b
Industry	New motor vehicle and engine manufacturers	33611, 336112, 336120	3711

^a North American Industry Classification System (NAICS) Code.

^b Standard Industrial Classification (SIC) System Code.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities EPA is now aware could potentially be regulated by this action. Other types of entities not listed in the table could also

be regulated. To determine whether your product is regulated by this action, you should carefully examine the applicability criteria in § 86.005-17 and § 86.1806-05 of title 40 of the Code of Federal Regulations. If you have

questions regarding the applicability of this action to a particular product, consult the person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

Access to Rulemaking Documents Through the Internet

Today's action is available electronically on the day of publication from EPA's **Federal Register** Internet Web site listed below. Electronic copies of this preamble, regulatory language, and other documents associated with today's proposal are available from the EPA Office of Transportation and Air Quality Web site listed below shortly after the rule is signed by the Administrator. This service is free of charge, except any cost that you already incur for connecting to the Internet.

EPA **Federal Register** Web site:
<http://www.epa.gov/docs/fedrgstr/epa-air/>. (Either select a desired date or use the Search feature.)

On-board diagnostics home page:
<http://www.epa.gov/otaq/obd.htm>.

Please note that due to differences between the software used to develop the document and the software into which the document may be downloaded, changes in format, page length, etc., may occur.

Statutory and Executive Order Reviews:

A. Executive Order 12866: Regulatory Planning and Review

Under Executive Order 12866 (58 FR 51735, October 4, 1993), the Agency is required to determine whether this regulatory action would be "significant" and therefore subject to review by the Office of Management and Budget (OMB) and the requirements of the Executive Order. The order defines a "significant regulatory action" as any regulatory action that is likely to result in a rule that may:

- (1) Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or state, local, or tribal governments or communities;
- (2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;
- (3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or,
- (4) Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

Pursuant to the terms of Executive Order 12866, we have determined that this proposed rule is not a "significant regulatory action."

B. Paperwork Reduction Act

Today's action does not impose any new information collection burden. The modifications noted above do not change the information collection requirements submitted to and approved by OMB in association with the OBD final rulemakings (58 FR 9468, February 19, 1993; and 59 FR 38372, July 28, 1994).

C. Regulatory Flexibility Act

The RFA generally requires an agency to prepare an initial regulatory flexibility analysis of any proposed rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small governmental jurisdictions.

For purposes of assessing the impacts of today's direct final rule on small entities, small entity is defined as: (1) Those businesses meeting the definition provided by the Small Business Administration; (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

After considering the economic impacts of today's direct final rule on small entities, EPA determines that this action will not have a significant economic impact on a substantial number of small entities. This rulemaking will provide regulatory relief to both large and small volume automobile and heavy-duty vehicle and engine manufacturers by maintaining consistency with California OBDII requirements. This rulemaking will not have a significant impact on businesses that manufacture, rebuild, distribute, or sell automotive parts, nor those involved in automotive service and repair, as the revisions affect only requirements on automobile and heavy-duty truck and engine manufacturers. See *United Distribution Companies v. FERC*, 88 F. 3d 1005, 1170 (D.C. Cir. 1996). Most manufacturers have thus far chosen to reduce their costs by producing vehicle OBD systems to California specifications, thereby avoiding the necessity of developing significantly different OBD calibrations meeting the existing federal specifications for the non-California

markets. Today's continuation of the optional compliance option to California's OBDII requirements continues this cost reduction.

D. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104-4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments, and the private sector. Under section 202 of the UMRA, we generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures to State, local, and tribal governments, in the aggregate, or to the private sector, of \$100 million or more for any single year. Before promulgating a rule for which a written statement is needed, section 205 of the UMRA generally requires us to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective, or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows us to adopt an alternative that is not the least costly, most cost-effective, or least burdensome alternative if we provide an explanation in the final rule of why such an alternative was adopted.

Before we establish any regulatory requirement that may significantly or uniquely affect small governments, including tribal governments, we must develop a small government plan pursuant to section 203 of the UMRA. Such a plan must provide for notifying potentially affected small governments, and enabling officials of affected small governments to have meaningful and timely input in the development of our regulatory proposals with significant federal intergovernmental mandates. The plan must also provide for informing, educating, and advising small governments on compliance with the regulatory requirements.

This proposed rule contains no Federal mandates for State, local, or tribal governments as defined by the provisions of title II of the UMRA. The proposed rule imposes no enforceable duties on any of these governmental entities. Nothing in the proposal will significantly or uniquely affect small governments.

We have determined that this proposed rule does not contain a Federal mandate that may result in estimated expenditures of more than \$100 million to the private sector in any single year.

E. Executive Order 13132: Federalism

Executive Order 13132, entitled "Federalism" (64 FR 43255, August 10, 1999), requires us to develop an accountable process to ensure "meaningful and timely input by state and local officials in the development of regulatory policies that have federalism implications." "Policies that have federalism implications" is defined in the Executive Order to include regulations that have "substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government."

Under section 6 of Executive Order 13132, we may not issue a regulation that has federalism implications, that imposes substantial direct compliance costs, and that is not required by statute, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by State and local governments, or we consult with State and local officials early in the process of developing the proposed regulation. We also may not issue a regulation that has federalism implications and that preempts State law, unless the Agency consults with State and local officials early in the process of developing the proposed regulation.

Section 4 of the Executive Order contains additional requirements for rules that preempt State or local law, even if those rules do not have federalism implications (*i.e.*, the rules will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government). Those requirements include providing all affected State and local officials notice and an opportunity for appropriate participation in the development of the regulation. If the preemption is not based on express or implied statutory authority, we also must consult, to the extent practicable, with appropriate State and local officials regarding the conflict between State law and federally protected interests within the agency's area of regulatory responsibility.

This proposed rule does not have federalism implications. It will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. This proposed rule updates provisions of an earlier

rule that adopted national standards relating to OBD systems and the ability of manufacturers to demonstrate Federal compliance based on demonstration of compliance with California OBD II regulations. The requirements of the rule will be enforced by the Federal government at the national level. Thus, the requirements of section 6 of the Executive Order do not apply to this rule.

F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

Executive Order 13175, entitled "Consultation and Coordination with Indian Tribal Governments" (65 FR 67249, November 6, 2000), requires EPA to develop an accountable process to ensure "meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications." This proposed rule does not have tribal implications, as specified in Executive Order 13175. Today's rule would not uniquely affect the communities of American Indian tribal governments since the motor vehicle fuel and other related requirements for private businesses in today's rule have national applicability. Furthermore, today's proposed rule does not impose any direct compliance costs on these communities and no circumstances specific to such communities exist that will cause an impact on these communities beyond those discussed in the other sections of today's document.

This proposed rule does not significantly or uniquely affect the communities of Indian tribal governments. As noted above, this rule will be implemented at the federal level and imposes compliance obligations and options on private industry. Thus, Executive Order 13175 does not apply to this proposed rule.

G. Executive Order 13045: Protection of Children From Environmental Health & Safety Risks

Executive Order 13045, "Protection of Children from Environmental Health Risks and Safety Risks" (62 FR 19885, April 23, 1997) applies to any rule that (1) is determined to be "economically significant" as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that we have reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, section 5–501 of the Executive Order directs us to evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other

potentially effective and reasonably feasible alternatives considered by us.

This proposed rule is not subject to the Executive Order because it is not an economically significant regulatory action as defined by Executive Order 12866. Furthermore, this proposed rule does not concern an environmental health or safety risk that we have reason to believe may have a disproportionate effect on children.

H. Executive Order 13211: Actions That Significantly Affect Energy Supply, Distribution, or Use

This rule is not subject to Executive Order 13211, "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use" (66 FR 28355 (May 22, 2001)) because it is not a significant regulatory action under Executive Order 12866.

I. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA), section 12(d) of Public Law 104–113, directs us to use voluntary consensus standards in our regulatory activities unless it would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (*e.g.*, materials specifications, test methods, sampling procedures, and business practices) developed or adopted by voluntary consensus standards bodies. The NTTAA directs us to provide Congress, through OMB, explanations when we decide not to use available and applicable voluntary consensus standards.

This proposed rule references technical standards adopted by us through previous rulemakings. No new technical standards are established in today's proposed rule.

Statutory and Legal Authority

Statutory authority for today's proposed rule comes from the Clean Air Act, 42 U.S.C. 7401 *et seq.*, in particular, section 202(m) of the Act (42 U.S.C. 7521(m)).

List of Subjects in 40 CFR Part 86

Environmental protection, Incorporation by reference, Administrative practice and procedure, Motor vehicle pollution, On-board diagnostics.

Dated: April 25, 2003.

Christine Todd Whitman,
Administrator.

[FR Doc. 03–14570 Filed 6–16–03; 8:45 am]

BILLING CODE 6560–50–P

FEDERAL COMMUNICATIONS COMMISSION**47 CFR Part 76****[CS Docket No. 97–80; FCC 03–89]****Commercial Availability of Navigation Devices****AGENCY:** Federal Communications Commission.**ACTION:** Notice of proposed rulemaking.

SUMMARY: This document initiates a rulemaking reassessing the retail market for navigation devices and the need for the upcoming July 1, 2006 ban on integrated navigation devices. This reassessment is needed to determine whether the July 1, 2006 ban on integrated navigation devices remains appropriate or is no longer necessary as a result of ongoing industry negotiations for a bidirectional specification for digital cable receivers and products. This rulemaking is initiated pursuant to Section 629 of the Communications Act which directs the Commission to adopt regulations to assure the commercial availability of navigation devices equipment used by consumers to access services from multichannel video programming distributors.

DATES: Comments due February 19, 2004; reply comments are due March 10, 2004. Written comments by the public on the proposed information collections are due February 19, 2004. Written comments must be submitted by the Office of Management and Budget (OMB) on the proposed information collection(s) on or before August 18, 2003.

ADDRESSES: Federal Communications Commission, 445 12th Street, SW., Washington, DC 20554. For further filing information, see **SUPPLEMENTARY INFORMATION**.

FOR FURTHER INFORMATION CONTACT: Susan Mort, 202–418–1043 or smort@fcc.gov. In addition to filing comments with the Secretary, a copy of any comments on the information collection(s) contained herein should be submitted to Leslie Smith, Federal Communications Commission, Room 1–A804, 445 12th Street, SW., Washington, DC 20554, or via the Internet at Leslie.Smith@fcc.gov, or at 202–418–0217, and to Kim A. Johnson, OMB Desk Officer, Room 102236 NEOB, 725 17th Street, NW., Washington, DC 20503 or via the Internet to Kim_A.Johnson@omb.eop.gov.

SUPPLEMENTARY INFORMATION: This is a synopsis of the Commission's Order and Further Notice of Proposed Rulemaking

("FNPRM"), FCC 03–89, adopted April 14, 2003; released April 25, 2003. The full text of the Commission's FNPRM is available for inspection and copying during normal business hours in the FCC Reference Center (Room CY–A257) at its headquarters, 445 12th Street, SW., Washington, DC 20554, or may be purchased from the Commission's copy contractor, Qualex International, (202) 863–2893, Portals II, Room CY–B402, 445 12th St., SW., Washington, DC 20554, or may be reviewed via Internet at <http://www.fcc.gov/mb>.

Paperwork Reduction Act

The FNPRM portion of this document contains a proposed information collection. The Commission, as part of its continuing effort to reduce paperwork burdens, invites the general public and the Office of Management and Budget (OMB) to comment on the information collection(s) contained in the FNPRM, as required by the Paperwork Reduction Act of 1995, Public Law 104–13. Public and agency comments are due at the same time as other comments on this FNPRM; OMB notification of action is due August 18, 2003. Comments should address: (a) Whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; (b) the accuracy of the Commission's burden estimates; (c) ways to enhance the quality, utility, and clarity of the information collected; and (d) ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology.

In addition to filing comments with the Secretary, a copy of any PRA comments on the information collections contained herein should be submitted to Leslie Smith, Federal Communications Commission, Room 1–A804, 445 12th Street, SW., Washington, DC 20554, or via the Internet to Leslie.Smith@fcc.gov, and to Kim A. Johnson, OMB Desk Officer, Room 10236 NEOB, 725 17th Street, NW., Washington, DC 20503, or via the Internet to Kim_A.Johnson@omb.eop.gov.

OMB Control Number: 3060–0849.

Title: Commercial Availability of Navigation Devices.

Form Number: N/A.

Type of Review: Revision of a currently approved collection.

Respondents: Business or other for-profit entities.

Number of Respondents: 215.

Estimated Time per Response: 10 minutes to 40 hours.

Frequency of Response: Quarterly and semi-annual reporting requirements; Third party disclosure.

Total Annual Burden: 3,384 hours.

Total Annual Costs: \$33,450.

1. *Needs and Uses:* The FNPRM initiates a reassessment of the state of the navigation devices market by the Commission prior to January 1, 2005. Pursuant to this reassessment, the Commission shall determine whether the July 1, 2006 ban on integrated navigation devices remains appropriate or whether the ban will no longer be necessary. The state of the navigation devices market will be significantly impacted by ongoing negotiations between the cable and consumer electronics industries for a bidirectional specification for digital cable receivers and products. As a result, the cable and consumer electronics industries are requested to provide the Commission with status reports on these negotiations at 90, 180 and 270 day intervals following release of this FNPRM.

Synopsis of the Further Notice of Proposed Rulemaking

2. The Commission initiated its Commercial Availability of Navigation Devices proceeding by notice of proposed rulemaking in CS Docket No. 97–80 (FCC 97–53), 62 FR 10011, March 5, 1997. This action was taken pursuant to Section 629 of the Communications Act which directs the Commission to adopt regulations to assure the commercial availability of navigation devices equipment used by consumers to access services from multichannel video programming distributors ("MVPDs"). Pursuant to this directive, the Commission issued the Report and Order in the above-captioned proceeding establishing, inter alia, a January 1, 2005, deadline for MVPDs to cease deploying new navigation devices that perform both conditional access functions and other functions in a single integrated device. The Commission adopted the requirement to separate the conditional access function from the basic navigation device (the "host device") in order to permit unaffiliated manufacturers, retailers, and other vendors to commercially market host devices while allowing MVPDs to retain control over their system security. The Commission later issued a Further Notice of Proposed Rulemaking and Declaratory Ruling ("Further Notice and Declaratory Ruling") (FCC 00–341), 65 FR 58255, September 28, 2000, that sought comment on the effectiveness of the Commission's navigation device

rules, including the 2005 prohibition on integrated devices.

3. Since Section 629 and the Commission's rules were adopted, the cable and consumer electronics industries have made, and continue to make, significant progress in the development of technical standards in this area. However, the commercial market for navigation devices used in conjunction with the distribution of digital video programming remains in its infancy. In an effort to spur the transition to digital television, the cable and consumer electronics industry recently reached a Memorandum of Understanding ("MOU") on a cable compatibility standard for a unidirectional digital cable television receiver with host device functionality, as well as other unidirectional digital cable products. This standard would allow consumers to directly attach their DTV receivers to cable systems using a point of deployment ("POD") module and receive one-way cable television services without the need for an external navigation device. The Commission issued a Further Notice of Proposed Rulemaking ("MOU FNPRM") seeking public comment on the MOU issued in the above-captioned proceeding and in the Compatibility Between Cable Systems and Consumer Electronics Equipment proceeding.

4. In its earlier Further Notice and Declaratory Ruling, the Commission had already sought comment, *inter alia*, on whether the 2005 date for the phase-out of integrated boxes remains appropriate, on what, if any, incentives the requirement creates for the development of a commercial retail market for navigation devices, and on the economic impacts and costs associated with the requirement. In response, the cable industry and set-top box manufacturers generally urged that the 2005 deadline should be eliminated in favor of the continued offering of integrated navigation devices for rent to consumers. Other equipment manufacturing and retail interests urged that the date should be advanced to ensure the timely development of a retail market in host devices. Given the equipment ordering and manufacturing cycles involved, it is necessary at this point to provide guidance as to the Commission's expectations with respect to the 2005 date. Other issues raised in the Further Notice and Declaratory Ruling will be addressed separately at a later time.

5. Commission action in response to the MOU FNPRM could have a significant impact upon the development of a commercial market in separate host devices. In addition, the

cable and consumer electronic industries are in the midst of negotiations on specifications for bidirectional digital cable receivers and products which would permit the receipt of advanced cable television services by direct connection to cable systems. This ongoing process, which we are hopeful will produce results in the near term, could impact the development of technical specifications relating to host devices and POD modules. In light of the ongoing notice and comment cycle relating to the MOU FNPRM, the evolving nature of technical specifications relating to navigation devices, and the imminent business ordering and manufacturing cycles facing MVPDs and consumer electronics manufacturers in anticipation of the pending 2005 prohibition, we hereby extend the deadline concerning the prohibition on integrated devices until July 1, 2006.

6. This eighteen month extension should provide adequate time for the parties to complete their ongoing negotiations and for the Commission to make a more knowledgeable decision as to any further changes in the compliance date. By January 1, 2005, the Commission shall complete a reassessment of the state of the navigation devices market and determine whether the designated time frame remains appropriate or whether the ban on integrated devices will no longer be necessary. In the interim, the cable and consumer electronics industries are requested to provide the Commission with status reports on their negotiations on specifications for bidirectional digital cable receivers and products at 90, 180 and 270 day intervals following release of this Order. Following submission of the last status report to the Commission, the public shall have thirty days to submit comments on the status reports and whether any further changes in the phase-out date for integrated devices are warranted.

7. Based upon the record in the above-captioned proceeding and ongoing industry developments, we have concluded that a limited deferral of the date is consistent with the ultimate objectives of this proceeding and our statutory directive to act "in consultation with appropriate industry standard-setting organizations." We are not persuaded at this point to eliminate the prohibition on integrated devices since future developments in both the marketplace and ongoing industry negotiations may yet dictate a need for this requirement in order to achieve the objectives of Section 629. However, the conclusion of the unidirectional MOU,

as well as the ongoing negotiations towards a bidirectional agreement, do reflect progress towards the development of a retail market for consumer electronics equipment with navigation device functionality. As such, we do not believe that advancing the prohibition date, as previously suggested by a number of equipment manufacturing and retail interests, is necessary to further these objectives or would provide sufficient lead time for ordering and manufacturing prior to completion of the next phase of the standardization process.

8. *Authority.* This FNPRM is issued pursuant to authority contained in Sections 4(i), 303(r), and 629 of the Communications Act of 1934, as amended.

9. *Ex Parte Rules—Non-Restricted Proceeding.* This is a non-restricted notice and comment rulemaking proceeding. Ex parte presentations are permitted, except during the Sunshine Agenda period, provided that they are disclosed as provided in the Commission's Rules. See generally 47 CFR 1.1202, 1.1203, and 1.1206(a).

10. *Accessibility Information.* Accessible formats of this FNPRM (computer diskettes, large print, audio recording and Braille) are available to persons with disabilities by contacting Brian Millin, of the Consumer & Governmental Affairs Bureau, at (202) 418-7426, TTY (202) 418-7365, or at bmillin@fcc.gov.

11. *Comment Information.* Pursuant to §§ 1.415 and 1.419 of the Commission's rules, 47 CFR 1.415, 1.419, interested parties may file comments on or before February 19, 2004, and reply comments on or before March 10, 2004. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS) or by filing paper copies. See Electronic Filing of Documents in Rulemaking Proceedings, 63 FR 24121 (1998).

12. Comments filed through the ECFS can be sent as an electronic file via the Internet to <http://www.fcc.gov/e-file/ecfs.html>. Generally, only one copy of an electronic submission must be filed. If multiple docket or rulemaking numbers appear in the caption of this proceeding, however, commenters must transmit one electronic copy of the comments to each docket or rulemaking number referenced in the caption. In completing the transmittal screen, commenters should include their full name, U.S. Postal Service mailing address, and the applicable docket or rulemaking number. Parties may also submit an electronic comment by Internet e-mail. To get filing instructions for e-mail comments, commenters

should send an e-mail to ecfs@fcc.gov, and should include the following words in the body of the message, "get form <your e-mail address>." A sample form and directions will be sent in reply. Parties who choose to file by paper must file an original and four copies of each filing. If more than one docket or rulemaking number appear in the caption of this proceeding, commenters must submit two additional copies for each additional docket or rulemaking number. Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail (although we continue to experience delays in receiving U.S. Postal Service mail). The Commission's contractor, Vistrionix, Inc., will receive hand-delivered or messenger-delivered paper filings for the Commission's Secretary at 236 Massachusetts Avenue, NE., Suite 110, Washington, DC 20002. The filing hours at this location are 8 a.m. to 7 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes must be disposed of before entering the building. Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743. U.S. Postal Service first-class mail, Express Mail, and Priority Mail should be addressed to 445 12th Street, SW., Washington, DC 20554. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

13. *Paperwork Reduction Act of 1995 Analysis.* This FNPRM contains modified information collection(s) subject to the PRA. It will be submitted to the Office of Management and Budget ("OMB") for review under Section 3507(d) of the PRA. OMB, the general public, and other Federal agencies are invited to comment on the new or modified information collection(s) contained in this proceeding.

14. Written comments by the public on the proposed information collection(s) are due August 18, 2003. Written comments must be submitted by the public, Office of Management and Budget and other interested parties on the proposed information collection(s) on or before August 18, 2003. In addition to filing comments with the Secretary, a copy of any comments on the information collection(s) contained herein should be submitted to Leslie Smith, Federal Communications Commission, Room 1-A804, 445 12th Street, SW., Washington, DC 20554, or via the Internet to Leslie.Smith@fcc.gov, and to Kim A. Johnson, OMB Desk Officer, Room 10236 NEOB, 725 17th

Street, NW., Washington, DC 20503, or via the Internet to Kim_A.Johnson@omb.eop.gov.

15. *Regulatory Flexibility Act.* As required by the Regulatory Flexibility Act, the Commission has prepared an Initial Regulatory Flexibility Analysis ("IRFA") of the possible significant economic impact on a substantial number of small entities of the proposals addressed in this FNPRM. The IRFA is set forth below. Written public comments are requested on the IRFA. These comments must be filed in accordance with the same filing deadlines for comments on the FNPRM, and they should have a separate and distinct heading designating them as responses to the IRFA.

Initial Regulatory Flexibility Analysis

16. As required by the Regulatory Flexibility Act of 1980, as amended ("RFA") the Commission has prepared this present Initial Regulatory Flexibility Analysis ("IRFA") of the possible significant economic impact on a substantial number of small entities by the policies and rules proposed in this Order and Further Notice of Proposed Rulemaking ("FNPRM"). Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the FNPRM provided in paragraph 10-11. The Commission will send a copy of this entire, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration ("SBA"). In addition, the FNPRM and the IRFA (or summaries thereof) will be published in the **Federal Register**.

17. *Need for, and Objectives of, the Proposed Rules.* In this FNPRM, we extend our review of the development of the commercial availability of navigation devices in light of ongoing industry negotiations which may affect the technical specifications relating to navigation devices. Our objective is to seek comment on the appropriateness of the new July 1, 2006 ban on integrated devices based upon the status of these negotiations. This objective is commensurate with our statutory directive in Section 629 of the Communications Act of 1934, as amended, to act "in consultation with appropriate industry standard-setting organizations" to assure the commercial availability of navigation devices used in conjunction with services provided by multichannel video programming distributors ("MVPDs").

18. *Legal Basis.* The authority for this proposed rulemaking is contained in Sections 4(i), 303(r), and 629 of the Communications Act of 1934, as

amended, 47 U.S.C. 154(i), 303(r), and 549.

19. *Description and Estimate of the Number of Small Entities To Which Rules Will Apply.* The RFA directs the Commission to provide a description of and, where feasible, an estimate of the number of small entities that will be affected by the proposed rules, if adopted. The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction." In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act. A "small business concern" is one which: (1) Is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration ("SBA").

20. *Cable and Other Program Distribution.* The SBA has developed a small business size standard for cable and other program distribution services, which includes all such companies generating \$12.5 million or less in revenue annually. This category includes, among others, cable operators, direct broadcast satellite ("DBS") services, home satellite dish ("HSD") services, multipoint distribution services ("MDS"), multichannel multipoint distribution service ("MMDS"), Instructional Television Fixed Service ("ITFS"), local multipoint distribution service ("LMDS"), satellite master antenna television ("SMATV") systems, and open video systems ("OVS"). According to the Census Bureau data, there are 1,311 total cable and other pay television service firms that operate throughout the year of which 1,180 have less than \$10 million in revenue. We address below each service individually to provide a more precise estimate of small entities.

21. *Cable Operators.* The Commission has developed, with SBA's approval, our own definition of a small cable system operator for the purposes of rate regulation. Under the Commission's rules, a "small cable company" is one serving fewer than 400,000 subscribers nationwide. We last estimated that there were 1,439 cable operators that qualified as small cable companies. Since then, some of those companies may have grown to serve over 400,000 subscribers, and others may have been involved in transactions that caused them to be combined with other cable operators. Consequently, we estimate that there are fewer than 1,439 small entity cable system operators that may be affected by

the decisions and rules proposed in this Order and FNPRM.

22. The Communications Act, as amended, also contains a size standard for a small cable system operator, which is "a cable operator that, directly or through an affiliate, serves in the aggregate fewer than 1% of all subscribers in the United States and is not affiliated with any entity or entities whose gross annual revenues in the aggregate exceed \$250,000,000." The Commission has determined that there are 68,500,000 subscribers in the United States. Therefore, an operator serving fewer than 685,000 subscribers shall be deemed a small operator if its annual revenues, when combined with the total annual revenues of all of its affiliates, do not exceed \$250 million in the aggregate. Based on available data, we find that the number of cable operators serving 685,000 subscribers or less totals approximately 1,450. Although it seems certain that some of these cable system operators are affiliated with entities whose gross annual revenues exceed \$250,000,000, we are unable at this time to estimate with greater precision the number of cable system operators that would qualify as small cable operators under the definition in the Communications Act.

23. *Direct Broadcast Satellite ("DBS") Service.* Because DBS provides subscription services, DBS falls within the SBA-recognized definition of cable and other program distribution services. This definition provides that a small entity is one with \$12.5 million or less in annual receipts. There are four licensees of DBS services under Part 100 of the Commission's Rules. Three of those licensees are currently operational. Two of the licensees that are operational have annual revenues that may be in excess of the threshold for a small business. The Commission, however, does not collect annual revenue data for DBS and, therefore, is unable to ascertain the number of small DBS licensees that could be impacted by these proposed rules. DBS service requires a great investment of capital for operation, and we acknowledge, despite the absence of specific data on this point, that there are entrants in this field that may not yet have generated \$12.5 million in annual receipts, and therefore may be categorized as a small business, if independently owned and operated.

24. *Home Satellite Dish ("HSD") Service.* Because HSD provides subscription services, HSD falls within the SBA-recognized definition of cable and other program distribution services. This definition provides that a small entity is one with \$12.5 million or less in annual receipts. The market for HSD

service is difficult to quantify. Indeed, the service itself bears little resemblance to other MVPDs. HSD owners have access to more than 265 channels of programming placed on C-band satellites by programmers for receipt and distribution by MVPDs, of which 115 channels are scrambled and approximately 150 are unscrambled. HSD owners can watch unscrambled channels without paying a subscription fee. To receive scrambled channels, however, an HSD owner must purchase an integrated receiver-decoder from an equipment dealer and pay a subscription fee to an HSD programming package. Thus, HSD users include: (1) viewers who subscribe to a packaged programming service, which affords them access to most of the same programming provided to subscribers of other MVPDs; (2) viewers who receive only non-subscription programming; and (3) viewers who receive satellite programming services illegally without subscribing. Because scrambled packages of programming are most specifically intended for retail consumers, these are the services most relevant to this discussion.

25. *Multipoint Distribution Service ("MDS"), Multichannel Multipoint Distribution Service ("MMDS"), Instructional Television Fixed Service ("ITFS") and Local Multipoint Distribution Service ("LMDS").* MMDS systems, often referred to as "wireless cable," transmit video programming to subscribers using the microwave frequencies of the MDS and ITFS. LMDS is a fixed broadband point-to-multipoint microwave service that provides for two-way video telecommunications.

26. In connection with the 1996 MDS auction, the Commission defined small businesses as entities that had annual average gross revenues of less than \$40 million in the previous three calendar years. This definition of a small entity in the context of MDS auctions has been approved by the SBA. The MDS auctions resulted in 67 successful bidders obtaining licensing opportunities for 493 Basic Trading Areas ("BTAs"). Of the 67 auction winners, 61 met the definition of a small business. MDS also includes licensees of stations authorized prior to the auction. As noted, the SBA has developed a definition of small entities for pay television services, which includes all such companies generating \$12.5 million or less in annual receipts. This definition includes multipoint distribution services, and thus applies to MDS licensees and wireless cable operators that did not participate in the MDS auction. Information available to us indicates that there are

approximately 850 of these licensees and operators that do not generate revenue in excess of \$12.5 million annually. Therefore, for purposes of the IRFA, we find there are approximately 850 small MDS providers as defined by the SBA and the Commission's auction rules.

27. The SBA definition of small entities for cable and other program distribution services, which includes such companies generating \$12.5 million in annual receipts, seems reasonably applicable to ITFS. There are presently 2,032 ITFS licensees. All but 100 of these licenses are held by educational institutions. Educational institutions are included in the definition of a small business. However, we do not collect annual revenue data for ITFS licensees, and are not able to ascertain how many of the 100 non-educational licensees would be categorized as small under the SBA definition. Thus, we tentatively conclude that at least 1,932 licensees are small businesses.

28. Additionally, the auction of the 1,030 LMDS licenses began on February 18, 1998, and closed on March 25, 1998. The Commission defined "small entity" for LMDS licenses as an entity that has average gross revenues of less than \$40 million in the three previous calendar years. An additional classification for "very small business" was added and is defined as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding calendar years. These regulations defining "small entity" in the context of LMDS auctions have been approved by the SBA. There were 93 winning bidders that qualified as small entities in the LMDS auctions. A total of 93 small and very small business bidders won approximately 277 A Block licenses and 387 B Block licenses. On March 27, 1999, the Commission re-auctioned 161 licenses; there were 40 winning bidders. Based on this information, we conclude that the number of small LMDS licenses will include the 93 winning bidders in the first auction and the 40 winning bidders in the re-auction, for a total of 133 small entity LMDS providers as defined by the SBA and the Commission's auction rules.

29. In sum, there are approximately a total of 2,000 MDS/MMDS/LMDS stations currently licensed. Of the approximate total of 2,000 stations, we estimate that there are 1,595 MDS/MMDS/LMDS providers that are small businesses as deemed by the SBA and the Commission's auction rules.

30. *Satellite Master Antenna Television ("SMATV") Systems.* The

SBA definition of small entities for cable and other program distribution services includes SMATV services and, thus, small entities are defined as all such companies generating \$12.5 million or less in annual receipts. Industry sources estimate that approximately 5,200 SMATV operators were providing service as of December 1995. Other estimates indicate that SMATV operators serve approximately 1.5 million residential subscribers as of July 2001. The best available estimates indicate that the largest SMATV operators serve between 15,000 and 55,000 subscribers each. Most SMATV operators serve approximately 3,000–4,000 customers. Because these operators are not rate regulated, they are not required to file financial data with the Commission. Furthermore, we are not aware of any privately published financial information regarding these operators. Based on the estimated number of operators and the estimated number of units served by the largest ten SMATVs, we believe that a substantial number of SMATV operators qualify as small entities.

31. *Open Video Systems ("OVS").* Because OVS operators provide subscription services, OVS falls within the SBA-recognized definition of cable and other program distribution services. This definition provides that a small entity is one with \$12.5 million or less in annual receipts. The Commission has certified 25 OVS operators with some now providing service. Affiliates of Residential Communications Network, Inc. ("RCN") received approval to operate OVS systems in New York City, Boston, Washington, DC and other areas. RCN has sufficient revenues to assure us that they do not qualify as small business entities. Little financial information is available for the other entities authorized to provide OVS that are not yet operational. Given that other entities have been authorized to provide OVS service but have not yet begun to generate revenues, we conclude that at least some of the OVS operators qualify as small entities.

32. *Electronics Equipment Manufacturers.* Rules adopted in this proceeding could apply to manufacturers of DTV receiving equipment and other types of consumer electronics equipment. The SBA has

developed definitions of small entity for manufacturers of audio and video equipment as well as radio and television broadcasting and wireless communications equipment. These categories both include all such companies employing 750 or fewer employees. The Commission has not developed a definition of small entities applicable to manufacturers of electronic equipment used by consumers, as compared to industrial use by television licensees and related businesses. Therefore, we will utilize the SBA definitions applicable to manufacturers of audio and visual equipment and radio and television broadcasting and wireless communications equipment, since these are the two closest NAICS Codes applicable to the consumer electronics equipment manufacturing industry. However, these NAICS categories are broad and specific figures are not available as to how many of these establishments manufacture consumer equipment. According to the SBA's regulations, an audio and visual equipment manufacturer must have 750 or fewer employees in order to qualify as a small business concern. Census Bureau data indicates that there are 554 U.S. establishments that manufacture audio and visual equipment, and that 542 of these establishments have fewer than 500 employees and would be classified as small entities. The remaining 12 establishments have 500 or more employees; however, we are unable to determine how many of those have fewer than 750 employees and therefore, also qualify as small entities under the SBA definition. Under the SBA's regulations, a radio and television broadcasting and wireless communications equipment manufacturer must also have 750 or fewer employees in order to qualify as a small business concern. Census Bureau data indicates that there are 1,215 U.S. establishments that manufacture radio and television broadcasting and wireless communications equipment, and that 1,150 of these establishments have fewer than 500 employees and would be classified as small entities. The remaining 65 establishments have 500 or more employees; however, we are unable to determine how many of those

have fewer than 750 employees and therefore, also qualify as small entities under the SBA definition. We therefore conclude that there are no more than 542 small manufacturers of audio and visual electronics equipment and no more than 1,150 small manufacturers of radio and television broadcasting and wireless communications equipment for consumer/household use.

33. *Description of Projected Reporting, Recordkeeping and Other Compliance Requirements.* At this time, it is not expected that the proposed actions will require any additional recordkeeping or compliance requirements. We seek comment on whether others perceive a need for recordkeeping.

34. *Steps Taken To Minimize Significant Impact on Small Entities, and Significant Alternatives Considered.* The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): (1) The establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.

35. We have sought comment on the appropriateness of the July 1, 2006 prohibition on integrated navigation devices in light of, inter alia, ongoing developments regarding this industry. As a part of this effort, we wish to consider and examine the effect of changing or eliminating the prohibition deadline on small entities. We welcome comments suggesting ways in which any perceived burden upon small entities could be mitigated.

36. *Federal Rules That May Duplicate, Overlap, or Conflict With the Proposed Rules.* None.

Federal Communications Commission.

Marlene H. Dortch,

Secretary.

[FR Doc. 03–15188 Filed 6–16–03; 8:45 am]

BILLING CODE 6712–01–P

Notices

Federal Register

Vol. 68, No. 116

Tuesday, June 17, 2003

This section of the FEDERAL REGISTER contains documents other than rules or proposed rules that are applicable to the public. Notices of hearings and investigations, committee meetings, agency decisions and rulings, delegations of authority, filing of petitions and applications and agency statements of organization and functions are examples of documents appearing in this section.

DEPARTMENT OF AGRICULTURE

Submission for OMB Review; Comment Request

June 12, 2003.

The Department of Agriculture has submitted the following information collection requirement(s) to OMB for review and clearance under the Paperwork Reduction Act of 1995, Pub. L. 104-13. Comments regarding (a) whether the collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility; (b) the accuracy of the agency's estimate of burden including the validity of the methodology and assumptions used; (c) ways to enhance the quality, utility and clarity of the information to be collected; (d) ways to minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology should be addressed to: Desk Officer for Agriculture, Office of Information and Regulatory Affairs, Office of Management and Budget (OMB), Washington, DC 20503 and to Departmental Clearance Office, USDA, OCIO, Mail Stop 7602, Washington, DC 20250-7602. Comments regarding these information collections are best assured of having their full effect if received within 30 days of this notification. Copies of the submission(s) may be obtained by calling (202) 720-6746.

An agency may not conduct or sponsor a collection of information unless the collection of information displays a currently valid OMB control number and the agency informs potential persons who are to respond to the collection of information that such persons are not required to respond to the collection of information unless it

displays a currently valid OMB control number.

Foreign Agricultural Service

Title: McGovern-Dole International Food for Education and Child Nutrition Program.

OMB Control Number: 0551-NEW.

Summary of Collection: The Farm Security and Rural Investment Act of 2002 requires reporting on food aid programs, including the new McGovern-Dole International Food for Education and Child Nutrition program (Food for Education). This program will provide agricultural commodities and financial and technical assistance, to carry out educational programs for food and nutrition in foreign countries. Although the number of report requirements vary in accordance with circumstances, reports will be received from the Cooperating Sponsor every six months during the active life of the agreements. Reporting will be required until all commodities have been distributed, cash outlays expended, and/or the funds generated from the sales of the donated commodities have been disbursed. Information is necessary to satisfy statutory requirements and to assure that public resources are properly used.

Need and Use of the Information: The Foreign Agricultural Service (FAS) will collect from cooperating sponsors a Plan of Operation (*i.e.*, program proposal) and budget, which will be used to determine eligibility for participation. FAS will also collect information that describes the organizational capacity to develop, implement, monitor, and report on school feeding and child nutrition programs. Without the information, it would difficult for FAS to determine the accountability and compliance of the Cooperating Sponsors.

Description of Respondents: Not-for-profit institutions; Business or other for-profit.

Number of Respondents: 156.

Frequency of Responses: Recordkeeping; Reporting: Quarterly; Semi-annually.

Total Burden Hours: 11,607.

Animal and Plant Health Inspection Service

Title: Horse Protection Regulations (9 CFR part 11).

OMB Control Number: 0579-0056.

Summary of Collection: 9 CFR part 11, Regulations, implement the Horse

Protection Act of 1970 (Pub. L. 91-540), as amended July 13, 1976 (Pub. L. 94-360), and are authorized under Section 9 of the Act. The Horse Protection Legislation was enacted to prevent showing, exhibiting, selling, or auctioning of "sore" horses, and certain transportation of sore horses in connection therewith at horse shows, horse exhibitions, horse sales, and horse auctions. A sore horse is a horse that has received pain-provoking practices that cause the horse to have an accentuated, high stepping gait. Sored horses cannot be entered in an event by any person, including trainers, riders, or owners. Management of shows, sales, exhibitions, or auctions must identify sored horses to prevent their participation under the act.

Need and Use of the Information: APHIS will collect information at specified intervals from Horse Industry Organizations (HIO) and show managements. HIOs must maintain an acceptable Designated Qualified Person program and recordkeeping system as outlined in the regulations. Information provided by the HIOs through designated qualified persons allows APHIS to monitor whether enforcement of the Horse Protection Act, its regulations, and certifying programs are effective.

Description of Respondents: Business or other for-profit; Farms.

Number of Respondents: 1,514.

Frequency of Responses: Recordkeeping; Reporting: Quarterly; Monthly; Annually.

Total Burden Hours: 2,357.

Food and Nutrition Service

Title: Negative Quality Control Review Schedule; Status of Sample Selection and Completion.

OMB Control Number: 0584-0034.

Summary of Collection: The legislative basis for the operation of the quality control system is provided by section 16 of the Food Stamp Act of 1977. State agencies are required to perform Quality Control (QC) reviews for the Food Stamp Program (FSP). As part of the Performance Reporting System, each State agency is required to provide a systemic means of determining the accuracy of household eligibility and measuring the extent to which households receive the food stamp allotment to which they are entitled. Section 275.21(a) requires State agencies to submit reports to enable the

Food and Nutrition Service (FNS) to monitor their compliance with Program requirements relative to the Quality Control Review System. FNS will collect information using forms FNS-245 Negative Case Action Review Schedule and FNS-248 Status of Sample Selection and Completion.

Need and Use of the Information: FNS will collect information to record data in negative case reviews. FNS will also measure program operations and determination of a State's eligibility for enhanced administrative funding and to monitor the progress of sample selection and completion. If the information were not collected, it would delay the awarding of monetary incentives in which the negative error rate played a role.

Description of Respondents: State, Local, or Tribal Government; Federal Government; Individuals or households.

Number of Respondents: 53.

Frequency of Responses:

Recordkeeping; Reporting: Weekly; Monthly; Annually.

Total Burden Hours: 123,374.

Food and Nutrition Service

Title: USDA National Hunger Clearinghouse Database Form.

OMB Control Number: 0584-0474.

Summary of Collection: The Food and Nutrition Service (FNS) is interested in maintaining and further developing an information clearinghouse (named "USDA National Hunger Clearinghouse") for groups that assist low-income individuals and communities concerning nutrition assistance programs or other assistance. Section 26 of the National School Lunch Act, which was added to the Act by Section 123 Pub. L. 102-448 on November 2, 1994 (Appendix A), mandated that FNS enter into a 4 year contract with a non governmental organization to develop and maintain a national information clearinghouse of grassroots organizations working on hunger, food, nutrition, and other agricultural issues, including food recovery. This legislation was further amended on October 13, 1998 by section 112 of Pub. L. 105-336 to extend and increase funding for the clearinghouse (for fiscal years 1999 through 2003). The USDA National Hunger Clearinghouse uses state-of-the art computer and telecommunications technologies to connect the target audience, sharing information on effective program models, pending legislation and rule makings, surplus and emergency food distribution networks, and USDA programs and policies.

Need and Use of the Information: FNS will collect information to provide a

resource for groups that assist low-income individuals or communities regarding nutrition assistance program or other assistance. The information provided by the Clearinghouse database enables these groups to do a better job of assisting the target audience.

Description of Respondents: Not-for-profit institutions; Business or other for-profit; Farms.

Number of Respondents: 1,750.

Frequency of Responses: Reporting: Annually.

Total Burden Hours: 146.

Forest Service

Title: Public land use and Values.

OMB Control Number: 0596-New.

Summary of Collection: As part of a continuing research effort to develop and evaluate alternative approaches and methods for obtaining and incorporating public input into land and resource management decision, this information collection will focus mainly on people and their use of public lands. The information collection will include three aspects of public preferences, which are: (1) Objectives (comprised of values and desired outcomes) and preferences related to public land and management, (2) land attributes and people's behaviors and perceived consequences that can be linked to policy and management alternatives (in particular, measurable indicators of changes caused or prevented by policy and management actions), (3) identification of how people evaluate measured indicators of policy and management outcomes and consequences. The Forest Service (FS) will collect information using a survey that will be administered primarily by mail, some telephone contact and some in-person contact.

Need and Use of the Information: The information collected will also help managers and planners broaden and deepen their understanding of the public perceptions of various land management practices and impacts of those practices. Without the information reliable data would not be available on how the public feels about various management policies and means for accomplishing those policies on public lands.

Description of Respondents: Individuals or households.

Number of Respondents: 8,000.

Frequency of Responses: Reporting: On occasion.

Total Burden Hours: 4,000.

Grain Inspection, Packers and Stockyard Administration

Title: Survey of Customers of the Official Grain Inspection and Weighing System.

OMB Control Number: 0580-0018.

Summary of Collection: The United States Grain Standards Act, as amended (7 U.S.C. 71-87) (USGSA), and the Agricultural Marketing Act of 1946, as amended (7 U.S.C. 1621-1627) (AMA), authorizes the Secretary of the United States Department of Agriculture to establish official inspection, grading, and weighing programs for grains and other agricultural commodities. Under the USGSA and AMA, Grain Inspection, Packers and Stockyard Administration (GIPSA's) Federal Grain Inspection Service (FGIS) offers inspecting, weighing, grading, quality assurance, and certification services for a user-fee to facilitate the efficient marketing of grain, oilseeds, rice, lentils, dry peas, edible beans, and related agricultural commodities in the global marketplace. The goal of FGIS and the official inspection, grading, and weighing system is to provide timely, high-quality, accurate, consistent, and professional service that facilitates the orderly marketing of grain and related commodities.

Need and Use of the Information: FGIS will collect information using a survey to determine where and to what extent services are satisfactory, and can be improved. The information will be shared with other managers and program leaders who will be responsible for making any necessary improvements at the office/agency, program, and project level.

Description of Respondents: Business or other for-profit; State, Local or Tribal Government.

Number of Respondents: 1,874.

Frequency of Responses: Reporting: Annually.

Total Burden Hours: 313.

Rural Utilities Service

Title: 7 CFR 1744-C, Advance and Disbursement of Funds—Telecommunications.

OMB Control Number: 0572-0023.

Summary of Collection: Section 201 of the Rural Electrification Act (RE Act) of 1936 authorizes the Administrator of the Rural Utilities Service (RUS) to make loans for the purpose of providing telephone service to the widest practicable number of rural subscribers. A borrower requesting loan advances must submit RUS Form 481, "Financial Requirement Statement" and a description of the advances. A borrower must submit upon request copies of backup documentation relating to the transactions. The information is used to determine what projects the contracts listed on the form relate to. Within a reasonable amount of time, funds are advanced to the borrower for the

purposes specified in the statement of purposes.

Need and Use of the Information: The Form 481 is used by RUS to record and control transactions in the construction fund. RUS will collect information and verify that the funds advanced are related directly to loan purposes. If the information were not collected, RUS would not have any control over how loan funds are spent or a record of the balance to be advanced.

Description of Respondents: Business or other for-profit.

Number of Respondents: 645.

Frequency of Responses: Reporting: On occasion.

Total Burden Hours: 2,893.

Rural Utilities Service

Title: 7 CFR Part 1703–H, Deferments of RUS Loan Payments for Rural Development Projects.

OMB Control Number: 0572–0097.

Summary of Collection: Subsection (b) of section 12 of the Rural Electrification Act (RE Act) of 1936, as amended (7 U.S.C. 912), a Rural Utilities Service (RUS) electric or telephone borrower may defer the payment of principal and interest on any insured or direct loan made under the RE Act invest the deferred amounts in rural development projects. The Deferment program is used to encourage borrowers to invest in and promote rural development and rural job creation projects that are based on sound economic and financial analyses.

Need and Use of the Information: RUS will collect information to determine eligibility; purposes for which the deferment amount will be utilized; the term of the deferment the borrower will receive; the cost of the total project and degree of participation in the financing from other sources; verification that the purposes will not violate limitations established in 7 CFR 1703–H. If the information were not collected, RUS would be unable to determine eligibility for a project.

Description of Respondents: Not-for-profit; Business or other for-profit.

Number of Respondents: 1.

Frequency of Responses: Recordkeeping; Reporting: On occasion.

Total Burden Hours: 35.

Rural Utilities Service

Title: 7 CFR part 1775, Technical Assistance Program.

OMB Control Number: 0572–0112.

Summary of Collection: Section 306 of the Consolidated Farm and Rural Development Act (CONACT), 7 U.S.C. 1926, authorizes Rural Utilities Service (RUS) to make loans and grants to public agencies, American Indian tribes, and nonprofit corporations. The loans

and grants fund the development of drinking water, wastewater, and solid waste disposal facilities in rural areas with populations of up to 10,000 residents. Nonprofit organizations receive Technical Assistance and Training (TAT) and Solid Waste Management (SMM) grants to help small rural communities or areas identify and solve problems relating to community drinking water, wastewater, or solid waste disposal systems. The technical assistance is intended to improve the management and operation of the systems and reduce or eliminate pollution of water resources.

Need and Use of the Information: RUS will collect information to determine applicant eligibility, project feasibility, and the applicant's ability to meet the grant and regulatory requirements. Failure to collect proper information could result in improper determinations of eligibility and improper use of funds.

Description of Respondents: Not-for-profit institutions.

Number of Respondents: 95.

Frequency of Responses: Reporting: On occasion; Quarterly; Monthly.

Total Burden Hours: 4,986.

Forest Service

Title: Recreation Fee Permit Envelope.

OMB Control Number: 0596–0106.

Summary of Collection: The Land and Water Conservation Fund Act of 1965, section 4(b), and Forest Service regulations at Title 36, Code of Federal Regulations (CFR), § 291.2 authorize the collection of fees at some of the National Forest and Grassland recreation sites. Every year millions of people visit National Forest System recreations sites. At some of these sites, the public is required to pay a fee to use the site. Fees are charged to help cover the costs of operating and maintaining fee sites, areas, and facilities such as campgrounds. The Forest Service (FS) used the Recreation Fee Permit Envelope for collection of these fees. The fee envelope is also used as a tool to collect information from visitors who will assist the FS in improving its facilities and services for future visitors.

Need and use of the Information: FS will collect information to be used for two purposes; First, the information pertaining to the fee (site number, length of stay, amount paid, etc.) will be used to verify the visitor has complied with the fee requirements. Second, visitors will be given the opportunity to provide comments about their visit, the condition of the facilities, and how the FS can improve services to the public. If a visitor elects not to complete the information related to the fee, there will

be no way to verify they have paid the required fee.

Description of Respondents: Individuals or households; Business or other for-profit; Not-for-profit institutions.

Number of Respondents: 400,000.

Frequency of Responses: Reporting: Other (per visit).

Total Burden Hours: 20,000.

National Appeals Division

Title: National Appeals Division Customer Service Survey

OMB Control Number: 0503–NEW.

Summary of Collection: The National Appeals Division (NAD) proposes to conduct a customer service survey by mail pursuant to Executive Order No. 12862. The Secretary of Agriculture established NAD on October 20, 1994, by Secretary's Memorandum 1010–1, pursuant to the Federal Crop Insurance Reform and Department of Agriculture Reorganization Act of 1994. The Act consolidated the appellate functions and staff of several USDA Agencies and provided for independent hearings and reviews of adverse decisions of Agencies within USDA. Hearing Officers conduct evidentiary hearings on adverse decisions or, when the appellant requests they review the Agency's record of the adverse decision without a hearing. Although NAD maintains a database to track appeal requests, the database contains only information necessary to process the appeal request, such as the name, address, filing results etc. NAD will collect information using a survey.

Need and Use of the Information: NAD will collect information to gauge the appellant's preference for face-to-face hearings, telephone hearings or record reviews, perception of the fairness of the appeal process, how the hearing was conducted, how impartial was the proceeding, appellant treatment, timeliness, and how understandable the final determination. NAD managers to set Customer Service Standards, and make adjustments and improvements to NAD processes, including type of appeal and clarity of NAD notices and determinations, will use the results of the annual survey.

Description of Respondents: Farms; Individuals or households; Not-for-profit institutions; Business or other for-profit; State, Local or Tribal Government.

Number of Respondents: 1176.

Frequency of Responses: Reporting: Annually.

Total Burden Hours: 294.

Natural Resources Conservation Service

Title: Long Term Contracting.

OMB Control Number: 0578-0013.

Summary of Collection: The Long term Contracting regulations at 7 CFR part 630, and the Conservation program regulations at 7 CFR parts (12, 610, 622, 624, 631, 632, 633, 634, 636, 701, 702, 752, 1410, 1465, 1466, 1467 and 1491) set forth the basic policies, program provisions, and eligibility requirements for owners and operators to enter into and carry out long-term conservation program contracts with technical assistance under the various programs. These programs authorize federal technical and financial cost sharing assistance for conservation treatment with eligible land users. The financial assistance is based on a conservation plan that is made a part of an agreement or contract for a period of no less than one year. Under the terms of the agreement, the participant agrees to apply, or arrange to apply, the conservation treatment specified in the conservation plan. In return for this agreement, federal cost-share payments are made to the land user, or third party, upon successful application of the conservation treatment.

Need and Use of the Information: Natural Resource and Conservation Service (NRCS) will collect information on cost sharing and technical assistance, making land use changes and install measure to conserve, develop and utilize soil, water, and related natural resources on participants land. NRCS uses the information to ensure the proper utilization of program funds, including application for participation, easement acquisition, contract implementation, conservation planning, and application for payment.

Description of Respondents: Individuals or households; Farms; Not-for-profit institutions; State, Local or Tribal Government.

Number of Respondents: 383,312.

Frequency of Responses: Reporting; Annually, Other.

Total Burden Hours: 755,152.

Ruth Brown,

Departmental Information Collection
Clearance Officer.

[FR Doc. 03-15271 Filed 6-16-03; 8:45 am]

BILLING CODE 3410-01-M

DEPARTMENT OF AGRICULTURE

Agricultural Research Service, Cooperative State Research, Education, and Extension Service

Solicitation of Input From Stakeholders on Research, Education and Extension Programs Related to Food Safety Administered by the Cooperative State Research, Education, and Extension Service and the Agricultural Research Service

AGENCIES: Cooperative State Research, Education, and Extension Service and Agricultural Research Service, USDA.

ACTION: Notice of stakeholders' listening session on food safety research priorities.

SUMMARY: Section 102(b) of the Agricultural Research, Extension, and Education Reform Act of 1998 (AREERA) (7 U.S.C. 7612) requires the Cooperative State Research, Education, and Extension Service (CSREES) and the Agricultural Research Service (ARS) in establishing priorities for agricultural research, extension, and education activities conducted or funded by CSREES and ARS to solicit and consider input and recommendations from persons who conduct or use agricultural research, extension, or education. As part of the Agencies' ongoing stakeholder input processes, CSREES and ARS are soliciting input and comments on the top food safety research priorities of partners and stakeholders. As part of this effort, CSREES and ARS are planning to conduct a "Stakeholders' Listening Session on Food Safety Research Priorities" in Denver, Colorado.

Dates and Addresses: The listening session will be held on Monday, June 30, 2003, from 8:30 a.m. to 5 p.m. at the Radisson Hotel Denver Stapleton Plaza; 3333 Quebec Street; Denver, CO 80207. Attendees must make their own hotel arrangements.

To aid participants in scheduling their attendance, the following schedule is anticipated for the listening session: 8:30 a.m.-9 a.m. Introductory Remarks and Background. 9 a.m.-12 p.m. Scheduled 5-Minute Comment Periods. 1 p.m.-5 p.m. Scheduled 5-Minute Comment Periods.

Persons interested in submitting comments but unable to attend should submit written presentations to be received by 5 p.m. e.d.t. July 14, 2003. Send written presentations to Dr. Pat Kendall at the address below.

FOR FURTHER INFORMATION CONTACT: All those intending to attend and make oral

presentations at this meeting are required to pre-register. A List of Participants, including all those who have pre-registered, will be available at the Listening Session. Participants may pre-register by contacting Dr. Pat Kendall at (970) 491-7334, by fax at (970) 491-7252 or by e-mail to foodnutr@coop.ext.colostate.edu or by registering on line at www.caahs.colostate.edu/fshn/foodsafety/.

SUPPLEMENTARY INFORMATION:

Purpose of This Listening Session

The purpose of this Listening Session is to allow CSREES and ARS partners and stakeholders an opportunity to identify up to five food safety research priorities requiring increased attention over the next five years. All oral presentations should follow the following format:

- (1) Provide a clear description of up to five food safety priorities;
- (2) Describe the current state of affairs for each priority; and
- (3) Indicate where the organization/agency would like to be in five years in regard to each priority.

ARS and CSREES are seeking comments on research priorities related to food safety topics in meat and poultry and fresh fruits and vegetables. Comments are solicited on such subjects including, but not limited to, pre- and post-harvest pathogen reduction, mycotoxins, residues, poisonous plants, good manufacturing practices, worker education and antibiotic resistance. The food safety research priorities identified by partners and stakeholders will provide valuable input for USDA food safety agencies. National Program Leaders from CSREES and ARS will conduct a series of follow-up meetings to develop national and agency-wide strategies for working with partners and stakeholders to help them achieve their 5-year food safety research goals.

Making Reservations To Attend This Listening Session

When making a reservation for a 5-minute oral comment period, participants should provide a title for their presentation. More time may be available in the comment session, depending on the number of people wishing to make a presentation. Reservations will be confirmed on a first-come, first-served basis. The final 30 minutes of the Listening Session will be reserved for unscheduled participants wishing to make 5-minute presentations. Participants who require a sign language interpreter or other special accommodations should contact Dr. Pat Kendall as directed above.

All those making oral presentations at the meeting are required to submit the text of their written presentations. Those unable to attend the meeting may also submit written presentations. Written presentations will be accepted through July 14, 2003. Written presentations may be submitted for the record by e-mailing them to foodnutr@coop.ext.colostate.edu or by mailing them to: CSREES/ARS Listening Session; c/o Dr. Pat Kendall; Colorado State University; Department of Food Science and Human Nutrition-1571; Fort Collins, CO 80523-1571. Please provide three copies of the written presentations. Presentations also may be faxed to Dr. Kendall at (970) 491-7252.

Information gathered from the Listening Session will be available for review on the CSREES Web page (<http://www.reeusda.gov>).

Background on Listening Sessions and CSREES Programs

Section 102(b) of AREERA (7 U.S.C. 7612) requires that CSREES and ARS, in establishing priorities for agricultural research, extension, and education activities conducted or funded by CSREES and ARS, solicit and consider input and recommendations from persons who conduct or use agricultural research, extension, or education. As part of this ongoing effort, CSREES and ARS conduct listening sessions to solicit input and comments on the effectiveness of the existing agricultural research, education and extension programs administered by CSREES and ARS in meeting current and future challenges in the food and agricultural sciences.

Section 1402 of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (NARETPA), 7 U.S.C. 3101, specifies that the purposes of agricultural research, extension, and education are to (1) enhance the competitiveness of the United States agriculture and food industry in an increasingly competitive world environment; (2) increase the long-term productivity of the United States agriculture and food industry while maintaining and enhancing the natural resource base on which rural America and the United States agricultural economy depend; (3) develop new uses and new products for agricultural commodities, such as alternative fuels, and develop new crops; (4) support agricultural research and extension to promote economic opportunity in rural communities and to meet the increasing demand for information and technology transfer throughout the United States agriculture industry; (5) improve risk management

in the United States agriculture industry; (6) improve the safe production and processing of, and adding of value to, United States food and fiber resources using methods that maintain the balance between yield and environmental soundness; (7) support higher education in agriculture to give the next generation of Americans the knowledge, technology, and applications necessary to enhance the competitiveness of United States agriculture; and (8) maintain an adequate, nutritious, and safe supply of food to meet human nutritional needs and requirements.

Section 1404 of NARETPA, 7 U.S.C. 3103, defines "Food and Agricultural Sciences" as meaning basic, applied, and developmental research, extension, and teaching activities in food and fiber, agricultural, renewable natural resources, forestry, and physical and social sciences, including activities relating to the following: (1) Animal health, production, and well-being, (2) plant health and production, (3) animal and plant germplasm collection and preservation, (4) aquaculture, (5) food safety, (6) soil and water conservation and improvement, (7) forestry, horticulture, and range management, (8) nutritional sciences and promotion, (9) farm enhancement, including financial management, input efficiency, and profitability, (10) home economics, (11) rural human ecology, (12) youth development and agricultural education, including 4-H clubs, (13) expansion of domestic and international markets for agricultural commodities and products, including agricultural trade barrier identification and analysis, (14) information management and technology transfer related to agriculture, (15) biotechnology related to agriculture, and (16) the processing, distributing, marketing, and utilization of food and agricultural products.

CSREES currently supports agricultural research, extension and education activities through a broad array of programs which includes both formula funded and competitively awarded grant programs. The formula funded programs include the agricultural research programs authorized under the Hatch Act (7 U.S.C. 361a *et seq.*) for the State Agricultural Experiment Stations; section 1445 of NARETPA (7 U.S.C. 3222) for the 1890 Land-Grant Institutions including Tuskegee University, and West Virginia State College; the McIntire-Stennis Cooperative Forestry Act (16 U.S.C. 582a *et seq.*); and section 1433 of NARETPA (7 U.S.C. 3195) for the Animal Health and Disease Research

program. The agricultural extension programs are funded under section 3 of the Smith-Lever Act (7 U.S.C. 343) for the cooperative extension services at the 1862 Land-Grant Institutions; section 3(d) of the Smith-Lever Act (7 U.S.C. 343(d)) for targeted, national programs; and section 1444 of NARETPA (7 U.S.C. 3221) for the 1890 Land-Grant Institutions including Tuskegee University, and West Virginia State College. Section 534(a) of the Equity in Educational Land-Grant Status Act of 1994 (7 U.S.C. 301 note) authorizes funding for the 1994 Institutions to strengthen their teaching programs in food and agricultural sciences.

The CSREES competitive grant programs include the National Research Initiative authorized under section 2(b) of the Competitive, Special, and Facilities Research Grant Act (7 U.S.C. 450i); the Initiative for Future Agriculture and Food Systems authorized under section 401 of AREERA (7 U.S.C. 7621); the Integrated Research, Education, and Extension Competitive Grants Program authorized under section 406 of AREERA (7 U.S.C. 7626); the Food and Agricultural Sciences National Needs Graduate Fellowship Grants Program authorized under section 1417(b)(6) of NARETPA (7 U.S.C. 3152(b)(6)); the Higher Education Challenge Grants Program authorized under section 1417(b)(1) of NARETPA (7 U.S.C. 3152(b)(1)); the Secondary Agriculture Education Challenge Grants Program authorized under section 1417(j) of NARETPA (7 U.S.C. 3152(j)); and the Hispanic-Serving Institutions Education Grants Program authorized under section 1455 of NAREPTA (7 U.S.C. 3241). In addition, sections 535 and 536 of the Equity in Educational Land-Grant Status Act of 1994 (7 U.S.C. 301 note) authorize competitive capacity building and research grant programs for the 1994 Institutions. Further information about CSREES grant programs is available through the CSREES Web page at <http://www.reeusda.gov> as the above list of CSREES grant programs is not exhaustive.

A majority of the agricultural research, extension, and education activities funded by CSREES are conducted through the 1862 Land-Grant Institutions which were established under the First Morrill Act (7 U.S.C. 301 *et seq.*); the 1890 Land-Grant Institutions under the Second Morrill Act (7 U.S.C. 321 *et seq.*); and the 1994 Institutions under the Equity in Educational Land-Grant Status Act of 1994 (7 U.S.C. 301 note).

The Agricultural Research Service (ARS) is the in-house research agency of

the U.S. Department of Agriculture (USDA). Authority for ARS research is derived from the Department of Agriculture Organic Act of 1862 (7 U.S.C. 2201), which established the Department of Agriculture. The scope of USDA's agricultural research programs has been expanded and extended many times since the Department was first created. Today ARS has a workforce of approximately 8,000 employees including 2,000 scientists representing a wide range of disciplines. ARS conducts 1,200 research projects at over 100 locations across the country and at four overseas laboratories. The National Agricultural Library and the National Arboretum are also part of ARS.

ARS conducts research to develop and transfer solutions to agricultural problems of high national priority and provides information access and dissemination to (1) Ensure high-quality, safe food and other agricultural products, (2) assess the nutritional needs of Americans, (3) sustain a competitive agricultural economy, (4) enhance the natural resource base and the environment, and (5) provide economic opportunities for rural citizens, communities, and society as a whole.

To achieve these objectives, ARS research projects are divided into National Programs. Currently, ARS research is organized into 22 National Programs which are described in detail on the ARS Web site at <http://www.nps.ars.usda.gov/>. ARS also works to ensure the timely transfer of new knowledge and technologies to potential users. ARS seeks to broaden public understanding of the value of agriculture and agricultural research to ensure the continued primacy of the U.S. agriculture in the 21st century. Program direction related specifically to food safety programs can be found at <http://www.nps.ars.usda.gov/programs/programs.htm?NPNUMBER=108>.

Done in Washington, DC, this 11th day of June, 2003.

Joseph J. Jen,

Under Secretary, Research, Education, and Economics.

[FR Doc. 03-15275 Filed 6-16-03; 8:45 am]

BILLING CODE 3410-22-P

DEPARTMENT OF AGRICULTURE

Federal Crop Insurance Corporation

Request for Applications (RFA): Community Outreach and Assistance Partnership Program

ACTION: Announcement of availability of funds and request for applications for

the Community Outreach and Assistance Partnership Program.

SUMMARY: In accordance with section 522(d) of the Federal Crop Insurance Act (Act), the Federal Crop Insurance Corporation (FCIC), operating through the Risk Management Agency (RMA), announces the availability of up to approximately \$3.5 million in fiscal year (FY) 2003 for collaborative outreach and assistance programs for women, limited resource, socially disadvantaged and other traditionally under-served farmers and ranchers, who produce agricultural commodities covered by the noninsured crop disaster assistance program (7 U.S.C. 7333); specialty crops; and under served commodities (For purposes of this announcement, these commodities are collectively referred to as "Priority Commodities"). Awards under this program will be made on a competitive basis for projects of up to one year. Recipients of awards must demonstrate non-financial benefits from a partnership agreement and must agree to the substantial involvement of RMA in the project. This announcement lists the information needed to submit an application under this program.

Closing Dates: The closing date and time for receipt of applications under this RFA is 5 p.m. Eastern Time on August 1, 2003. Applications received after the deadline will not be evaluated by the technical review panel.

FOR FURTHER INFORMATION CONTACT:

Applicants and other interested parties are encouraged to contact: Marie Buchanan, National Outreach Program Manager, Telephone (202) 690-2686, Facsimile (202) 690-1518, E-mail: Marie.Buchanan@usda.gov. You may also obtain additional information regarding this announcement from the RMA Web site at <http://www.rma.usda.gov>. Applicants may download an application package for the community outreach and assistance partnership program from the Risk Management Agency (RMA) Web site at: <http://www.rma.usda.gov>. Applicants may also request an application package from: Marie Buchanan, USDA RMA, Community Outreach and Assistance Program, 1400 Independence Avenue, SW., Room 6709, Stop 0805, Washington, DC 20250-0805. Telephone (202) 690-2686, Facsimile (202) 690-1518, E-mail: Marie.Buchanan@usda.gov.

Applicants are strongly encouraged to submit completed and signed application packages using overnight mail or delivery service to ensure timely receipt by the USDA. The applicable address for such submissions is: USDA-

RMA, Community Outreach and Assistance Programs, c/o Marie Buchanan, 1400 Independence Avenue SW., Room 6709, Stop 0805, Washington, DC 20250-0805.

Completed and signed application packages sent via the U.S. Postal Service must also be sent to the above address. Applicants using the U.S. Postal Service should allow for extra security-processing time for mail delivered to government offices.

Paperwork Reduction Act

Under the provisions of the Paperwork Reduction Act of 1995, as amended (44 U.S.C. chapter 25), the collection of information requirements contained in this announcement have been approved under OMB Document Nos. 0348-0043, 0348-0044, and 0348-0046 and 0348-0040.

The Catalog of Federal Domestic Assistance Number for these programs is 10.450.

SUPPLEMENTARY INFORMATION: This announcement consists of six parts:

Part I. General Information

- A. Legislative Authority
- B. Background
- C. Project Goal
- D. Purpose
- E. Definition of Priority Commodities

Part II. Eligibility/Funding

- A. Eligible Applicants
- B. Non-financial Benefits
- C. Project Period
- D. Availability of Funds and Amounts

Part III. Program Description

- A. Recipient Activities
- B. RMA Activities
- C. Other Activities

Part IV—Preparation of an Application

- A. Program Application Materials
- B. Content of Applications
- C. Submission of Applications
- D. Acknowledgement of Applications

Part V—Review Process

- A. General
- B. Evaluation Criteria and Weights
- C. Confidentiality

Part VI—Additional Information

- A. Requirement to Use Program Logo
- B. Requirement to Provide Project Information to an RMA representative
- C. Private Crop Insurance Organizations and Potential Conflicts of Interest
- D. Access to Panel Review Information
- E. Notification of Partnership Agreement Awards
- F. Confidential Aspects of Proposals and Awards
- G. Reporting Requirements
- H. Audit Requirements
- I. Prohibitions and Requirements with Regard to Lobbying
- J. Applicable OMB Circulars

Part I—Information for the Community Outreach and Assistance Partnership Program

A. General Information

1. Authority

This program is authorized under section 522(d)(3)(F) of the Federal Crop Insurance Act (Act).

2. Background

RMA promotes and regulates sound risk management solutions to improve the economic stability of American agriculture. On behalf of FCIC, RMA does this by offering Federal crop insurance products through a network of private-sector partners, overseeing the creation of new risk management products, seeking enhancements in existing products, ensuring the integrity of crop insurance programs, offering outreach programs aimed at equal access and participation of underserved communities, and providing risk management education and information.

One of RMA's four strategic goals is to ensure that its customers are well informed as to the risk management solutions available. This educational goal is supported by section 522(d)(3)(F) of the Act, which authorizes FCIC funding for risk management training and informational efforts for agricultural producers through the formation of partnerships with public and private organizations. With respect to such partnerships, a priority is to be given to producers of Priority Commodities (as specified in subsection 5 of this section).

3. Project Goal

The goal of this program is to ensure that “ * * * producers will be better able to use financial management, crop insurance, marketing contracts, and other existing and emerging risk management tools.”

4. Purpose

The purpose of the Community Outreach and Assistance Partnership Program is to ensure that women, limited resource, socially disadvantaged, and other traditionally underserved producers of priority commodities are provided information and training necessary to use financial management, crop insurance, marketing contracts, and other existing and emerging risk management tools.

Each partnership agreement awarded through this program will provide the applicant with funds, guidance, and the substantial involvement of RMA to carry out an outreach and assistance program for producers in a specific geographical area.

5. Definition of Priority Commodities

For purposes of this program, Priority Commodities are defined as:

- *Agricultural commodities covered by (7 U.S.C. 7333).* Commodities in this group are commercial crops that are not covered by catastrophic risk protection crop insurance, are used for food or fiber (except livestock), and specifically include, but are not limited to, floricultural, ornamental nursery, Christmas trees, turf grass sod, aquaculture (including ornamental fish), and industrial crops.

- *Specialty crops.* Commodities in this group may or may not be covered under a Federal crop insurance plan and include, but are not limited to, fruits, vegetables, tree nuts, syrups, honey, roots, herbs, and highly specialized varieties of traditional crops.

- *Underserved commodities.* This group includes: (a) commodities, including livestock and forage, that are covered by a Federal crop insurance plan but for which participation in an area is below the national average; and (b) commodities, including livestock, with inadequate crop insurance coverage produced by women, limited resource, socially disadvantaged, or beginning farmers and ranchers.

A project is considered as giving priority to Priority Commodities if the majority of the outreach and educational activities of the project are directed to producers of any of the three classes of commodities listed above or any combination of the three classes.

Part II—Eligibility/Funding

1. Eligible Applicants

Eligible applicants include educational institutions, community based organizations, associations of farmers, ranchers and other nonprofit organizations with demonstrated capabilities in developing and implementing risk management and other marketing options for priority commodities. Individuals are not eligible applicants. Applicants are encouraged to form partnerships with other entities that complement, enhance and/or increase the effectiveness and efficiency of the proposed project.

Although an applicant may be eligible to compete for an award based on its status as an eligible entity, other factors may exclude an applicant from receiving Federal assistance under this program (e.g. debarment and suspension; a determination of non-performance on a prior contract, cooperative agreement, grant or partnership; a determination of a violation of applicable ethical standards).

2. Non-financial Benefits

To be eligible, applicants must also be able to demonstrate that they will receive a non-financial benefit as a result of a partnership agreement. Non-financial benefits must accrue to the applicant and must include more than the ability to provide employment income to the applicant or for the applicant's employees or the community. The applicant must demonstrate that performance under the partnership agreement will further the specific mission of the applicant (such as providing research or activities necessary for graduate or other students to complete their educational program).

3. Project Period

Each project will be funded for a period of up to one year from the project starting date for the activities described in this announcement.

4. Availability of Funds and Amounts

The amount of funds available in FY 2003 for support of partnership agreement awards under this program is up to approximately \$3.5 million. There is no commitment by USDA/RMA to fund any particular project or to make a specific number of awards. Applicants awarded a partnership agreement for an amount that is less than the amount requested will be required to modify their application to conform to the reduced amount before execution of the partnership agreement. No maximum or minimum funding levels have been established for individual projects or geographic locations. It is expected that the awards will be made approximately 60 days after the application deadline. All awards will be made and agreements completed no later than September 30, 2003.

Those applicants awarded partnership agreements require a match of ten (10) percent of the award amount. The applicant's contribution must be from non-federal funds and can be cash or in-kind.

Partnership agreement funds may not be used to:

1. Plan, repair, rehabilitate, acquire, or construct a building or facility including a processing facility;
2. To purchase, rent, or install fixed equipment;
3. Repair or maintain privately owned vehicles;
4. Pay for the preparation of the partnership application;
5. Fund political activities;
6. Pay costs incurred prior to receiving this partnership agreement;
7. Fund any activities prohibited in 7 CFR Parts 3015 and 3019, as applicable.

Part III—Program Description

In conducting activities to achieve the purpose and goal of this program, the award recipient will be responsible for the activities listed under paragraph 1 of this part. FCIC, working through RMA, will be substantially involved in the activities listed under paragraph 2.

1. Recipient Activities

Award recipients will be required to perform the following activities:

- Finalize an outreach delivery plan that will accomplish the purpose of this program. The plan must describe the manner in which various tasks for the project will be completed, the dates by which each task will be completed, and the partners that will have responsibility for each task. Task milestones must be listed so as to ensure that progress can be measured at various stages throughout the life of the project. The plan must also provide for the substantial involvement of RMA in the project. (**Note:** All partnership agreements resulting from this announcement will include delivery plans in a table format. The table can be obtained from the RMA Web site at: <http://www.rma.usda.gov>. All applicants are strongly encouraged to refer to this table when preparing a delivery plan and to use this format as part of the application narrative.)
- Assemble risk management instructional materials appropriate for targeted audience to be used in delivering education and information. This will include: (a) Gathering existing instructional materials that meet the needs of agricultural producers of agricultural commodities; (b) identifying gaps in existing instructional materials; and (c) developing new materials or modifying existing instructional materials to fill existing gaps.
- Develop and conduct a promotional program. This program will include activities using media, newsletters, publications, or other informational dissemination techniques that are designed to: (a) Raise awareness for risk management; (b) inform producers of the availability of risk management tools; and (c) inform producers of the training and informational opportunities being offered.
- Deliver risk management training and informational opportunities to agricultural producers and agribusiness professionals. This will include organizing and delivering outreach and educational activities using the instructional materials identified earlier. Activities should be directed primarily to agricultural producers, but may include those agribusiness professionals

that have frequent opportunities to advise producers on risk management.

- Document all outreach and educational activities conducted under the partnership agreement and the results of such activities, including criteria and indicators used to evaluate the success of the program. The recipient will also be required to provide information to an RMA representative to evaluate all educational activities and advise RMA as to the effectiveness of activities.

2. RMA Activities

RMA will be responsible for the following activities:

- Review and approve in advance the recipient's project delivery plan.
- Collaborate with the recipient in assembling risk management materials for producers. This will include: (a) Reviewing and approving in advance all educational materials for technical accuracy; (b) serving on curriculum development workgroups; (c) providing curriculum developers with fact sheets and other risk management publications that have been prepared by RMA; (d) advising the applicant on the materials available over the internet through the AgRisk Education Library; (e) advising the applicant on technical issues related to crop insurance instructional materials; and (f) advising the applicant on the use of the standardized design and layout formats to be used on program materials.
- Collaborate with the recipient on a promotional program for raising awareness for risk management and for informing producers of training and informational opportunities. This will include: (a) Reviewing and approving in advance all promotional plans, materials, and programs; (b) serving on workgroups that plan promotional programs; (c) advising the applicant on technical issues relating to the presentation of crop insurance products in promotional materials; and (d) participating, as appropriate, in media programs designed to raise general awareness or provide farmers with risk management education.
- Collaborate with the recipient on the delivery of education to agricultural producers and agribusiness leaders. This will include: (a) Reviewing and approving in advance all producer and agribusiness educational delivery plans; (b) advising the applicant on technical issues related to the delivery of crop insurance education and information; and (c) assisting the applicant in informing crop insurance professionals about educational plans and scheduled meetings.

- Reviewing and approving recipient's documentation of risk management educational and outreach activities.

3. Other Activities

In addition to the specific, required activities listed above, the applicant may suggest other outreach activities that would contribute directly to the purpose of this program. For any additional activity suggested, the applicant should identify the objective of the activity, the specific tasks required to meet the objective, specific time lines for performing the tasks, and specific responsibilities of the partners. The applicant must also identify specific ways in which RMA could have substantial involvement in the proposed outreach activity.

Part IV—Preparation of an Application

A. Program Application Materials

Program application materials under this announcement may be downloaded from the RMA Web site at: <http://www.rma.usda.gov>. Applicants may also request application materials from: Marie Buchanan, Telephone (202) 690-2686, Facsimile (202) 690-1518, E-mail: Marie.Buchanan@usda.gov.

B. Content of Applications

A complete and valid application package must include an original, two paper copies, and one electronic copy (Microsoft Word format preferred) of the application package on diskette or compact disc and must include the following:

1. Applicants must specify whether their application is a new, renewal, or resubmitted application and provide the required information in accordance with the following:

2. New Applications—This is a project application that has not been previously submitted to the RMA Outreach Program. All new applications will be reviewed competitively using the selection process and evaluation criteria described in this RFA.

3. Renewal Applications—This is a project proposal that requests additional funding for a project beyond the period that was approved in an original or amended award. Applications for renewed funding must contain the same information as required for new applications, and additionally must contain a Progress Report. Renewal applications must be received by the relevant due dates, will be evaluated in competition with other pending applications, and will be reviewed according to the same evaluation criteria as new applications.

4. Resubmitted Applications—This is a proposal that was previously submitted to the RMA Outreach office, but was not funded. Resubmitted proposals must be reviewed by the relevant due dates, will be evaluated in competition with other pending applications, and will be reviewed according to the same evaluation criteria as new applications.

5. A completed and signed OMB Standard Form 424, "Application for Federal Assistance."

6. A completed and signed OMB Standard Form 424-A, "Budget Information—Non-construction Programs." Indirect costs allowed for projects submitted under this announcement will be limited to 10 percent of the total direct cost of the partnership or cooperative agreement.

7. A budget and detailed narrative in support of the budget that shows all funding sources and itemized costs for each line item contained in the SF-424A. All budget categories must be individually listed (with costs) in the same order as the budget and justified on a separate sheet of paper and placed immediately behind the SF-424A. There must be a detailed breakdown of all costs, including indirect costs. Include budget notes on each budget line item detailing how each line item was derived. Also provide a brief narrative description of any costs that may require explanation (*i.e.*, why specific costs may be higher than market costs). Only items or services that are necessary for the successful completion of the project will be funded as permitted under the Act, the applicable Federal cost principles, and are not prohibited under any other Federal statute. Salaries of project personnel should be requested in proportion to the effort that they would devote to the project.

8. A completed and signed OMB Standard Form 424-B—"Assurances, Non-constructive Programs."

9. A "Statement of Non-financial Benefits." (Refer to Part I.B.2 "Non-financial Benefits")

10. A narrative title page. This single page can provide: (a) The name of the project; (b) the name of the program; (c) the geographic area and target audience for which the project will be directed; (d) the organization submitting the application; (e) a listing of project partners; (f) a brief project summary; and (g) information needed to contact the project's leader, including an e-mail address.

11. A written narrative (limited to fifteen single-sided pages) that describes the outreach project in detail, including the program delivery plan. The narrative

should provide reviewers with sufficient information to effectively evaluate the merits of the application under the criteria contained in Part V. In preparing narratives, applicants are strongly encouraged to carefully review and understand the specific features and authorities governing the specific program for which funds are being requested, as described in this announcement. The narrative should include the circumstances giving rise to the proposed activity; a clear, concise statement of the objectives; the steps necessary to implement the program to attain the objectives; an evaluation plan for the activities; and a management and work plan that describes how the activities will be managed by the applicant. Also, all partnerships resulting from this announcement will have delivery plans that are prepared using a specific table format. The delivery plan should identify each objective and the key tasks to achieve the objective, the entity responsible for the task, the completion date, the task location, and RMA's role. A sample table format is available from the RMA Web site <http://www.rma.usda.gov> or can be provided by RMA upon request. Applicants are strongly encouraged to refer to this table when preparing a delivery plan and to use this table format in that portion of the application narrative that addresses the delivery plan. The table can be attached as an Appendix to the narrative.

12. An appendix containing exhibits that the applicant believes will directly support the information provided in the narrative. (Optional)

13. A completed and signed OMB Standard Form LLL, "Disclosure of Lobbying Activities."

14. A completed and signed AD-1047, "Certification Regarding Debarment, Suspension and Other Responsibility Matters (Primary Covered Transactions)."

15. A completed and signed AD-1049, "Certification Regarding Drug-Free Workplace."

C. Submission of Applications

1. An original and two paper copies of the completed and signed application, and one electronic copy (Microsoft Word format preferred) on diskette or compact disc must be submitted in one package at the time of initial submission.

2. All applications must be received by the deadline. Applications that do not meet all the requirements in this announcement are considered as late applications. Late or incomplete applications will not be considered and will be returned to the applicant.

3. Applications submitted through express, overnight mail or another delivery service will be considered as meeting the announced deadline only if they are received in the mailroom at the address stated above for express, overnight mail or another delivery service on or before the deadline. Applicants are cautioned that express, overnight mail or other delivery services do not always deliver as agreed. Applicants should take this into account because failure of such delivery services will not extend the deadline. The address must appear on the envelope or package containing the application with the note "Attention: Community Outreach and Assistance Partnership Program."

Mailed applications will be considered as meeting the announced deadline if they are received on or before the deadline in the mailroom at the address stated above for mailed applications. Applicants are responsible for mailing applications well in advance, to ensure that applications are received on or before the deadline time and date. Applicants using the U.S. Postal Service should allow for the extra time for delivery due to the additional security measures that mail delivered to government offices in the Washington D.C. area now requires.

4. RMA cannot accommodate transmissions of applications by facsimile or through other electronic media. Therefore, applications transmitted electronically will not be accepted regardless of the date or time of submission or the time of receipt.

5. The deadline for receipt of an application is 5 p.m. Eastern Time on August 1, 2003. The application deadline is firm as to date and hour and applies to submission of the original application and two copies.

D. Acknowledgement of Applications

Receipt of applications will be acknowledged by e-mail, whenever possible. Therefore, applicants are encouraged to provide e-mail addresses in the application. If an e-mail address is not indicated on an application, receipt will be acknowledged by letter. There will be no notification of incomplete, unqualified or unfunded applications until the awards have been made.

When received by RMA, applications will be assigned an identification number. This number will be communicated to applicants in the acknowledgement of receipt of applications. An application's identification number should be referenced in all correspondence regarding the application. If the

applicant does not receive an acknowledgement within 15 days of the submission deadline, the applicant should contact Marie Buchanan at (202) 690-2686.

Part V—Review Process

A. General

Each application will be evaluated using a two-part process. First, each application will be screened by RMA personnel to ensure that it meets the requirements in this announcement. Applications that do not meet the requirements of this announcement or are incomplete will not receive further consideration.

Second, a review panel will consider the merits of all applications that meet the requirements in the announcement. The evaluation of each application will be conducted by a panel of not less than three independent reviewers. Reviewers will be drawn from USDA, other federal agencies, and others representing public and private organizations, as needed. The narrative and any appendixes provided by each applicant will be used by the review panel to evaluate the merits of the project that is being proposed for funding. The panel will examine and score applications based on the "Evaluation Criteria and Weights" contained in this paragraph B of this part.

Applications will be evaluated and scored in each of the four criteria listed below. The panel will be looking for the specific elements listed with each criterion when evaluating the applications and scoring them. For each application, panel members will assign a point value up to the maximum for each criterion. After all reviewers have evaluated and scored each of the applications, the scores for the entire panel will be averaged to determine an application's final score.

After assigning points upon those criteria, applications will be listed in initial rank order and presented, along with funding level recommendations, to the Manager of FCIC, who will make the final decision on awarding of a partnership agreement. Applications will then be funded in final rank order until all available funds have been expended. Applicants must score 50 points or more during the first round to be considered for funding. Unused remaining funds from the first round of competition will be allocated to the second round of competition. Unless the applicant withdraws their proposal, eligible, but unfunded, proposals from the first competition will be considered in the second competition, with or without a revision by the applicant.

An organization, or group of organizations in partnership, may apply for funding under other FCIC or RMA programs, in addition to the programs described in this announcement. However, if the Manager of FCIC determines that an application recommended for funding under this announcement is sufficiently similar to a project that has been funded or has been recommended to be funded under another FCIC or RMA education or outreach program, then the Manager may elect to not fund that application in whole or in part.

B. Evaluation Criteria and Weights

Applications will be evaluated according to the following criteria:

1. Project Management—Maximum 20 Points

The applicant must demonstrate an ability to implement sound and effective project management practices. Higher scores will be awarded to applicants that can demonstrate organizational skills, leadership, and experience in delivering services or programs that assist women, limited resource, socially disadvantaged and other traditionally underserved producers. If the applicant has been a recipient of other Federal or other government grants, cooperative agreements, or contracts, the applicant must also detail that they have consistently complied with financial and program reporting and auditing requirements. Applicants that will employ, or have access to, personnel who have experience in directing agricultural programs or providing outreach programs that benefit producers will receive higher rankings.

2. Collaborative Partnering—Maximum 50 Points

The applicant must demonstrate experience and capacity to partner with and gain the support of other agencies, grower organizations, agribusiness professionals, and agricultural leaders to enhance the quality and effectiveness of the program. Applicants will receive higher scores to the extent that they can document and demonstrate: (a) That partnership commitments are in place for the express purpose of delivering the program in this announcement; (b) that a broad and diverse group of farmers and ranchers will be reached; and (c) that a substantial effort has been made to partner with organizations that can meet the needs of producers that are women, limited resource, socially disadvantaged and other traditionally under-served farmers and ranchers.

3. Delivery Plan—Maximum 15 Points

The applicant must demonstrate that its program delivery plan is clear and specific. For each of the applicant's responsibilities contained in the description of the program, the applicant must demonstrate that it can identify specific tasks and provide reasonable time lines that further the purpose of this program. Applicants will obtain a higher score to the extent that the tasks of the project are specific, measurable, and reasonable, have specific time frames for completion, and relate directly to the required activities and program objectives described in this announcement. For guidance on a delivery plan format, applicants are encouraged to refer to the table in the appendix of this notice.

4. Project Benefits—Maximum 15 Points

The applicant must demonstrate that the project benefits to women, limited resource, socially disadvantaged and other traditionally underserved producers warrant the funding requested. Applicants will be scored according to the extent they can: (a) Reasonably estimate the number of producers reached through the project; (b) justify the estimates with clear specifics related to the delivery plan; (c) identify the actions producers will likely be able to take as a result of the project; and (d) identify specific measures for evaluating the success of the project. Reviewers' scoring will be based on the scope and reasonableness of the applicants' estimates of producers reached through the project, clear descriptions of specific expected project benefits for producers, and well-constructed plans for measuring the project's effectiveness.

5. Diversity—Maximum 20 Points

Applicant must identify the geographic areas to be served. After applications have been evaluated and awarded points under the first four criteria, applications that promote the broadest geographic diversity will receive the highest score.

C. Confidentiality

The names of applicants, the names of individuals identified in the applications, the content of applications, and the panel evaluations of applications will all be kept confidential, except to those involved in the review process, to the extent permitted by law. In addition, the identities of review panel members will remain confidential throughout the entire review process and will not be released to applicants. At the end of the fiscal year, names of panel members

will be made available. However, panelists will not be identified with the review of any particular application.

Part VI—Additional Information

A. Requirement To Use Program Logo

Applicants awarded partnership agreements will be required to use a program logo and design provided by RMA for all instructional and promotional materials.

B. Requirement To Provide Project Information to an RMA-selected Contractor

Applicants awarded partnership agreements will be required to assist RMA in evaluating the effectiveness of its education programs by providing documentation of outreach activities and related information to any contractor selected by RMA for program evaluation purposes.

C. Private Crop Insurance Organizations and Potential Conflicts of Interest

Private organizations that are involved in the sale of Federal crop insurance, or that have financial ties to such organizations, are eligible to apply for funding under either of the two educational programs described in this announcement. However, such entities will not be allowed to receive funding to conduct activities that would otherwise be required under a Standard Reinsurance Agreement or any other agreement in effect between FCIC and the entity. Such entities will also not be allowed the receive funding to conduct activities that could be perceived by producers as promoting one company's services or products over another's. If applying for funding, such organizations are encouraged to be sensitive to potential conflicts of interest and to describe in their application the specific actions they will take to avoid actual and perceived conflicts of interest.

D. Access to Panel Review Information

Upon written request from the applicant, scores from the evaluation panel, not including the identity of reviewers, will be sent to the applicant after the review and awards process has been completed.

E. Notification of Partnership Agreement Awards

Following approval by the awarding official of RMA of the applications selected for funding, project leaders whose applications have been selected for funding will be notified. Within the limit of funds available for such a purpose, the awarding official of RMA shall enter into a partnership agreements with those applicants whose

applications are judged to be most meritorious under the procedures set forth in this announcement. The agreements provide the amount of Federal funds for use in the project period, the terms and conditions of the award, and the time period for the project.

The effective date of the agreement shall be on the date the agreement is executed by both parties and it shall remain in effect for up to one year. RMA will then extend to award recipients, in writing, the authority to draw down funds for the purpose of conducting the activities listed in the agreement. All funds provided to the applicant by FCIC must be expended solely for the purpose for which the funds are obligated in accordance with the approved agreement and budget, the regulations, the terms and conditions of the award, and the applicability of Federal cost principles. No commitment of Federal assistance beyond the project period is made or implied for any award resulting from this notice. Notification of denial of funding will be sent to applicants after final funding decisions have been made. Reasons for denial of funding can include incomplete proposals, scored low or were duplicative.

F. Confidential Aspects of Proposals and Awards

When an application results in a partnership agreement, it becomes a part of the official record of RMA transactions, available to the public upon specific request. Information that the Secretary of Agriculture determines to be of a confidential, privileged, or proprietary nature will be held in confidence to the extent permitted by law. Therefore, any information that the applicant wishes to be considered confidential, privileged, or proprietary should be clearly marked within an application, including the basis for such designation. The original copy of a proposal that does not result in an award will be retained by RMA for a period of one year. Other copies will be destroyed. Copies of proposals not receiving awards will be released only with the express written consent of the applicant or to the extent required by law. A proposal may be withdrawn at any time prior to award.

G. Reporting Requirements

Applicants awarded partnership agreements will be required to submit quarterly progress and financial reports (OMB Standard Form 269) throughout the project period, as well as a final program and financial report not later than 90 days after the end of the project period.

H. Audit Requirements

Applicants awarded partnership agreements are subject to audit.

I. Prohibitions and Requirements With Regard to Lobbying

Section 1352 of Public Law 101-121, enacted on October 23, 1989, imposes prohibitions and requirements for disclosure and certification related to lobbying on recipients of Federal contracts, grants, cooperative agreements, and loans. It provides exemptions for Indian Tribes and tribal organizations. Current and prospective recipients, and any subcontractors, are prohibited from using Federal funds, other than profits from a Federal contract, for lobbying Congress or any Federal agency in connection with the award of a contract, grant, cooperative agreement, or loan. In addition, for each award action in excess of \$100,000 (\$150,000 for loans) the law requires recipients and any subcontractors: (1) To certify that they have neither used nor will use any appropriated funds for payment of lobbyists; (2) to disclose the name, address, payment details, and purpose of any agreements with lobbyists whom recipients of their subcontractors will pay with profits or other non-appropriated funds on or after December 22, 1989; and (3) to file quarterly up-dates about the use of lobbyists if material changes occur in their use. The law establishes civil penalties for non-compliance. A copy of the certification and disclosure forms must be submitted with the application and are available from Marie Buchanan at the above stated address and telephone number.

J. Applicable OMB Circulars

All partnership agreements funded as a result of this notice will be subject to the requirements contained in all applicable OMB circulars.

Ross J. Davidson, Jr.,

Manager, Federal Crop Insurance Corporation.

[FR Doc. 03-15205 Filed 6-16-03; 8:45 am]

BILLING CODE 3410-08-P

DEPARTMENT OF COMMERCE

[I.D. 061203C]

Submission for OMB Review; Comment Request

The Department of Commerce has submitted to the Office of Management and Budget (OMB) for clearance the following proposal for collection of information under the provisions of the

Paperwork Reduction Act (44 U.S.C. Chapter 35).

Agency: National Oceanic and Atmospheric Administration (NOAA).

Title: Tortugas Access Permits.

Form Number(s): None.

OMB Approval Number: 0648-0418.

Type of Request: Regular submission.

Burden Hours: 8.

Number of Respondents: 31.

Average Hours Per Response: 10 minutes for an application; 2 minutes for a notification; and 90 minutes for an appeal.

Needs and Uses: Persons must obtain a permit in order to gain access to the Tortugas ecological reserve. Permit holders must notify NOAA by radio no less than 30 minutes and no more than 6 hours before entering the reserve, and when leaving it. Permit actions may be appealed. The purposes of the access permit and notifications are to (1) protect this unique deepwater coral reef and (2) facilitate the enforcement of the no-take regulations in this remote area. Applications and notifications are made by phone. Appeals must be in writing.

Affected Public: Business or other for-profit organizations; individuals or households; not-for-profit institutions; and State, Local, or Tribal Government.

Frequency: On occasion.

Respondent's Obligation: Mandatory.

OMB Desk Officer: David Rostker, (202) 395-3897.

Copies of the above information collection proposal can be obtained by calling or writing Diana Hynek, Departmental Paperwork Clearance Officer, (202) 482-0266, Department of Commerce, Room 6625, 14th and Constitution Avenue, NW., Washington, DC 20230 (or via the Internet at dHynek@doc.gov).

Written comments and recommendations for the proposed information collection should be sent within 30 days of publication of this notice to David Rostker, OMB Desk Officer, Room 10202, New Executive Office Building, Washington, DC 20503.

Dated: June 10, 2003.

Gwellnar Banks,

Management Analyst, Office of the Chief Information Officer.

[FR Doc. 03-15295 Filed 6-16-03; 8:45 am]

BILLING CODE 3510-NK-S

DEPARTMENT OF COMMERCE

Office of the Secretary

[Docket Number: 030520131-3131-01]

Privacy Act of 1974; Altered System of Records

AGENCY: Office of the Secretary, Department of Commerce.

ACTION: Notice and request for comments

SUMMARY: In accordance with the requirements of the Privacy Act of 1974, as amended, 5 U.S.C. 552a, the Department of Commerce (Department) is issuing notice of our intent to amend the system of records entitled Commerce Department System 2, "Accounts Receivable," to add to this system records compiled in conjunction with new pronouncements issued by federal authoritative agencies for debt collection. We invite public comment on the proposed changes in this publication.

DATES: *Comment Date:* To be considered, written comments must be submitted on or before July 17, 2003.

Effective Date: Unless comments are received, the amendments will become effective as proposed on the date of publication of a subsequent notice in the **Federal Register**.

ADDRESSES: Comments may be mailed to Deputy Chief Financial Officer, Office of Financial Management, U. S. Department of Commerce, Room 6827, 14th and Constitution Avenue, NW., Washington, DC 20230.

FOR FURTHER INFORMATION CONTACT: Lisa Casias at 202-482-1207.

SUPPLEMENTARY INFORMATION: Pursuant to the Privacy Act of 1974 (5 U.S.C. 552a) and the Office of Management and Budget (OMB) Circular No. A-130, OMB Circular A-129 (Revised) and the Departments of Treasury/Justice Federal Claims Collections Standards (Final Rule), the Department has completed a review of its Privacy Act systems of records notices for the purpose of debt collection. In addition, other minor administrative updates are being amended to the system location, categories of records, routine uses, storage, retrievability, notification procedure, and records access procedures.

Commerce/Dept-2

SYSTEM LOCATION:

Delete: a. through g.

Add:

(1) For Office of the Secretary (OS), which includes Gifts & Bequests Fund,

Salaries & Expense Fund, and Working Capital Fund:

a. NIST, 100 Bureau Drive, Building 101, Room C29, Gaithersburg, MD 20899
b. Washington National Records Center, 4205 Suitland Road, Suitland, MD 20746-8001

(2) For Bureau of the Census (Census):
a. U.S. Census Bureau, 4700 Silverhill Road, Federal Building #3, Rooms 3280/3565, Washington, DC 20233

b. Washington National Records Center, 4205 Suitland Road, Suitland, MD 20746-8001

(3) For Bureau of Industry and Security (BIS) (formerly called the Bureau of Export Administration (BXA)):

a. NOAA, 20020 Century Boulevard, Stations 3333/3505, Germantown, MD 20874

b. Washington National Records Center, 4205 Suitland Road, Suitland, MD 20746-8001

(4) For Economic and Statistics Administration/Bureau of Economic Analysis (ESA/BEA):

a. NIST, 100 Bureau Drive, Building 101, Room C29, Gaithersburg, MD 20899

b. Washington National Records Center, 4205 Suitland Road, Suitland, MD 20746-8001

(5) For Economic Development Administration (EDA):

a. EDA, Accounting Division, Herbert C. Hoover Building, Room 7215, 14th & Constitution Avenue, NW., Washington, DC 20230

b. Washington National Records Center, 4205 Suitland Road, Suitland, MD 20746-8001

(6) For Emergency Loan Guarantee Program, Oil & Gas/Steel (ELGP):

a. NIST, 100 Bureau Drive, Building 101, Room C29, Gaithersburg, MD 20899

b. Washington National Records Center, 4205 Suitland Road, Suitland, MD 20746-8001

(7) For International Trade Administration (ITA):

a. National Business Center, P&S Mail Stop 2760, 7301 W. Mansfield Avenue, Lakewood, CO 80235-2230

b. National Archives, Bldg. 48, Denver Federal Center, P.O. Box 25307, Denver, CO, 80225

(8) For Minority Business Development Agency (MBDA):

a. NIST, 100 Bureau Drive, Building 101, Room C29, Gaithersburg, MD 20899

b. Washington National Records Center, 4205 Suitland Road, Suitland, MD 20746-8001

(9) For National Institute of Standards and Technology (NIST):

a. NIST, 100 Bureau Drive, Room A822, Gaithersburg, MD 20899

b. Washington National Records Center, 4205 Suitland Road, Suitland, MD 20746-8001

(10) For National Oceanic and Atmospheric Administration (NOAA):
a. NOAA, 20020 Century Boulevard, Stations 3333/3505, Germantown, MD 20874

b. Washington National Records Center, 4205 Suitland Road, Suitland, MD 20746-8001

(11) For National Telecommunications & Information Administration (NTIA):

a. NIST, 100 Bureau Drive, Building 101, Room C29, Gaithersburg, MD 20899

b. Washington National Records Center, 4205 Suitland Road, Suitland, MD 20746-8001

(12) For National Technical Information Service (NTIS):

a. NTIS, 5285 Port Royal Road, Room 1021, Springfield, VA 22161

(13) For U.S. Patent and Trademark Office (PTO):

a. U.S. Patent and Trademark Office, 2011 Crystal Drive, Suite 802, Arlington, VA 22202

b. U.S. Patent and Trademark Office Franconia Warehouse (Files Repository), 6808 Loisdale Road, Springfield, VA 22150-1910

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Delete: current paragraph

Add: Individuals who owe debts to the Department or one of its offices or bureaus.

CATEGORIES OF RECORDS IN THE SYSTEM:

Delete: current paragraph

Add:

Debt records containing information about the debtor(s), the type of debt, the governmental entity to which the debt is owed, and the debt collection tools utilized to collect the debt. The records may contain identifying information, such as name(s) and taxpayer identifying number (*i.e.*, social security number or employer identification number); debtor contact information, such as work and home address, and work and home telephone numbers; and name of employer and employer address. Debts include loans, assessments, fines, fees, penalties, overpayments, advances, extensions of credit from sales of goods or services, and other amounts of money or property owed to the Department or one of its offices or bureaus. The records also may contain information about: (a) The debt, such as the original amount of the debt, the debt account number, the date the debt originated, the amount of the delinquency or default, the date of delinquency or default, basis for the debt, amounts accrued for interest, penalties, and administrative costs, and payments on the account; (b) Actions

taken to collect or resolve the debt, such as copies of demand letters or invoices, documents or information required for the referral of accounts to collection agencies or for litigation, and collectors' notes regarding telephone or other communications related to the collection or resolution of the debt; and (c) The Departmental office or bureau that is collecting or owed the debt, and the name, telephone number, and address of the Departmental office or bureau contact.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

Delete: current paragraph

Add:

28 U.S.C. 3101-3105, Debt Collection Act of 1982 (Pub. L. 97-365); 26 U.S.C. 6402(d); and 31 U.S.C. 3711.

ADD THIS SECTION:

PURPOSE(S):

The purpose of this system is to maintain records about individuals who owe debt(s) to the Department or one of its offices or bureaus. The information contained in the records is maintained for the purpose of taking action to facilitate the collection and resolution of the debt(s) using various collection methods, including, but not limited to, requesting repayment of the debt by telephone or in writing, offset, levy, administrative wage garnishment, reporting to credit bureaus, referral to collection agencies or for litigation, and other collection or resolution methods authorized or required by law. The information also is maintained for the purpose of providing collection information about the debt to the agency collecting the debt, to provide statistical information on debt collection operations, and for the purpose of testing and developing enhancements to the computer systems which contain the records.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

These records may be disclosed as follows:

(1) In the event that a system of records maintained by the Department to carry out its functions indicates a violation or potential violation of law or contract, whether civil, criminal or regulatory in nature, and whether arising by general statute or particular program statute or contract, or rule, regulation, or order issued pursuant thereto, or the necessity to protect an interest of the Department, the relevant records in the system of records may be referred to the appropriate agency, whether Federal, state, local or foreign, charged with the responsibility of

investigating or prosecuting such violation or charged with enforcing or implementing the statute or contract, or rule, regulation or order issued pursuant thereto, or protecting the interest of the Department.

(2) A record from this system of records may be disclosed to a Federal, state or local agency maintaining civil, criminal or other relevant enforcement information or other pertinent information, such as current licenses, if necessary to obtain information relevant to a Department decision concerning the assignment, hiring or retention of an individual, the issuance of a security clearance, the letting of a contract, or the issuance of a license, grant or other benefit.

(3) A record from this system of records may be disclosed to a Federal, state, local or international agency, in response to its request, in connection with the assignment, hiring or retention of an individual, the issuance of a security clearance, the reporting of an investigation of an individual, the letting of a contract, or the issuance of a license, grant, or other benefit by the requesting agency, to the extent that the information is relevant and necessary to the requesting agency's decision on the matter.

(4) A record from this system of records may be disclosed in the course of presenting evidence to a court, magistrate or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

(5) A record in this system of records may be disclosed to a Member of Congress submitting a request involving an individual when the individual has requested assistance from the Member with respect to the subject matter of the record.

(6) A record in this system of records may be disclosed to the Office of Management and Budget in connection with the review of private relief legislation as set forth in OMB Circular No. A-19 at any stage of the legislative coordination and clearance process as set forth in that Circular.

(7) A record in this system of records may be disclosed to the Department of Justice in connection with determining whether disclosure thereof is required by the Freedom of Information Act (5 U.S.C. 552).

(8) A record in this system of records may be disclosed to a contractor of the Department having need for the information in the performance of the contract, but not operating a system of records within the meaning of 5 U.S.C. 552a(m).

(9) A record in this system may be transferred to the Office of Personnel Management: for personnel research purposes; as a data source for management information; for the production of summary descriptive statistics and analytical studies in support of the function for which the records are collected and maintained; or for related manpower studies.

(10) A record from this system of records may be disclosed to the Administrator, General Services, or his designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.* GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

(11) Any Federal agency, state or local agency, U.S. territory or commonwealth, or the District of Columbia, or their agents or contractors, including private collection agencies (consumer and commercial):

a. To facilitate the collection of debts through the use of any combination of various debt collection methods required or authorized by law, including, but not limited to;

(i) Request for repayment by telephone or in writing;

(ii) Negotiation of voluntary repayment or compromise agreements;

(iii) Offset of Federal payments, which may include the disclosure of information contained in the records for the purpose of providing the debtor with appropriate pre-offset notice and to otherwise comply with offset prerequisites, to facilitate voluntary repayment in lieu of offset, and to otherwise effectuate the offset process;

(iv) Referral of debts to private collection agencies, to Treasury-designated debt collection centers, or for litigation;

(v) Administrative and court-ordered wage garnishment;

(vi) Debt sales;

(vii) Publication of names and identities of delinquent debtors in the media or other appropriate places; and

(viii) Any other debt collection method authorized by law;

b. To conduct computerized comparisons to locate Federal payments to be made to debtors;

c. To conduct computerized comparisons to locate employers of, or obtain taxpayer identifying numbers or

other information about, an individual for debt collection purposes;

d. To collect a debt owed to the Department or one of its offices or bureaus through the offset of payments made by states, territories, commonwealths, or the District of Columbia;

e. To account or report on the status of debts for which such entity has a financial or other legitimate need for the information in the performance of official duties;

f. For the purpose of denying Federal financial assistance in the form of a loan or loan guaranty to an individual who owes delinquent debt to the United States;

g. To develop, enhance and/or test database, matching, communications, or other computerized systems which facilitate debt collection processes; or

h. For any other appropriate debt collection purpose.

(12) The Department of Defense, the U.S. Postal Service, or other Federal agency for the purpose of conducting an authorized computer matching program in compliance with the Privacy Act of 1974, as amended, to identify and locate individuals receiving Federal payments including, but not limited to, salaries, wages, and benefits, which may include the disclosure of information contained in the records for the purpose of requesting voluntary repayment or implementing Federal employee salary offset or other offset procedures;

(13) The Department of Justice for the purpose of litigation to enforce collection of a delinquent debt or to obtain the Department of Justice's concurrence in a decision to compromise, suspend, or terminate collection action on a debt;

(14) Any individual or other entity who receives Federal payments as a joint payee with a debtor for the purpose of providing notice of, and information about, offsets from such Federal payments; and

(15) Any individual or entity:

a. To facilitate the collection of debts through the use of any combination of various debt collection methods required or authorized by law, including, but not limited to:

(i) Administrative and court-ordered wage garnishment;

(ii) Report information to commercial credit bureaus;

(iii) Conduct asset searches;

(iv) Publish names and identities of delinquent debtors in the media or other appropriate places; or

(v) Debt sales;

b. For the purpose of denying financial assistance in the form of a loan or loan guaranty to an individual who

owes delinquent debt to the Department or one of its offices or bureaus; or

c. For any other appropriate debt collection purpose.

ADD THIS SECTION:

DISCLOSURE TO CONSUMER REPORTING AGENCIES:

Debt information concerning a government claim against a debtor is also furnished, in accordance with 5 U.S.C. 552a(b)(12) and 31 U.S.C. 3711(e), to consumer reporting agencies, as defined by the Fair Credit Reporting Act, 5 U.S.C. 1681(f), to encourage repayment of an overdue debt.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:

STORAGE:

Delete: current paragraph

Add: Records are maintained in computer processible storage media, such as computer hard drives, magnetic disc, tape; in file folders; and on paper lists and forms.

RETRIEVABILITY:

Delete: current paragraph.

Add: Records are retrieved by various combinations of name, taxpayer identifying number (*i.e.*, social security number or employer identification number), or debt account number.

SAFEGUARDS:

Delete: current paragraph.

Add: All officials access the system of records on a need-to-know basis only, as authorized by the system manager. Procedural and physical safeguards are utilized, such as accountability, receipt records, and specialized communications security. Access to computerized records is limited, through use of passwords, and other internal mechanisms, to those whose official duties require access. Hard-copy records are held in file cabinets, with access limited by visual controls and/or lock system. During normal working hours, files are attended by responsible officials; files are locked up during non-working hours.

RETENTION AND DISPOSAL:

Delete: current paragraph.

Add: Hard-copy records and electronic records shall be retained and disposed of in accordance with National Archives and Records Administration regulations (36 CFR Subchapter B—Records Retention); Departmental directives and comprehensive records schedules.

SYSTEM MANAGER(S) AND ADDRESS:

Delete: current paragraph.

Add:

(1) For Office of the Secretary (OS), which includes Gifts & Bequests Fund, Salaries & Expense Fund, and Working Capital Fund:

a. Chief, Financial Operations Division, NIST, 100 Bureau Drive, Mail Stop 3750, Building 101, Room A738, Gaithersburg, MD 20899

(2) For Bureau of the Census (Census):
a. Chief, Reimbursable Section, Finance Division, U.S. Census Bureau, 4700 Silverhill Road, Federal Building #3, Room 3565, Washington, DC 20233

(3) For Bureau of Industry and Security (BIS) (formerly called the Bureau of Export Administration (BXA)):

a. Chief, Receivables Branch, NOAA, 20020 Century Boulevard, Room 3418, Germantown, MD 20874

(4) For Economic and Statistics Administration/Bureau of Economic Analysis (ESA/BEA):

a. Chief, Financial Operations Division, NIST, 100 Bureau Drive, Mail Stop 3750, Building 101, Room A738, Gaithersburg, MD 20899

(5) For Economic Development Administration (EDA):

a. Director, Accounting Division, EDA, Herbert C. Hoover Building, Room 7215, 14th & Constitution Avenue, NW., Washington, DC 20230

(6) For Emergency Loan Guarantee Program, Oil & Gas/Steel (ELGP):

a. Chief, Financial Operations Division, NIST, 100 Bureau Drive, Mail Stop 3750, Building 101, Room A738, Gaithersburg, MD 20899

(7) For International Trade Administration (ITA):

a. Supervisor Accountant, National Business Center, P&S Mail Stop 2760, 7301 W. Mansfield Avenue, Lakewood, CO 80235-2230

(8) For Minority Business

Development Agency (MBDA):

a. Chief, Financial Operations Division, NIST, 100 Bureau Drive, Mail Stop 3750, Building 101, Room A738, Gaithersburg, MD 20899

(9) For National Institute of Standards and Technology (NIST):

a. Supervisor, Accounts Receivable Group, NIST, 100 Bureau Drive, Mail Stop 3751, Gaithersburg, MD 20899-3751

(10) For National Oceanic and Atmospheric Administration (NOAA):
a. Chief, Receivables Branch, NOAA, 20020 Century Boulevard, Room 3418, Germantown, MD 20874

(11) For National Telecommunications & Information Administration (NTIA):

a. Chief, Financial Operations Division, NIST, 100 Bureau Drive, Mail Stop 3750, Building 101, Room A738, Gaithersburg, MD 20899

(12) For National Technical Information Service (NTIS):

a. Supervisory Accountant, NTIS, 5285 Port Royal Road, Room 1021, Springfield, VA 22161

(13) For U.S. Patent and Trademark Office (PTO):

a. Director, Office of Finance, U.S. Patent and Trademark Office, 2011 Crystal Drive, Suite 802, Arlington, VA 22202

ADD:

NOTIFICATION PROCEDURE:

Inquiries under the Privacy Act of 1974, as amended, shall be addressed to the System Managers at the addresses listed in the section above. All individuals making inquiries should provide with their request as much descriptive matter as is possible to identify the particular record desired. The system manager will advise as to whether the Department or one of its offices or bureaus maintains the records requested by the individual.

RECORD ACCESS PROCEDURES:

Delete: current paragraph.

Add: Individuals requesting information under the Privacy Act of 1974, as amended, concerning procedures for gaining access or contesting records should write to the System Managers listed above. All individuals are urged to examine the rules of the Department as published in 15 CFR part 4 b, concerning requirements of the Department with respect to the Privacy Act of 1974, as amended.

CONTESTING RECORD PROCEDURES:

Delete: current paragraph.

Add: See "Record access procedures" above.

RECORD SOURCE CATEGORIES:

Delete: current paragraph.

Add: Information in this system is provided by the individual on whom the record is maintained, the Departmental office or bureau to which the debt is owed, Federal employing agencies and other entities that employ the individual, Federal agencies issuing payments, collection agencies, locator and asset search companies, credit bureaus, Federal agencies furnishing identifying information and/or address of debtor information, or from public documents.

ADD:

EXEMPTIONS CLAIMED FOR THE SYSTEM:

None.

Dated: June 10, 2003.

Brenda Dolan,

Department of Commerce, Freedom of Information/Privacy Act Officer.

[FR Doc. 03-15207 Filed 6-16-03; 8:45 am]

BILLING CODE 3510-BV-P

DEPARTMENT OF COMMERCE

Office of the Secretary

[Docket No.: 030520130-3130-01]

Privacy Act Altered System of Records

AGENCY: Office of the Secretary, Department of Commerce.

ACTION: Notice of amendment of Privacy Act System of Records, Commerce/Department system 18: employees personnel files not covered by notices of other agencies and request for comments.

SUMMARY: In accordance with the requirements of the Privacy Act of 1974, as amended, 5 U.S.C. 552a(e)(4) and (11), the Department of Commerce (Department) is issuing notice of our intent to amend the system of records entitled Commerce Department System 18, "Employees Personnel Files Not Covered By Notices of Other Agencies." This amendment adds to this system those records compiled in conjunction with requesting, approving, denying and/or providing reasonable accommodation under the requirements of E.O. 13164, 7/26/00. We invite public comment on the proposed changes in this publication.

DATES: *Comment Date:* To be considered, written comments must be submitted on or before July 17, 2003.

Effective Date: Unless comments are received, the amendments will become effective as proposed on the date of publication of a subsequent notice in the **Federal Register**.

ADDRESSES: Comments may be mailed to Brenda Dolan, U. S. Department of Commerce, Room 6022, 14th and Constitution Avenue, NW., Washington, DC 20230, 202-482-4115.

FOR FURTHER INFORMATION CONTACT: Brenda Brittain at 202-482-8183.

SUPPLEMENTARY INFORMATION: On July 26, 2000, Executive Order 13164, which stipulated that Federal agencies must issue written procedures for providing reasonable accommodation to employees, was promulgated. This amendment adds to the subject system those files containing records compiled in accordance with the E.O. 13164 and the Department policy guidance. Department guidance establishes procedures to implement requirements

for the reasonable accommodation issued by the Equal Employment Opportunity Commission in October 2000. In addition, other minor administrative updates are being amended to the system location, categories of records, routine uses, storage, retrievability, notification procedure, and records access procedures.

Commerce/Dept-18

SYSTEM NAME:

Employees Personnel Files Not Covered by Notices of Other Agencies-COMMERCE/DEPT-18.

SYSTEM LOCATION:

a. For all Departmental employees: Departmental Office of Human Resources Management, Room 5001, U.S. Department of Commerce, Washington, DC 20230 (for automated records and for selected records relating to Senior Executive Service and Departmental Honor Awards).

b. For employees of Departmental Offices, Office of Human Resource Services, Room 5005, U.S. Department of Commerce, Washington, DC 20230.

c. For employees of the Bureau of the Census: Human Resources Division, Bureau of the Census, Federal Building 3, Room 3260, Suitland, Maryland 20233.

d. For employees of International Trade Administration, National Telecommunications and Information Administration, Minority Business Development Agency, Economic Development Administration, Bureau of Industry and Security, and Bureau of Economic Analysis: Human Resources Management, International Trade Administration, Room 3512, U.S. Department of Commerce, Washington, DC 20230.

e. For employees of National Institute of Standards and Technology, Technology Administration and National Technical Information Service: Human Resources Management Division, National Institute of Standards and Technology, Administration Building, Room A-123, Gaithersburg, Maryland 20899-3550.

f. For employees of National Oceanic and Atmospheric Administration: Human Resources Management Office, National Oceanic and Atmospheric Administration, 1305 East-West Highway, 12th Floor, Silver Spring, Maryland 20910, and the following Administrative Support Centers:

DOC/NOAA/Eastern Administrative Support Center, Norfolk Federal Building, 200 Granby Street, Room 815, Norfolk, Virginia 23510; DOC/NOAA/

Mountain Administrative Support Center, 325 Broadway, Room GB109, Boulder, Colorado 80305-3328; DOC/NOAA/Western Administrative Support Center, Operations, 7600 Sand Point Way, NE., Seattle, Washington 98115-6349; and DOC/NOAA/Central Administrative Support Center, Federal Building, 601 E. 12th Street, Room 1737, Kansas City, Missouri 64106.

g. For employees of U.S. Patent and Trademark Office, Office of Human Resources, U.S. Patent and Trademark Office, U.S. Department of Commerce, Suite 707, 2011 Crystal Drive, Arlington, Virginia 22202.

h. For employees of Office of Inspector General, Human Resources Management Division, Room 7713, U.S. Department of Commerce, Washington, DC.

i. For employees of U.S. Foreign and Commercial Service, Office of Foreign Service Human Resources, Room 3227, U.S. Department of Commerce, Washington, DC 20230.

j. For Bureau of the Census' National Processing Center, Human Resources Branch, U.S. Department of Commerce, National Processing Center, Bureau of the Census, 1201 East 10th Street, Jeffersonville, IN 47132.

k. For political appointees in the Department of Commerce, Office of White House Liaison, U.S. Department of Commerce, Room 5835, Washington, DC 20230

l. For any Department employee: The immediate office of the employee's supervisor(s).

m. For any reasonable accommodation reports (CD 575): The Office of Civil Rights, U.S. Department of Commerce, Room 6003, Washington, DC 20230

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Applicants, Current and Former Employees.

CATEGORIES OF RECORDS IN THE SYSTEM:

All personnel records in the Department which are subject to the Privacy Act but are not covered in the notices of systems of records published by other agencies with influence upon personnel management in the Department, such as the Office of Personnel Management, Merit Systems Protection Board, Office of Special Counsel, Equal Employment Opportunity Commission, Department of State or Department of Labor. The records of this system may include, but are not limited to: The individual's name; birth date; home and emergency addresses and telephone numbers; personnel actions; qualifications;

training; employment history; awards; counseling; reprimands; work assignments; injuries; travel; outside employment; employee development records; incentive awards; employee relations; grievance records; medical records; work-related injury or illness claims; career management program ship personnel; employee overseas assignment(s); minority group statistics program; work performance and appraisal records, including supervisory records; re-employment and priority placement program; executive assignments and merit pay actions; merit assignment programs; retirements; within-grade denials (reconsideration files); reasonable accommodation report (CD 575); automated employee information system; and U.S. Foreign and Commercial Service employee personnel and security information.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

Includes the following, with all revisions and amendments: 5 U.S.C. 301; 44 U.S.C. 3101; E.O. 12107, E.O. 13164.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

These records may be disclosed as follows:

(1) In the event that a system of records maintained by the Department to carry out its functions indicates a violation or potential violation of law or contract, whether civil, criminal or regulatory in nature, and whether arising by general statute or particular program statute or contract, or rule, regulation, or order issued pursuant thereto, or the necessity to protect an interest of the Department, the relevant records in the system of records may be referred to the appropriate agency, whether Federal, state, local or foreign, charged with the responsibility of investigating or prosecuting such violation or charged with enforcing or implementing the statute or contract, or rule, regulation or order issued pursuant thereto, or protecting the interest of the Department.

(2) A record from this system of records may be disclosed to a Federal, state or local agency maintaining civil, criminal or other relevant enforcement information or other pertinent information, such as current licenses, if necessary to obtain information relevant to a Department decision concerning the assignment, hiring or retention of an individual, the issuance of a security clearance, the letting of a contract, or the issuance of a license, grant or other benefit.

(3) A record from this system of records may be disclosed to a Federal, state, local or international agency, in response to its request, in connection with the assignment, hiring or retention of an individual, the issuance of a security clearance, the reporting of an investigation of an individual, the letting of a contract, or the issuance of a license, grant, or other benefit by the requesting agency, to the extent that the information is relevant and necessary to the requesting agency's decision on the matter.

(4) A record from this system of records may be disclosed in the course of presenting evidence to a court, magistrate or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

(5) A record in this system of records may be disclosed to a Member of Congress submitting a request involving an individual when the individual has requested assistance from the Member with respect to the subject matter of the record.

(6) A record in this system of records may be disclosed to the Department of Justice in connection with determining whether disclosure thereof is required by the Freedom of Information Act (5 U.S.C. 552).

(7) A record in this system of records may be disclosed to a contractor of the Department having need for the information in the performance of the contract, but not operating a system of records within the meaning of 5 U.S.C. 552a(m).

(8) A record in this system may be disclosed to the Office of Personnel Management: for personnel research purposes; as a data source for management information; for the production of summary descriptive statistics and analytical studies in support of the function for which the records are collected and maintained; or for related manpower studies.

(9) A record from this system of records may be disclosed to the Administrator, General Services Administration (GSA), or his designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.* GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

(10) A record in this system of records may be disclosed to any source from which additional information is requested in the course of processing a grievance to the extent necessary to identify the individual, inform the source of the purpose(s) of the request, and identify the type of information requested.

(11) A record in this system of records may be disclosed to officials of the Office of Personnel Management, Merit Systems Protection Board, including the Office of the Special Counsel, the Federal Labor Relations Authority and its General Counsel, or the Equal Employment Opportunity Commission, the Department of State, or the Department of Labor when requested in performance of their authorized duties.

(12) A record in this system of records may be disclosed in response to a request for discovery or for appearance of a witness, information that is relevant to the subject matter involved in a pending judicial or administrative proceeding.

(13) A record in this system of records may be disclosed to officials or labor organizations reorganized under the Civil Service Reform Act when relevant and necessary to their duties of exclusive representation concerning personnel policies, practices, and matters affecting work conditions.

(14) A record in this system of records may be disclosed to commercial contractors (debt collection agencies) for the purpose of collecting delinquent debts as authorized by the Debt Collection Act (31 U.S.C. 3718).

(15) A record in this system of records may be disclosed to Senior State Department officials at U.S. Embassies, including the Ambassador, Deputy Chief of Mission, Administrative Counselor and Human Resource Officers, for matters relating to employment or security issues pertaining to Department of Commerce employees working in U.S. Embassies or facilities overseas.

DISCLOSURE TO CONSUMER REPORTING AGENCIES:

Disclosures pursuant to 5 U.S.C. 552a(b)(12): Disclosures may be made from this system to "consumer reporting agencies" as defined in the Fair Credit Reporting Act, 15 U.S.C. 1681a(f), and the Federal Claims Collection Act of 1968 (31 U.S.C. 3701(a)(3)).

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:

STORAGE:

Records are maintained in computer processible storage media, such as

computer hard drives, magnetic disc, tape; in file folders; and on paper lists and forms.

RETRIEVABILITY:

Records are retrieved by various combinations of name, taxpayer identifying number (*i.e.*, social security number or employer identification number), or debt account number.

SAFEGUARDS:

Records are located in lockable metal file cabinets or in secured rooms or secured premises or secured computers with access limited to those whose official duties require access.

RETENTION AND DISPOSAL:

All records shall be retained and disposed of in accordance with National Archives and Records Administration regulations (36 CFR Subchapter B—Records Retention); Departmental directives and comprehensive records schedules.

SYSTEM MANAGER(S) AND ADDRESS:

Same as listed under System Location.

NOTIFICATION PROCEDURE:

For Bureau of Economic Analysis records at locations a and d, information may be obtained from: Chief, Management and Organization Branch, Bureau of Economic Analysis, Tower Building, 1401 K Street, NW., Washington, DC 20230;

For National Telecommunications and Information Administration records at locations a and d, information may be obtained from: Privacy Officer, National Telecommunications and Information Administration, U.S. Department of Commerce, Washington, DC 20230; For National Technical Information Service records at locations a and e, information may be obtained from: Privacy Officer, National Technical Information Service, U.S. Department of Commerce, Washington, DC 20230;

For Minority Business Development Agency records at locations a and d, information may be obtained from: Privacy Officer, Office of Chief Counsel, Minority Business Development Agency, U.S. Department of Commerce, Washington, DC 20230;

For all other records at locations a and b, information may be obtained from Departmental Privacy Act Officer, Office of Executive Assistance Management, U.S. Department of Commerce, Washington, DC 20230;

For records at location c, information may be obtained from Associate Director for Finance and Administration, Bureau of the Census, Federal Building 3, Washington, DC 20230;

For records at location d, information may be obtained from Privacy Act Officer, Office of Management and Systems, International Trade Administration, Room 4001B, U.S. Department of Commerce, Washington, DC 20230;

For records at location e, information may be obtained from: Chief, Management and Organization Division, Room A525, Administration Building, National Institute of Standards and Technology, Gaithersburg, Maryland 20899-3220;

For records at location f, information may be obtained from: Director, Human Resources Management Offices, National Oceanic and Atmospheric Administration, 1305 East-West Highway, 12th Floor, Silver Spring, Maryland 20910;

For records at location g, information may be obtained from: Chief Financial Officer and Chief Administrative Officer, U.S. Patent and Trademark Office, Washington, DC 20231;

For records at location h, information may be obtained from: Personnel Management Division, Economic Development Administration, Room 7089, U.S. Department of Commerce, Washington, DC 20230;

For Bureau of Industry and Security records at location d, information may be obtained from: Director, Office of Planning, Evaluation and Management, and various Director's offices, Room 6883, U.S. Department of Commerce, Washington, DC 20230;

For Technology Administration records at location e, information may be obtained from: Human Resources Management Division, National Institute of Standards and Technology, Administration Building, Room A-123, Gaithersburg, Maryland 20899-3550;

For records at location k, information may be obtained from: Privacy Officer for employee's unit.

For records at location l, information may be obtained from: Privacy Officer for employee's operating unit.

Requester should provide name, social security number, and time or organization unit of employment pursuant to the inquiry provisions of the Department's rules which appear in 15 CFR part 4b.

For records at location h, information may be obtained from: Personnel Management Division, Economic Development Administration, Room 7089, U.S. Department of Commerce, Washington, DC.

For records at location i, information may be obtained from: Office of Foreign Service Human Resources, Room 3227, U.S. Department of Commerce, Washington, DC 20230.

For records at location j, information may be obtained from: Human Resources Branch, U.S. Department of Commerce, National Processing Center, Bureau of the Census, 1201 East 10th Street, Jeffersonville, IN 47132.

For records at location m, information may be obtained from Departmental Privacy Act Officer, Office of Executive Assistance Management, U.S. Department of Commerce, Washington, DC 20230.

RECORD ACCESS PROCEDURES:

Request from individuals should be addressed to: same address as stated in the Notification section above.

CONTESTING RECORD PROCEDURES:

The Department's rules for access, for contesting contents, and appealing initial determinations by the individual concerned appear in 15 CFR part 4b. Use address in notification section.

RECORD SOURCE CATEGORIES:

Subject individual and those authorized by the individual to furnish information; others involved in reference of the individual; physicians; employee's supervisor; for grievance records information is also provided by the testimony of witnesses, by agency officials, and from related correspondence from organizations or persons.

Dated: June 10, 2003.

Brenda Dolan,

Department of Commerce, Freedom of Information/Privacy Act Officer.

[FR Doc. 03-15208 Filed 6-16-03; 8:45 am]

BILLING CODE 3510-BP-P

DEPARTMENT OF COMMERCE

Foreign-Trade Zones Board

[Docket 27-2003]

Foreign-Trade Zone 50—Long Beach, California, Area Application for Expansion

An application has been submitted to the Foreign-Trade Zones (FTZ) Board (the Board) by the City of Long Beach, grantee of Foreign-Trade Zone 50, requesting authority to expand FTZ 50 in the Long Beach, California, area, adjacent to the Los Angeles-Long Beach Customs port of entry. The application was submitted pursuant to the provisions of the Foreign-Trade Zones Act, as amended (19 U.S.C. 81a-81u), and the regulations of the Board (15 CFR part 400). It was formally filed on June 9, 2003.

FTZ 50 was approved on September 14, 1979 (Board Order 147, 44 FR 55919,

9/28/79) and expanded on April 2, 1985 (Board Order 298, 50 FR 15205, 4/17/85), on March 25, 1987 (Board Order 341, 52 FR 10393, 4/1/87), on December 19, 1990 (Board Order 494, 55 FR 53581, 12/31/90), on July 17, 1996 (Board Order 833, 61 FR 42832, 8/19/96), and on January 16, 2001 (Board Order 1141, 66 FR 8378, 1/31/01). The general-purpose zone currently consists of seven sites (2,204 acres) in the Long Beach area: Site 1 (12 acres)—Parcel 1-A (8 acres) located at 909 East Colon Street, Wilmington, and Parcel 1-B (4 acres) located at 22941 South Wilmington Avenue, Carson; Site 2 (1,844 acres)—California Commerce Center, Ontario; Site 3 (109 acres)—92 acres within the Inter-City Commuter Station Redevelopment area in Santa Ana and 17 acres at two warehouse facilities located at 3000/3100 Segerstrom Avenue and 2900/2930 South Fairview Street in Santa Ana; Site 4 (175 acres)—within the 2,300-acre San Bernardino International Airport and Trade Center complex in San Bernardino; Site 5 (11 acres)—Parcel 1 (6 acres) located at 1101 W. McKinley Avenue within the Fairplex Center in Pomona and Parcel 2 (5 acres) located at 10501-10509 East Valley Boulevard at Pacific Place in El Monte; Site 6 (50 acres)—former General Dynamics/Hughes site, north of Mission Boulevard between Humane Way and Dudley Street, Pomona; and, Site 7 (3 acres—2 sites)—a 1-acre site extending along San Marino Avenue and bounded on the north and south by Broadway and Clary Avenues and a 2-acre site at Santa Anita and Junipero Serra Streets in San Gabriel.

The applicant is now requesting authority to expand existing Site 2 by adding an additional 143 acres within the California Commerce Center in Ontario. This increases the total acreage at this site to 1,987 acres. The site will provide public warehousing and distribution services to area businesses. No specific manufacturing authority is being requested at this time. Such requests would be made to the Board on a case-by-case basis.

In accordance with the Board's regulations, a member of the FTZ Staff has been designated examiner to investigate the application and report to the Board.

Public comment on the application is invited from interested parties. Submissions (original and 3 copies) shall be addressed to the Board's Executive Secretary at one of the addresses below:

1. Submissions via Express/Package Delivery Services: Foreign-Trade Zones Board, U.S. Department of Commerce, Franklin Court Building—Suite 4100W,

1099 14th Street, NW., Washington, DC 20005; or

2. Submissions via the U.S. Postal Service: Foreign-Trade Zones Board, U.S. Department of Commerce, FCB—Suite 4100W, 1401 Constitution Avenue, NW., Washington, DC 20230.

The closing period for their receipt is August 18, 2003. Rebuttal comments in response to material submitted during the foregoing period may be submitted during the subsequent 15-day period (to September 1, 2003).

A copy of the application and accompanying exhibits will be available for public inspection at the Office of the Foreign-Trade Zones Board's Executive Secretary at the first address listed above, and at the U.S. Department of Commerce, Export Assistance Center, 2940 Inland Empire Boulevard, Suite 121, Ontario, CA 91764.

Dated: June 10, 2003.

Dennis Puccinelli,

Executive Secretary.

[FR Doc. 03-15290 Filed 6-16-03; 8:45 am]

BILLING CODE 3510-DS-P

DEPARTMENT OF COMMERCE

Foreign-Trade Zones Board

[Docket 26—2003]

Foreign-Trade Zone 26—Atlanta, GA; Application for Subzone Status; Inflation Systems, Inc., Facilities (Automotive Airbag Inflators); LaGrange, GA

An application has been submitted to the Foreign-Trade Zones Board (the Board) by the Georgia Foreign-Trade Zone, Inc., grantee of FTZ 26, requesting special-purpose subzone status for the automotive airbag inflator manufacturing facilities of Inflation Systems, Inc. (ISI) (a subsidiary of Takata Corporation, of Tokyo, Japan) located in LaGrange, Georgia. The application was submitted pursuant to the provisions of the Foreign-Trade Zones Act, as amended (19 U.S.C. 81a–81u), and the regulations of the Board (15 CFR part 400). It was formally filed on June 9, 2003.

The proposed subzone would include two ISI facilities located about 60 miles southwest of Atlanta: Site 1 (138 acres/130,000 sq. ft.)—manufacturing plant located at 200 Piedmont Circle, LaGrange (Troup County), Georgia; and, Site 2 (5 acres/25,000 sq. ft.)—warehouse located within the Gordon Commercial Park at 118 Gordon Commercial Drive, LaGrange. The facilities (400 employees) are used to produce automotive airbag inflators for

export and the domestic market. The manufacturing plant has capacity to produce about six and a half million inflators annually. Components purchased from abroad (representing about 10% of finished inflator value) include: bases, caps, flanges, disks, bodies, closures, and connectors classified under HTSUS 8708.99.8080, and filters (duty rate range: free—2.5%).

FTZ procedures would exempt ISI from Customs duty payments on the foreign components used in export production. On its domestic sales and exports to NAFTA countries, ISI would be able to defer duty payment on the foreign components used in production until the finished inflators are formally entered for consumption. No duties would be paid on foreign components of inflators that are transferred in-bond to auto assembly plants with subzone status. The application indicates that subzone status would help improve the facilities' international competitiveness.

In accordance with the Board's regulations, a member of the FTZ Staff has been designated examiner to investigate the application and report to the BBoard.

Public comment on the application is invited from interested parties. Submissions (original and three copies) shall be addressed to the Board's Executive Secretary at the following addresses:

1. *Submissions via Express/Package Delivery Services:* Foreign-Trade Zones Board, U.S. Department of Commerce, Franklin Court Building—Suite 4100W, 1099 14th Street, NW., Washington, DC 20005; or,

2. *Submissions via the U.S. Postal Service:* Foreign-Trade Zones Board, U.S. Department of Commerce, FCB—4100W, 1401 Constitution Ave., NW., Washington, DC 20230.

The closing period for their receipt is August 18, 2003. Rebuttal comments in response to material submitted during the foregoing period may be submitted during the subsequent 15-day period (to September 1, 2003).

A copy of the application will be available for public inspection at the Office of the Foreign-Trade Zones Board's Executive Secretary at address No.1 listed above and at the U.S. Department of Commerce Export Assistance Center, Suite 900, 285 Peachtree Center Avenue, Atlanta, Georgia 30308.

Dated: June 10, 2003.

Dennis Puccinelli,

Executive Secretary.

[FR Doc. 03-15289 Filed 6-16-03; 8:45 am]

BILLING CODE 3510-DS-P

DEPARTMENT OF COMMERCE

Foreign-Trade Zones Board

[Docket 28—2003]

Foreign-Trade Zone 151—Findlay, OH; Application for Expansion

An application has been submitted to the Foreign-Trade Zones (FTZ) Board (the Board), by the Findlay Hancock Chamber of Commerce (FHCOC), grantee of Foreign-Trade Zone 151, requesting authority to expand its zone in Findlay, Ohio, within the Toledo Customs port of entry. The application was submitted pursuant to the provisions of the Foreign-Trade Zones Act, as amended (19 U.S.C. 81a–81u), and the regulations of the Board (15 CFR part 400). It was formally filed on June 10, 2003.

FTZ 151 was approved on July 6, 1988 (Board Order 389, 53 FR 27058, 7/18/88) and expanded on February 10, 1999 (Board Order 1023, 64 FR 8542, 2/22/99). The general-purpose zone currently consists of two sites (921 acres) in Findlay (Hancock County): *Site 1* (820 acres)—Tall Timbers Industrial Center located at the intersection of State Route 12 and County Road 95; and, *Site 2* (101 acres, 2 parcels)—Ball Metal Container Group general-purpose warehouse facility located at 12340 Township Road 99 East and a warehouse facility located on County Road 95 (expires 6/30/2004). In a separate pending application (FTZ Doc. 13–03), the grantee has requested an indefinite extension of authority for Site 2.

The applicant is now requesting authority to expand the zone to include an additional site: *Proposed Site 3* (373 acres) within the 398-acre Ottawa Industrial Park, located at the intersection of Williamstown Street and Sugarmill Drive in Ottawa (Putnam County). The site will provide public warehousing and distribution services to area businesses. No specific manufacturing authority is being requested at this time. Such requests would be made to the Board on a case-by-case basis.

In accordance with the Board's regulations, a member of the FTZ Staff has been designated examiner to investigate the application and report to the Board.

Public comment on the application is invited from interested parties. Submissions (original and 3 copies) shall be addressed to the Board's Executive Secretary at one of the addresses below:

1. *Submissions via Express/Package Delivery Services:* Foreign-Trade Zones

Board, U.S. Department of Commerce, Franklin Court Building—Suite 4100W, 1099 14th Street NW., Washington, DC 20005; or

2. Submissions via the U.S. Postal Service: Foreign-Trade Zones Board, U.S. Department of Commerce, FCB—Suite 4100W, 1401 Constitution Avenue, NW., Washington, DC 20230.

The closing period for their receipt is August 18, 2003. Rebuttal comments in response to material submitted during the foregoing period may be submitted during the subsequent 15-day period (to September 1, 2003).

A copy of the application and accompanying exhibits will be available for public inspection at the Office of the Foreign-Trade Zones Board's Executive Secretary at the first address listed above, and at the Office of the Findlay/Hancock County Chamber of Commerce, 123 E. Main Cross Street, Findlay, Ohio 45840.

Dated: June 10, 2003.

Dennis Puccinelli,

Executive Secretary.

[FR Doc. 03-15291 Filed 6-16-03; 8:45 am]

BILLING CODE 3510-DS-P

DEPARTMENT OF COMMERCE

Foreign-Trade Zones Board

[Docket 25-2003]

Foreign-Trade Zone 203—Moses Lake, WA; Application for Subzone Status; Inflation Systems, Inc., Plant (Automotive Airbag Inflators and Propellant); Moses Lake, WA

An application has been submitted to the Foreign-Trade Zones Board (the Board) by the Moses Lake Public Corporation, grantee of FTZ 203, requesting special-purpose subzone status for the automotive airbag inflator and propellant manufacturing plant of Inflation Systems, Inc. (ISI) (a subsidiary of Takata Corporation, of Tokyo, Japan) located in Moses Lake, Washington. The application was submitted pursuant to the provisions of the Foreign-Trade Zones Act, as amended (19 U.S.C. 81a-81u), and the regulations of the Board (15 CFR part 400). It was formally filed on June 9, 2003.

The ISI plant (125 acres/234,000 sq. ft.) is located at 9138 Randolph Road NE in Moses Lake (Grant County), Washington. The facility (300 employees) is used to produce automotive airbag inflators and related propellant for export and the domestic market. The plant has capacity to produce about four and half million inflators and three million pounds of

propellant annually. Propellants ISI manufactures include 3110, 2004, 128T classified under HTSUS 3602.00.00 (duty free). Components and chemical inputs purchased from abroad (representing between 10-72% of finished inflator and propellant value) include: bases, caps, flanges, disks, bodies, closures, and connectors classified under HTSUS 8708.99.8080, filters, strontium nitrate, 5AT, K5AT, BHT, and DNPH (duty rate range: free-6.5%).

FTZ procedures would exempt ISI from Customs duty payments on the foreign components and chemicals used in export production. On its domestic sales and exports to NAFTA countries, ISI would be able to choose the duty rates that apply to finished propellant (duty free) and airbag inflators (2.5%) for the foreign inputs noted above that have higher rates. The application indicates that subzone status would help improve the plant's international competitiveness.

In accordance with the Board's regulations, a member of the FTZ Staff has been designated examiner to investigate the application and report to the Board.

Public comment on the application is invited from interested parties. Submissions (original and three copies) shall be addressed to the Board's Executive Secretary at the following addresses:

1. Submissions via Express/Package Delivery Services: Foreign-Trade Zones Board, U.S. Department of Commerce, Franklin Court Building—Suite 4100W, 1099 14th Street, NW., Washington, DC 20005; or,

2. Submissions via the U.S. Postal Service: Foreign-Trade Zones Board, U.S. Department of Commerce, FCB—4100W, 1401 Constitution Ave., NW., Washington, DC 20230.

The closing period for their receipt is August 18, 2003. Rebuttal comments in response to material submitted during the foregoing period may be submitted during the subsequent 15-day period (to September 1, 2003).

A copy of the application will be available for public inspection at the Office of the Foreign-Trade Zones Board's Executive Secretary at address No.1 listed above and at the Bureau of Customs and Border Protection Office, Grant County International Airport, 7810 Andrews Street NE., Moses Lake, Washington 98837.

Dated: June 10, 2003.

Dennis Puccinelli,

Executive Secretary.

[FR Doc. 03-15288 Filed 6-16-03; 8:45 am]

BILLING CODE 3510-DS-P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[I.D. 061203A]

Proposed Information Collection; Comment Request; Subsistence Fishery for Pacific Halibut in Waters off Alaska, Registration and Gear Marking

AGENCY: National Oceanic and Atmospheric Administration (NOAA).

ACTION: Notice.

SUMMARY: The Department of Commerce, as part of its continuing effort to reduce paperwork and respondent burden, invites the general public and other Federal agencies to take this opportunity to comment on proposed and/or continuing information collections, as required by the Paperwork Reduction Act of 1995, Public Law 104-13 (44 U.S.C. 3506(c)(2)(A)).

DATES: Written comments must be submitted on or before August 18, 2003.

ADDRESSES: Direct all written comments to Diana Hynek, Departmental Paperwork Clearance Officer, Department of Commerce, Room 6625, 14th and Constitution Avenue, NW., Washington, DC 20230 (or via the Internet at dHynek@doc.gov).

FOR FURTHER INFORMATION CONTACT: Requests for additional information or copies of the information collection instrument and instructions should be directed to Patsy A. Bearden at 907-586-7228 or at patsy.bearden@noaa.gov.

SUPPLEMENTARY INFORMATION:

I. Abstract

This submission seeks renewal of collection-of-information requirements that are part of the program for the Pacific halibut subsistence fishery. The program includes requirements for registration to participate in the fishery, and the marking of certain types of gear used in this fishery. The registration requirement is intended to allow qualified persons to practice the long-term customary and traditional harvest of Pacific halibut for food in a non-commercial manner. The gear-marking requirement aids in enforcement and in actions related to gear damage or loss.

II. Method of Collection

The registration information may be submitted by an individual or as a list of multiple individuals from an Alaska Native tribe. Submissions may be made by mail, FAX, e-mail or on-line.

III. Data

OMB Number: 0648-0460.

Form Number: None.

Type of Review: Regular submission.

Affected Public: Individuals or households, and not-for-profit institutions.

Estimated Number of Respondents: 4,658.

Estimated Time Per Response: 10 minutes for a subsistence halibut registration; and 15 minutes for subsistence halibut gear marking.

Estimated Total Annual Burden Hours: 1,167.

Estimated Total Annual Cost to Public: \$16,816.

IV. Request for Comments

Comments are invited on: (a) whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; (b) the accuracy of the agency's estimate of the burden (including hours and cost) of the proposed collection of information; (c) ways to enhance the quality, utility, and clarity of the information to be collected; and (d) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or other forms of information technology.

Comments submitted in response to this notice will be summarized and/or included in the request for OMB approval of this information collection; they also will become a matter of public record.

Dated: June 10, 2003.

Gwellnar Banks,

Management Analyst, Office of the Chief Information Officer.

[FR Doc. 03-15293 Filed 6-16-03; 8:45 am]

BILLING CODE 3510-22-S

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[I.D. 061203B]

Proposed Information Collection; Comment Request; Subsistence Fishery for Pacific Halibut in Waters off Alaska, Annual Survey

AGENCY: National Oceanic and Atmospheric Administration (NOAA).

ACTION: Notice.

SUMMARY: The Department of Commerce, as part of its continuing effort to reduce paperwork and respondent burden, invites the general public and other Federal agencies to take this opportunity to comment on

proposed and/or continuing information collections, as required by the Paperwork Reduction Act of 1995, Public Law 104-13 (44 U.S.C. 3506(c)(2)(A)).

DATES: Written comments must be submitted on or before August 18, 2003.

ADDRESSES: Direct all written comments to Diana Hynek, Departmental Paperwork Clearance Officer, Department of Commerce, Room 6625, 14th and Constitution Avenue, NW., Washington, DC 20230 (or via the Internet at dHynek@doc.gov).

FOR FURTHER INFORMATION CONTACT:

Requests for additional information or copies of the information collection instrument and instructions should be directed to Patsy A. Bearden at 907-586-7228 or at patsy.bearden@noaa.gov.

SUPPLEMENTARY INFORMATION:

I. Abstract

This survey is part of a subsistence Pacific halibut program that is intended to allow qualified persons to practice the long-term customary and traditional harvest of Pacific halibut for food in a non-commercial manner. The annual survey would be voluntarily submitted to NOAA to report Pacific halibut catch for the prior year. The catch reports will be used to help track the impacts of the program.

II. Method of Collection

The annual survey may be submitted by mail, FAX, e-mail or by individual post-season interviews.

III. Data

OMB Number: None.

Form Number: None.

Type of Review: Regular submission.

Affected Public: Individuals or households, and not-for-profit institutions.

Estimated Number of Respondents: 8,900.

Estimated Time Per Response: 30 minutes.

Estimated Total Annual Burden Hours: 4,450.

Estimated Total Annual Cost to Public: \$8,900.

IV. Request for Comments

Comments are invited on: (a) whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; (b) the accuracy of the agency's estimate of the burden (including hours and cost) of the proposed collection of information; (c) ways to enhance the quality, utility, and clarity of the information to be

collected; and (d) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or other forms of information technology.

Comments submitted in response to this notice will be summarized and/or included in the request for OMB approval of this information collection; they also will become a matter of public record.

Dated: June 10, 2003.

Gwellnar Banks,

Management Analyst, Office of the Chief Information Officer.

[FR Doc. 03-15294 Filed 6-16-03; 8:45 am]

BILLING CODE 3510-22-S

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

Federal Consistency Appeal by Islander East Pipeline Company From an Objection by the Connecticut Department of Environmental Protection

AGENCY: National Oceanic and Atmospheric Administration (NOAA), Department of Commerce (Commerce).

ACTION: Notice of remand and stay of appeal proceedings; reopening of public comment period.

SUMMARY: This notice: (1) Announces a remand of Islander East's administrative appeal (Consistency Appeal of Islander East Pipeline Company, L.L.C.) to the Connecticut Department of Environmental Protection; (2) announces a suspension in processing Islander East's administrative appeal by the Department of Commerce, for a period ending no later than July 31, 2003; (3) reopens the period for the public to comment on Islander East's administrative appeal; and (4) provides information about procedural aspects of the appeal that are affected by the remand and stay of appeal proceedings.

DATES: The remand of the appeal to the Connecticut Department of Environmental Protection will extend for a period ending no later than July 31, 2003. The stay of appeal proceedings by the Department of Commerce will run through a period ending no later than July 31, 2003. The public comment period will now close on July 31, 2003, but will be extended assuming processing of the appeal resumes. The Federal agency comment period will be extended to run through July 31, 2003, and will be further extended after the appeal has recommenced.

ADDRESSES: All e-mail comments on issues relevant to the Secretary of Commerce's (Secretary) decision in this appeal may be submitted to *Islander East.comments@noaa.gov*. Comments may also be sent by mail to the Office of the General Counsel for Ocean Services, National Oceanic Atmospheric Administration, U.S. Department of Commerce, 1305 East-West Highway, Silver Spring, MD 20910. Materials from the appeal record are available at the Internet site <http://www.ogc.doc.gov/czma.htm> and at the Office of the General Counsel for Ocean Services. Also, public filings made by the parties to the appeal are to be available for review at the Connecticut Department of Environmental Protection, 79 Elm Street, Hartford, CT.

FOR FURTHER INFORMATION CONTACT: Branden Blum, Senior Counselor, NOAA Office of the General Counsel, via e-mail at *GCOS.inquiries@noaa.gov*, or at 301-713-2967, extension 186.

SUPPLEMENTARY INFORMATION:

I. Remand and Stay

In November 2002, the Islander East Pipeline Company, L.L.C. (Islander East) filed a notice of appeal with the Department of Commerce (Department), pursuant to the Coastal Zone Management Act of 1972 (CZMA), as amended, asking that the Secretary of Commerce override the State of Connecticut's (State) objection to Islander East's proposed natural gas pipeline. The pipeline would extend from near North Haven, Connecticut, across the Long Island Sound to a terminus in Suffolk County (Long Island), New York. Connecticut's objection is based on the project's potential effect on the natural resources or land and water uses of Connecticut's coastal zone.

In March 2003, and then in early May 2003, the Department granted, and then extended, a stay of proceedings for this appeal, as jointly requested by the parties. Subsequently, on May 15, 2003, Islander East requested the Department of Commerce to: (1) Continue the stay then in place regarding the Department's proceeding of the appeal; and (2) remand the proceeding to the Connecticut Department of Environmental Protection. The remand would allow the State to reconsider its October 2002 objection to the proposed pipeline project, based on new information submitted by Islander East. The new information primarily involves changes proposed to minimize adverse environmental impacts to Long Island Sound that may result from construction of the proposed pipeline. The changes

are intended to address concerns which were a basis for the State's objection to the project.

The State of Connecticut advised the Department on May 23, 2003, that it did not object to a remand; nor did it object to the period of the remand ending no later than July 31, 2003, as proposed by Islander East. On June 2, 2003, the Department granted the requested remand and stay pursuant to 15 CFR 930.129(d).

II. Public Comments

During the remand and stay, the public may continue to submit comments to the Department of Commerce (see address section above) on issues to be considered if the appeal recommences. A summary of the grounds for which Islander East requested an override of the State's objection appears in the **Federal Register** at 68 FR 3513. The public comment period, which was announced in this same issue of the **Federal Register** as ending on May 8, 2003, is reopened through July 31, 2003. Comments received after May 8, 2003, but before the publication of this notice, will be considered to be timely filed.

III. Other Procedural Matters

This portion of the **Federal Register** notice provides information concerning other procedural aspects of the Islander East appeal that are affected by the remand and stay. The Federal agency comment period will be reopened and letters announcing this action will be sent to agencies whose views were previously solicited but not yet received. If the Department resumes processing the appeal, both the public and federal agency comment periods will be further extended in order to provide an adequate opportunity to consider the State of Connecticut's brief. (The State's brief had been due on March 24, 2003. As announced previously, the State's brief is now due 45 days after the appeal has recommenced.) **Note:** the additional time for comments, to be provided if the appeal recommences, will not be commensurate with the length of the stays. This is a change to advice contained in a **Federal Register** notice announcing the stay granted on March 17, 2003 (see 68 FR 14401), and reflects the ongoing nature of the stay. The stay requested at the time we provided our earlier advice is far shorter than the overall length of the stay as subsequently extended.

The scheduling of a public hearing on the appeal will continue to be delayed until after processing of the appeal

resumes, consistent with the earlier request of Islander East and the State.

A summary of relevant issues as well as additional background on the appeal appears in a January 24, 2003, **Federal Register** announcement, 68 FR 3513, a copy of which can be found at the Department of Commerce CZMA appeals Web site www.ogc.doc.gov/czma.htm. The Web site also provides access to documents from the appeal record and general information concerning the appeal process.

Questions about the stay for the Islander East appeal may be sent to NOAA via e-mail (*GCOS.inquiries@noaa.gov*) or made by telephone (301 713-2967, extension 186).

(Federal Domestic Assistance Catalog No. 11.419 Coastal Zone Management Program Assistance.)

Dated: June 11, 2003.

James R. Walpole,
General Counsel.

[FR Doc. 03-15206 Filed 6-16-03; 8:45 am]

BILLING CODE 3510-08-M

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[I.D. 060303B]

Marine Mammals; File No. 550-1712

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Receipt of application.

SUMMARY: Notice is hereby given that Bernd Wursig, Ph.D., Professor and Director of the Institute of Marine Life Sciences, Texas A&M University, 4700 Avenue U, Building 303, Galveston, TX 77551, has applied in due form for a five-year permit to take bottlenose dolphins (*Tursiops truncatus*) for purposes of scientific research.

DATES: Written or telefaxed comments must be received on or before July 17, 2003.

ADDRESSES: The application and related documents are available for review upon written request or by appointment in the following office(s):

Permits, Conservation and Education Division, Office of Protected Resources, NMFS, 1315 East-West Highway, Room 13705, Silver Spring, MD 20910; phone (301)713-2289; fax (301)713-0376; and Southeast Region, NMFS, 9721 Executive Center Drive North, St. Petersburg, FL 33702-2432; phone (727)570-5301; fax (727)570-5320.

FOR FURTHER INFORMATION CONTACT: Jill Lewandowski or Carrie Hubard, (301)713-2289.

SUPPLEMENTARY INFORMATION: The subject permit is requested under the authority of the Marine Mammal Protection Act of 1972, as amended (MMPA; 16 U.S.C. 1361 *et seq.*) and the Regulations Governing the Taking and Importing of Marine Mammals (50 CFR part 216).

The proposed research is a continuation of behavioral ecology studies of bottlenose dolphins in the Gulf of Mexico along the Texas and Louisiana coastline. The applicant is specifically requesting to take bottlenose dolphins by close approach for photo-id, behavioral observation and biopsy sampling. Proposed takes include 1,000 individuals for photo-identification and behavioral observation annually and 250 takes of juveniles/adults by biopsy sampling over the course of the Permit. Calves would not be biopsy sampled.

In compliance with the National Environmental Policy Act of 1969 (42 U.S.C. 4321 *et seq.*), an initial determination has been made that the activity proposed is categorically excluded from the requirement to prepare an environmental assessment or environmental impact statement.

Written comments or requests for a public hearing on this application should be mailed to the Chief, Permits, Conservation and Education Division, F/PR1, Office of Protected Resources, NMFS, 1315 East-West Highway, Room 13705, Silver Spring, MD 20910. Those individuals requesting a hearing should set forth the specific reasons why a hearing on this particular request would be appropriate.

Comments may also be submitted by facsimile at (301)713-0376, provided the facsimile is confirmed by hard copy submitted by mail and postmarked no later than the closing date of the comment period. Please note that comments will not be accepted by e-mail or by other electronic media.

Concurrent with the publication of this notice in the **Federal Register**, NMFS is forwarding copies of this application to the Marine Mammal Commission and its Committee of Scientific Advisors.

Dated: June 11, 2003.

Stephen L. Leathery,

Chief, Permits, Conservation and Education Division, Office of Protected Resources, National Marine Fisheries Service.

[FR Doc. 03-15296 Filed 6-16-03; 8:45 am]

BILLING CODE 3510-22-S

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[Docket No. 030530140-3140-01; I.D. 060903D]

Final Guidance for the Coastal and Estuarine Land Conservation Program

AGENCY: National Ocean Service, National Oceanic and Atmospheric Administration (NOAA), Commerce
SUMMARY: Notice is hereby given of the availability of Final Guidelines for the Coastal and Estuarine Land Conservation Program (CELCP). The Fiscal Year 2002 Appropriations Act for the Departments of Commerce, Justice and State directed the Secretary of Commerce to establish a Coastal and Estuarine Land Conservation Program "for the purpose of protecting important coastal and estuarine areas that have significant conservation, recreation, ecological, historical, or aesthetic values, or that are threatened by conversion from their natural or recreational state to other uses," giving priority to lands which can be effectively managed and protected and which have significant ecological value. The law further directed the Secretary to issue guidelines for this program delineating the criteria for grant awards and to distribute funds in consultation with the States' Coastal Zone Managers' or Governors' designated representatives based on demonstrated need and ability to successfully leverage funds.

These guidelines: outline a planning process for states to identify the conservation needs and priorities within each state; provide the information necessary for eligible coastal states to develop land conservation plans and nominate projects to a national competitive selection process; and delineate the criteria for grant awards.

The Final Guidance for the Coastal and Estuarine Land Conservation Program, published below, can also be found on NOAA's website at <http://www.ocrm.nos.noaa.gov/landconservation.html> or may be obtained upon request via the contact information listed below.

FOR FURTHER INFORMATION CONTACT: Elaine Vaudreuil, NOAA's Ocean Service, Office of Ocean and Coastal Resource Management, 1305 East-West Highway (N/ORM), Silver Spring, MD 20910; tel. 301-713-3155, extension 103; e-mail: Elaine.Vaudreuil@noaa.gov.

SUPPLEMENTARY INFORMATION: (1) Program Authorities: Specific authority for this Announcement is found in 16 U.S.C. 1456d. (2) Federal Domestic

Assistance Catalog Number 11.419 Coastal Zone Management Program Administration

Response to Comments

NOAA made the draft guidelines available for a 30-day public comment period and received 20 sets of comments. The comments ask NOAA to:

- clarify which elements of the guidelines would apply to earmarks versus competitive grants;
- be flexible throughout the grant process to account for the nature of real estate transactions and private, willing seller landowners;
- enable local governments or watershed organizations to apply directly to the national competitive process;
- make non-governmental organizations eligible to apply for grants and hold title to land;
- clarify that the definition of "acquisition" includes other conservation options, such as the purchase of conservation easements;
- clarify that all land secured through CELCP be held in public ownership and provide conservation in perpetuity;
- clarify the relevance of the term "Project Areas" and how it differs from "priority areas", and "types of land";
- include timelines or deadlines, as well as instructions for applying for funds, such as the anticipated number of grants and their amounts, in order to solicit meaningful project applications;
- clarify eligibility and the application process for planning funds;
- seek the lead agency's approval before making direct grants to other state agencies or local governments;
- lower the percentage of required non-federal match; clarify whether planning funds require non-federal match;
- clarify a waiver of match for U.S. insular areas for projects up to \$200,000, in accordance with 48 U.S.C. 1469a(d);
- exercise its discretion to waive the match for underserved communities in specific circumstances, such as areas without public access;
- clarify whether the 5 percent limit on administrative costs refers to state, Federal, or combined program administration, and address state indirect costs that are incurred for grant administration;
- extend the 2-year period for land stewardship costs to a 5-year period and limit costs to 5 percent of the total grant award;
- make land acquisition the only eligible use of funds under the CELCP, and not program administration and stewardship costs, but rather allow these costs as state match contributions;

- enable states to use lands anywhere in the states' coastal zone as match, rather than lands in "...the vicinity of the property...or in the same project area ..";

- not require that lands used as match also contain deed restrictions similar to the land directly acquired under this program;

- prohibit "the acquisition of land for active recreation such as sports facilities, playgrounds or like uses.≥;

- address how pre-existing uses would be handled;

- not make too onerous the requirement for "a strategy for long-term stewardship" for each project, but rather ensure that the restrictions on future use of the property noted in 2.6(a) of the guidance are included as part of the land transaction;

- give greater recognition in the national ranking and selection criteria to: inter-state cooperation in developing state plans; to priorities within National Estuary Program comprehensive plans; and to projects within project areas that have higher population densities or urbanized areas;

- clarify whether an "assessment of priority land conservation needs", as described in section 1.3 is included among plan components at section 3.1;

- base the project identification process on scientific assessments of habitat needs;

- allow plans developed through other planning and public review processes, such as approved coastal management programs or watershed conservation plans, to be "adopted" or "recognized" by the state for purposes of a state's CELC Plan;

- add restoration plans to the types of plans to be considered in developing CELC plans;

- remove the criterion in section 3.1.b that requires projects to establish or help to "establish conservation corridors and/or linkages" as an overriding national project selection criteria;

- clarify that the "letter of intent" reflects an expectation of continuing negotiations leading to a purchase agreement;

- emphasize negotiation with willing sellers, and avoid projects that require condemnation;

- ask applications to note adjacent land uses on the project location map;

- clarify which standards are to be used for appraisals;

- allow cost estimates at the project application stage and not limit project applications to properties with letters of intent or contracts;

- reappoint and reconstitute the national peer review panel annually and

identify alternates to ensure that conflicts of interest can be addressed without delay;

- ensure geographic representation of coastal regions on the peer review panel and in the distribution of project funds;

- allow eligible entities to apply for grants for projects that have already closed during the prior year;

- administer CELC grants efficiently, recognizing that states must act on a timely basis to take advantage of conservation opportunities;

- clarify how resources will be allocated to each state on an annual basis, eg. through a formula based on shoreline mileage; and

- consider that requiring "...maps of "project areas" that identify the State's priority areas..." is too specific for planning purposes and may cause concern.

In response to these comments, in the final guidelines, NOAA has:

- added language to clarify which elements of the guidelines apply to earmarks versus competitive grants;

- provided more flexibility regarding when certain documents must be submitted and with regard to reimbursement of land acquisition costs in certain cases;

- clarified that the term "acquisition" includes the purchase of conservation easements;

- clarified that easements would be held in public ownership, as well as donated lands that are counted toward the non-federal match;

- revised the definition of "project areas" to clarify its meaning and relationship to other terms, and not intended to identify specific properties.

- clarified that the state's lead agency is eligible to apply for planning funds;

- clarified that NOAA will consult with the state's lead agency prior to making direct grants to other state agencies or local governments;

- clarified a waiver of match for U.S. insular areas for projects up to \$200,000, in accordance with 48 U.S.C. 1469a(d);

- addressed state indirect costs incurred for grant administration;

- extended to 3-years the period for initial land stewardship and limited the costs to 5 percent of the grant award;

- made the acquisition of land for active recreation such as sports facilities, playgrounds or similar uses

- ineligible for use of CELCP funds and inconsistent activities under section 2.6;

- clarified that state CELC plans identify the need for conservation through acquisition;

- clarified that plans developed through other planning and public review processes, such as approved coastal management programs or

watershed conservation plans, may be incorporated into a CELC plan;

- added restoration plans to the types of plans that may be considered in developing a CELC plan;

- clarified the nature of the documentation needed to prove an owner's willingness to sell;

- included identification of adjacent land uses on the project location map;

- added clarification regarding the budget justification and documentation required in the project application, including standards for appraisals, and some flexibility regarding projects that must go to settlement before a grant award is issued;

- clarified that NOAA will reconstitute the peer review panel annually and identify possible alternates; and

- removed the criterion for conservation corridors from the list of national criteria, as it is not listed in statute with the other criteria.

Statutory language requires 100 percent match of CELCP funds and distribution of funds in consultation with the States' Coastal Zone Manager or the Governors' designated representative. Coastal states are encouraged to work with other state, interstate, and local governments, with input from non-governmental organizations, to identify and nominate projects that advance the state's conservation priorities. No discretion is provided to NOAA by statute to waive the match for planning grants or for underserved communities.

Unless otherwise provided by law, lands (or interests therein) acquired with Federal funds under the CELCP will be held by a public entity. Federal regulations that govern matching funds generally presume a connection between the land to be acquired and the land used as match, and that deed restrictions would apply to properties counted as match as they would to property acquired through a cash contribution of the non-federal share.

Like the Forest Legacy Program, after which the CELCP was modeled, eligible states are to develop a plan in order to participate in the competitive program. NOAA encourages states that have existing plans that directly address land conservation priorities for portions of its coastal area to make use of, or even incorporate, those existing plans, if applicable, in a CELC plan. The program's project ranking criteria will address whether projects meet the national criteria and are included within a state CELC plan.

NOAA will publish deadlines and guidance for project applications in its annual request for proposals. NOAA

will make every effort to make the grants process efficient, and will strive for geographic distribution of project funds to the extent possible in a merit-based competitive process.

Final Guidelines

1. General Information

1.1 Authority and Purpose for the Program

The Department of Commerce, Justice, and State Appropriations Act of 2002 (Public Law 107-77), directed the Secretary of Commerce to establish a Coastal and Estuarine Land Conservation Program "for the purpose of protecting important coastal and estuarine areas that have significant conservation, recreation, ecological, historical, or aesthetic values, or that are threatened by conversion from their natural or recreational state to other uses," giving priority to lands which can be effectively managed and protected and that have significant ecological value. The law further directed the Secretary to issue guidelines for this program delineating the criteria for grant awards and to distribute funds in consultation with the States' Coastal Zone Managers' or Governors' designated representatives based on demonstrated need and ability to successfully leverage funds. Grants funded under this program shall require a 100-percent match from other sources. The authority for this program is codified at 16 U.S.C. 1456d.

The National Oceanic and Atmospheric Administration will work with the coastal states and territories through formal relationships established through its role in implementing the Coastal Zone Management Act of 1972, as amended (16 USC 1451 *et seq.*) (CZMA), to carry out this program. The CZMA highlights the importance of coastal and estuarine areas and contains policies related to the ecological, conservation, recreational, and aesthetic values of coastal areas.

1.2. Purpose of the Guidelines

These guidelines establish the eligibility, procedural, and programmatic requirements for participation in the Coastal and Estuarine Land Conservation Program (CELCP), authorized by the FY 2002 Appropriations Act. As required by the Act, these guidelines delineate the criteria for all financial assistance awards under the CELCP. These guidelines outline a three-stage process for competitive funding under the program: development of a state coastal and estuarine land conservation plan; a process for identifying and ranking

qualified projects within the state and nominating them to a national competitive selection process annually; and a process for conducting peer review and selection of projects at the national level. State participation in this program is voluntary. Coastal states that choose to participate in the CELCP, including eligible project applicants, shall use the guidelines when developing state conservation plans, proposing or soliciting land acquisition projects, applying for funds, and carrying out selected projects under this program.

1.3 Definition of Terms

Appropriations Act or Act. The Departments of Commerce, Justice, and State, the Judiciary, and Related Agencies Appropriations Act, 2002 (P.L. 107-77).

CELCP. The Coastal and Estuarine Land Conservation Program established by these guidelines pursuant to the Act.

Coastal and Estuarine Areas. Those areas within a coastal state that are: part of the state's coastal zone, as designated in the state's federally approved coastal management program under the CZMA or within the state's coastal watershed boundary as described in NOAA's Coastal Zone Boundary Review (October 1992). The coastal watershed boundary is defined: for estuarine drainage areas by the inland boundary of those 8-digit USGS hydrologic cataloguing units that contain the head of tide, and; for the Great Lakes region or those portions of watersheds along the marine coast that drain directly to marine waters by those cataloguing units that are located adjacent to the coast.

Coastal and Estuarine Land Conservation Plan or CELC Plan. A plan, to be developed by each coastal state in order to participate in the program, that provides an assessment of priority land conservation needs and clear guidance for nominating and selecting land conservation projects within the state.

Coastal State(s). As defined in section 304(4) of the Coastal Zone Management Act (16 USC section 1453(4)), "coastal state(s)" means a state of the United States in, or bordering on, the Atlantic, Pacific, or Arctic Ocean, the Gulf of Mexico, Long Island Sound, or one or more of the Great Lakes. The term also includes Puerto Rico, the Virgin Islands, Guam, the Commonwealth of the Northern Mariana Islands, and American Samoa.

CZMA. The Coastal Zone Management Act of 1972, as amended (16 USC 1451 *et seq.*).

Land Acquisition. Acquisition of real property, or interests therein, by fee

title, lease, easement, or any other method consistent with applicable State law or regulation.

NERR or Reserve. A National Estuarine Research Reserve designated pursuant to section 315 of the CZMA.

NOAA. The National Oceanic and Atmospheric Administration, within the Department of Commerce.

OCRM. The Office of Ocean and Coastal Resource Management, within the NOAA National Ocean Service.

Project Areas. Discrete areas to be identified within a CELC Plan that describe the state's priority areas for conservation based on national and state criteria, representing the values to be protected through the program and areas threatened by conversion. Project areas may consist, for example, of: geographic areas or habitat types identified by a state coastal management plan as areas of concern; significant areas within other coastal, estuarine, or watershed management plan(s) that may be priority areas for conservation; or areas that provide linkages or corridors among conservation areas within a geographical area.

Secretary. The Secretary of Commerce.

State lead agency. The agency or entity responsible for coordinating the establishment and implementation of the CELCP at the state level. The lead agency will be presumed to be the lead agency designated for implementing the state's coastal management program, as approved pursuant to the CZMA, unless otherwise designated by the Governor. If a state's coastal management program does not wish to assume the lead role, the Governor may designate as the lead agency another state agency with authority to plan, acquire or manage land for conservation purposes.

2. Eligibility Requirements

2.1 Who May Participate in the CELCP

Coastal states with approved coastal zone management plans or National Estuarine Research Reserves are eligible to participate in the CELCP. State participation is voluntary, and states may choose to participate by developing a Coastal and Estuarine Conservation Plan for approval by NOAA. The state lead agency will be responsible for coordinating the establishment and implementation of the CELCP at the state level.

2.2 Who May Submit a Project Application to the Competitive Process

Eligible coastal states that have submitted, and received approval of, a Coastal and Estuarine Land Conservation Plan, may submit

proposals to NOAA for federal funding under this program, provided that appropriated funds are available for competitive awards. The state lead agency may solicit, and include in their application, project proposals from additional state agencies, or local governments as defined at 15 CFR 24.3, or entities eligible for assistance under section 306A(e) of the CZMA (16 USC 1455a(e)), provided that each has the authority to acquire and manage land for conservation purposes.

The state lead agency will be responsible for: soliciting projects that are consistent with priorities outlined in the state's plan, reviewing them for completeness, prioritizing them according to state criteria, and nominating projects to the national selection process. States are encouraged to submit proposals from multiple agencies as a consolidated package to NOAA. The state will also be responsible for ensuring that allocated funds are used for the purposes of and in a manner consistent with this program.

2.3 Qualifying Projects

To be eligible for funding under the CELCP, a project must:

- be located in a coastal or estuarine area included within a state's approved coastal and estuarine land conservation (CELC) plan and meet the national criteria described in section 3.1.b.;
- match Federal CELCP funds with non-federal funds at a ratio of 1:1;
- be held in public ownership (fee simple or conservation easements) and provide conservation in perpetuity; and
- provide for access to the general public or other public benefit, as appropriate and consistent with resource protection.

2.4 Who May Receive Funds and Hold Title to Land

NOAA may make financial assistance awards to eligible coastal states, including the state's lead agency for implementing the CELCP, the state's coastal management program or its National Estuarine Research Reserve(s). The recipient may in turn allocate grants or make sub-awards to other state agencies, local governments as defined at 15 CFR 24.3, or entities eligible for assistance under section 306A(e) of the CZMA (16 USC 1455a(e)) to carry out approved projects. NOAA may, at its discretion and in consultation with the applicable coastal state, make grants directly to any of these eligible entities in order to expedite completion of an approved project. The recipient, or other appropriate public agency designated by the recipient, will hold title to the land,

or interests in land, in perpetuity. NOAA will not make grants under the CELCP to non-governmental organizations unless otherwise directed by Congress.

2.5 Uses of CELCP Funds

The purpose of funding under the CELCP is to protect important coastal and estuarine areas with significant values or that are threatened by conversion, and that can be effectively managed. NOAA has outlined the following uses of CELCP funding that are consistent with these purposes, as well as some that are not considered to be consistent.

a. Eligible uses. CELCP funds may be used for the following purposes:

1. State Planning

- Development of CELC plans to carry out this program. Each eligible state's lead agency may receive up to a total of \$50,000 for this purpose, which must be matched with non-federal funds at a ratio of 1:1 through cash and/or in-kind contributions.

2. Program Administration

- Administration of the program, including such direct or indirect costs as salaries and benefits of staff directly involved in program planning, implementation, project review, etc., that shall not exceed 5 percent of the amount appropriated to the Secretary each year. If a state proposes indirect costs as part of an application, the total dollar amount of the proposed indirect costs must not exceed the indirect cost rate negotiated and approved by a cognizant Federal agency.

3. Acquisition Projects

- Acquisition of properties or interests in properties from willing sellers, provided that the terms and conditions will ensure that the property will be administered for conservation in perpetuity, including direct expenses relating to the acquisition of lands and interests in lands acquired under the authority of the CELCP; and

- Certain initial costs for land stewardship, not to exceed 5 percent of the award and not to exceed 3 years or the duration of award period, to allow for signage, public safety, or other stewardship purposes.

b. Ineligible uses. The Federal share of CELCP funds may not be used for the following purposes:

- Funding long-term operations, maintenance, and management of the land;
- Construction of buildings, boat launching facilities, docks or piers, shoreline armoring, or other facilities;

- Research;

- Acquisition of lands, or interests in lands, that completely restrict access to specific persons (e.g. non-residents of a community);

- Acquisition of lands, or interests in lands, to comply with mandatory or compensatory mitigation for recent or pending habitat losses resulting from the actions of agencies, organizations, companies or individuals;

- The sole or primary purpose of enforcing fish, wildlife, or other regulations, except when necessary for the accomplishment of approved project purposes; and

- Acquisition of land for active recreation, such as sports facilities, water parks, playgrounds, or similar uses.

Some of these purposes are allowable under the non-federal matching share. Refer to section 2.7(b), Source of Matching Funds, for additional information.

2.6 Ownership, Use and Long-term Stewardship

a. The title of property or interests in property will be held in perpetuity by the grant recipient or other appropriate public agency designated by the recipient. As a condition of any grant award, NOAA will require that the recipient, or the designated public agency, register and furnish to NOAA a lien, covenant, or other appropriate notice of record to advise that the property has been acquired or improved in whole or in part with Federal financial assistance funds (pursuant to 15 CFR 24.31) and assurances that the land will be held for conservation in perpetuity. The terms and conditions specified in conservation easements must also be consistent with the purposes of the CELCP.

b. In general, lands acquired with CELCP funds will allow access to the general public. However, access may be limited or controlled in an equitable manner for resource protection, public safety, or for other reasonable cause. User fees should not be charged to access lands acquired through this program. However, if user fees are charged, they should comply with any applicable state standards for user fees. In such cases, all income or other revenues derived from the fees shall be used for the maintenance or management of the property.

c. The property shall be managed in a manner that is consistent with the purposes for which it was entered into the program and shall not convert to other uses. As a condition of the grant award, a strategy for long-term stewardship must be developed for each

project that identifies the entity(ies) responsible for ongoing stewardship, including financial or staff support, and monitoring of conservation easements or ongoing activities to ensure that they are consistent with long-term conservation.

Activities that may be considered to be consistent with conservation purposes include: resource protection; restoration and enhancement, such as vegetative erosion control or restoration of natural water flow to the area; recreational activities, such as: hiking, hunting, and fishing; access for swimming, canoeing, kayaking; and research and educational activities. Construction of facilities on a minor scale, such as restrooms or boardwalks, to facilitate these activities and/or for the purpose of minimizing harm to coastal resources due to public access and recreation may be allowed depending on the proposed use of the property and the site environment.

Activities that are considered to be inconsistent include: active agricultural or aquaculture production; shoreline armoring or other hard erosion control structures; construction or expansion of roads, buildings or facilities except as noted above, or such facilities for active recreation as sports facilities, water parks, playgrounds, or similar uses.

d. Non-governmental organizations, corporations, or individuals may participate in the acquisition and long-term stewardship of lands through this program, except as provided under sections 2.2 and 2.4 of these guidelines.

e. Leasing or renting of the property or interest in property acquired through the CELCP to a third party is prohibited unless specifically authorized by NOAA. The recipient agrees that any authorized arrangement for leasing or renting property involved in the project must be: consistent with the authorized general and special purpose of the award; for adequate consideration; and consistent with applicable Department of Commerce requirements concerning, but not limited to, nondiscrimination and environmental compliance. All income or other revenues derived from an approved lease or rent arrangement shall be used to maintain or manage the property.

f. Pre-existing uses on the property must be identified as part of the project application. NOAA will review such uses for potential impacts and to determine whether they are consistent with the purposes of the CELCP. Applicants may wish to consider protecting land that contains pre-existing uses through a conservation easement, rather than through fee simple acquisition. If a project is approved with pre-existing uses, such

uses may not be expanded or converted to other uses without prior approval of NOAA.

g. If the property or interest in the land acquired with CELCP funds is sold, exchanged, divested, or converted to other uses that are inconsistent with the purposes for which it was acquired without prior approval of NOAA, the recipient must return to NOAA the full amount of the Federal share of funds for re-distribution in the CELCP grant process. In some cases, at the recipient's request, NOAA may approve the disposition of the property and issue instructions to sell the property. In such cases, the correct value to be returned will be calculated by applying the Federal share of participation in the cost of the original purchase to the proceeds of the sale after deduction of any actual and reasonable selling expenses.

2.7. Cost-sharing requirements

a. Matching requirement. Federal funds awarded under this program shall be matched with funds from non-federal sources on a 1:1 basis. The coastal state is responsible for ensuring that the full amount of the matching requirement is provided, particularly when the non-federal share includes contributions from other agencies, groups or individuals. Notwithstanding any other provision herein, and in accordance with 48 U.S.C. 1469a(d), the Program shall waive the requirement for local matching funds for any project under \$200,000 (including in-kind contribution) to the governments of Insular Areas, defined as the jurisdictions of the U.S. Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands.

b. Source of matching funds. The non-federal share of funding may be derived from state, local, non-governmental or private sources in the form of cash or the value of non-monetary or in-kind contributions, such as the value of donated lands or interests therein, or services such as on-site remediation, restoration, enhancement, or donated labor and supplies, provided that the in-kind contributions are necessary and reasonable to accomplish the objectives of the project. Such in-kind contributions must be identified in the project application, completed within the financial assistance award period, and documented as part of the completed project. Any land used as match must be located within the vicinity of the property being acquired, in the same project area identified in the state's plan, or be substantially related in terms of conservation values or objectives, and must meet the eligibility

criteria, ownership and stewardship conditions described in sections 2.3 through 2.6. The value of land used as match must be documented with the grant application, and must reflect nationally recognized appraisal standards, including, to the extent appropriate, the Uniform Appraisal Standards for Federal Land Acquisition. (<http://www.usdoj.gov/enrd/land-ack/>).

No funds or in-kind contributions from Federal or non-federal sources, including the value of donated lands or services, that have been previously used to satisfy the matching requirements of this program or that have been or will be counted or used to satisfy another Federal grant, can be counted toward the non-federal matching share. Unless otherwise provided by law, the value of property or interests in property that were acquired with Federal funding may not be used as non-federal match.

See 15 CFR 24.24 Matching or Cost-Sharing (Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments) for determining the value of in-kind contributions.

c. Banked match. States may apply the value of land or in-kind services accrued up to 3 years prior to submission of the grant application toward the non-federal share of funding. Such "banked match" is subject to the same terms described under section 2.7.b. above.

3. State Coastal and Estuarine Land Conservation Plans

3.1 Development of CELC Plan

In order to qualify to receive funds under this program, a coastal state must develop and submit to NOAA for approval, a Coastal and Estuarine Land Conservation Plan that provides an assessment of priority conservation needs and clear guidance for nominating and selecting land conservation projects within the state. State plans will be developed and submitted by the state lead agency, in conjunction with: the state's coastal management program (if different from the lead agency); any NERRs in that state; any other state or Federal agencies involved in coastal land acquisition, conservation, or management in the state; and other interested parties.

Plans are intended to be fairly simple and concise, and may make use of work that has already been done in the state or region, such as regional, state or local watershed protection, restoration or land conservation plans. A state may incorporate existing plans, or portions thereof, by reference into a CELC plan. States are encouraged to consider

conservation needs on a multi-state or regional scale, and to work with neighboring states where appropriate for the conservation of coastal and estuarine resources within the region. State plans must be developed through a public process, which would include a public scoping process and comment period. If a state CELC plan incorporates existing plans, or elements thereof, that were developed and vetted through a public review process, the state may choose to seek comment on whether those plans or elements should be incorporated into the CELC plan, rather than seeking comment on the substance of those plans or elements.

a. State CELC plans must include the following information:

- A map or description of the geographic extent of coastal and estuarine areas within the state, as defined for the purposes of the CELCP;
- A description of the types of lands or values to be protected through the program and the need for conservation through acquisition;

- Identification of "project areas" that represent the state's priority areas for conservation, including areas threatened by conversion, based on state and national criteria (listed below) for the program;

- A description of existing plans, or elements thereof, that are incorporated into this plan;

- A list of state or local agencies, or types of agencies, that are eligible to hold title to property acquired through the CELCP;

- A description of the state's process for reviewing and prioritizing qualified proposals for nomination to the national selection process. The vetting process should, at a minimum, involve representatives from the state's coastal zone management program, NERR(s), and any other agencies or entities that the state considers appropriate; and
- A description of public involvement and interagency coordination that occurred during the development of the plan.

b. State plans must address the following national criteria for projects and project areas as they relate to the purpose of the CELCP:

- Protects important coastal and estuarine areas that have significant conservation, recreation, ecological, historical, or aesthetic values, or that are threatened by conversion from their natural or recreational state to other uses;

- Gives priority to lands which can be effectively managed and protected and that have significant ecological value;

- Directly advances the goals, objectives, or implementation of the

state's coastal management plan or program, NERR management plans approved under the CZMA, national objectives of the CZMA, or a regional or state watershed protection plan involving coastal states with approved coastal management plans; and

- Is consistent with the state's approved coastal management program.

3.2 Approval of Plans

The Assistant Administrator for Ocean Services and Coastal Zone Management or his/her designee, shall be the approving official for plans submitted to NOAA under this program. Upon approval of its plan, a state will be eligible to receive competitive funding under the CELCP.

3.3 Update of Plans

States must update their CELC plans at least once every 5 years to reflect changes that have taken place within the state or region and submit the updated plans to OCRM.

4. Application, Review and Ranking Process

4.1 State Nomination and Selection Process

a. Solicitation of Projects. Based on notification from NOAA of the availability of funding to implement this program in any given year, states with approved CELC plans may notify and solicit project applications from qualified entities. States may, at their discretion, focus their annual project solicitation toward specific priorities or areas identified in their approved CELC plan.

Based on the requirements of the state's solicitation for project applications, eligible applicants should submit proposals to the state's lead agency. A project proposal that includes several separate and distinct phases may be submitted in phases, but any succeeding phases must compete against other proposals in the year submitted.

b. State Review and Prioritization

i. Proposal acceptance. The state lead agency determines whether a proposal should be accepted for consideration on the basis that it is complete and eligible under the criteria identified in section 2. If the application is incomplete, the lead agency may provide an opportunity for applicants to submit any information that is missing.

ii. Proposal review and ranking. The state lead agency reviews and prioritizes project applications through the process described in its CELC plan. Projects should be ranked according to the degree to which it meets the state's

CELC plan. A list of prioritized projects is then submitted to NOAA for consideration at the national level.

4.2. Information Required in Project Applications to NOAA

Applications submitted to NOAA for the national competitive process must contain the following:

a. A completed and signed Project Application Checklist (Appendix B). The checklist addresses some of the information requested in items b. through f., below. NOAA may modify this checklist as needed to effectively implement the project application and selection process;

b. Project Description. A statement that describes:

- The nature of the project, including acreage and types of habitats or land values to be protected, the legal rights to be acquired (i.e., fee title or easement), how the funds (Federal and non-federal) will be used, and conversion threats to the property, as well as a description of these same characteristics for any property that will be used as match;

- How the proposed project meets the state and national criteria and its expected benefits in terms of coastal and estuarine land conservation;

- Any pre-existing uses of the property, the nature of those uses, and whether those uses will continue after acquisition;

- Discrete benchmarks for completing the project within a specified time period. These benchmarks should indicate whether the project is "ready to go," has any deadlines associated with it, and whether the project is likely to be completed within the award period;

- The types of activities that would be allowed to take place on the land and a strategy for long-term stewardship, including support for long-term operations, such as maintenance or enforcement against illegal uses; and

- Whether this project has been submitted in application for other sources of Federal funding, and if so, which Federal program(s) and year(s).

c. Project Location. Two maps, as follows:

- A map of the state or coastal county showing the general location of the project;

- A map of the project site, which shows the location and extent of the proposed acquisition, and its relationship to significant natural features (slope, wetlands, dunes, floodplains, access points, etc.), as well as adjacent land uses.

d. Project Budget and Justification of Proposed Costs/Appraisal.

The project budget must include a breakdown of the following costs, as applicable, by category -- salary, fringe benefits, travel, equipment, supplies, contractual, construction, other. (Note: Use of Standard Form 424A is suggested as it provides a model template for this information, and will be required in the grant application package for all projects that are selected for funding.) The total budget must reflect the 1:1 match required by statute. For information on what may be counted as the non-federal matching share, refer to section 2.7. Applicants wishing approval of pre-award costs should include such a request in their application to NOAA and identify the costs, the time period in which they occurred, and a justification for their need as associated with the project. For information regarding pre-award costs, refer to section 5.1.b.

The negotiated price of the property, or interest in property, should be based on the fair market value determined by an independent appraisal conducted by a state-approved appraiser. Before funds can be disbursed to the grant recipient for purchase of a property, or interest in property, using CELCP funds, the applicant must obtain and submit the appraisal to NOAA (refer to section 4.4.b.) Independent appraisals must reflect nationally recognized appraisal standards, including, to the extent appropriate, the Uniform Appraisal Standards for Federal Land Acquisition, (<http://www.usdoj.gov/enrd/land-ack/>).

If an appraisal has been completed at the time of application and the applicant wishes to pursue the acquisition at a price above the appraised value, the applicant will need to demonstrate reasonable effort to negotiate at the appraised value and submit written justification for the higher price based on reasonableness, prudence, public interest, additional or updated appraisals, estimated condemnation/trial costs, and/or valuation.

If an appraisal is not available at the time the project application is submitted, the applicant may submit a good-faith estimate of the cost for the project based on market value or agreement with the willing seller. However, if the project is selected for funding, the amount of the grant cannot exceed the estimated cost in the project application. An appraisal will be required at the time the applicant submits a formal grant application to NOAA (refer to section 5.4). If the appraised value is higher than the estimated cost, the applicant will be required to make up the difference, and

if that is not possible, the project may have to be withdrawn or terminated.

e. Certification of Compliance with Federal Laws, Regulations and Policies. As part of the project application checklist (attached as Appendix B), the applicant must answer questions that will enable NOAA to determine whether a project may have an adverse impact and whether additional information may be required to satisfy the requirements of applicable Federal laws, regulations, or policies. If an Environmental Assessment or Environmental Impact Statement has been prepared for the project, attach a copy with the application. States will be responsible for ensuring that any project applications submitted to NOAA are consistent with the state's approved coastal management program and any applicable NERR Management Plans. Refer to section 6.0, which describes the applicability of requirements under Federal laws, regulations and policies.

f. Documentation of Willingness or Intent to Sell. The applicant must submit documentation that the current owner is a willing participant in a process of negotiation for possible sale of property, or interests in property, for conservation purposes and that the landowner has been advised of the applicability of Public Law 91-646, Uniform Relocation Assistance and Real Property Acquisitions Policies Act of 1970 (refer to section 6.8). This documentation may be in the form of a letter of willingness or intent, option letter, contract, or other similar form. If not submitted with the project application, it will be required with the grant application to NOAA.

4.3 National Ranking and Selection Process

NOAA will conduct a peer review process to prioritize and select among all projects nominated by states through their competitive process as follows:

a. Peer review and ranking process. A national peer review panel that consists of at least six members will review each project nominated by a state. Membership of the panel will be made up of at least one representative from each of the following: NOAA, another Federal land conservation program, the state coastal resource management community, estuarine reserve community, and two from the non-governmental sector (i.e., industry, conservation community). Each member will rank projects according to the degree to which they meet national criteria and submit individual rankings to NOAA. No member may have a vested interest or stand to benefit from any of the proposed projects.

Membership of the panel may be reconstituted annually, and NOAA may identify alternates in the event that substitutions are needed.

b. Ranking criteria. Projects will be reviewed and prioritized according to the degree to which they meet the national criteria described in section 3.1b. NOAA will establish weighting factors for these criteria, in consultation with the coastal states, and will provide these ranking criteria to the states with its notification of availability of funding. Within these criteria, NOAA may also consider the availability of support for long-term management and stewardship, and success in leveraging other sources of funding. All ranking factors will be described in the annual notification.

c. Selection of approved projects. The Assistant Administrator for Ocean Services and Coastal Zone Management or his/her designee will serve as the selecting official for projects, based on the national rankings as well as availability of funds. In selecting projects, NOAA may consider geographic distribution of projects, as well as other factors deemed necessary to select among similarly-ranked projects, as described in the annual notification. The selecting official may maintain and select from a contingency list, in the event that any approved projects fall through or are completed below the planned cost.

4.4 Grant Application to NOAA - Selected Projects

NOAA will notify each state of projects that have been selected through the competitive process. For each of these projects, the state must submit the following materials, which, when combined with the original project application, will complete the application for Federal financial assistance. States are encouraged to consolidate multiple projects into one application, with each project as a separate task, particularly for projects that will be awarded to local governments. NOAA may, at its discretion and in consultation with the relevant coastal state, agree with the state to accept an application from, and make a grant directly to, an agency other than the lead agency in order to expedite the completion of an approved projects that will be implemented by that other agency.

Grant application materials. The following materials must be submitted to NOAA, in order to complete the application for Federal financial assistance:

a. Standard forms for Federal financial assistance. These forms can be

found at the NOAA Grants Management Web site (<http://www.rdc.noaa.gov/grants/>) along with detailed application instructions.

- Application for Federal Assistance (Standard Form 424);
- Budget Information (Standard Form 424A);
- Statement of Assurances (Standard Form 424B);
- Certifications Regarding Debarment, Suspension, Drug-Free Workplace and Lobbying (CD-511)

b. Appraisal. If an appraisal was not previously submitted as part of the project application described in section 4.2, it must be submitted with the grant application. Refer to section 4.2 for guidelines regarding the appraisal.

c. Title opinion for the land(s) that will be purchased. The opinion should identify the current owner from which the land will be purchased, and whether there are any easements or other encumbrances on the land to be acquired. If there are easements or encumbrances, the applicant's attorney should specify the nature of these and certify that they would not interfere with the purposes for which the land is being acquired. A sample title opinion can be found at Appendix C.

5. Acceptance and Use of Funds

5.1 Allowable Costs

a. Cost principles. Allowable grant costs are limited to costs necessary and reasonable to achieve the approved objectives of the grant and be consistent with general cost principles for grants awarded by Federal agencies, as contained in the Office of Management and Budget (OMB) Circular A-87 "Cost Principles for State, Local, and Indian Tribal Governments," which will be incorporated into the grant award. A copy of OMB Circular A-87 can be found at <http://www.whitehouse.gov/omb/grants/>.

b. Pre-award costs. If an applicant incurs costs before the effective date of the grant, they do so at their own risk. Pre-award costs cannot be reimbursed except as approved by NOAA, although they may be counted as match. When approved, pre-award costs may include such costs as those necessary for conducting environmental assessments, including risk assessments; feasibility surveys; appraisals; title searches or opinions; or preparation of documents needed to satisfy Federal legal requirements, such as the National Environmental Policy Act. In some cases, with prior approval from NOAA, the cost of the land acquisition (fee simple or easement) may be reimbursed as a pre-award cost if the acquisition

occurred between the date the project was recommended for funding through the competitive selection process ("selected") and the date that the grant award was approved by NOAA.

5.2 Expenditure of Funds

a. Availability of funds. Once a grant agreement has been signed, a recipient may draw funds, as needed, toward completion of the project, in accordance with 15 CFR 24.21 Payment.

b. Timetable for expenditure of funds. The standard financial assistance award period is 18 months, and may be extended an additional 18 months if circumstances warrant, but may not exceed 3 years. Awards may also be closed out early if the project is completed in less time.

c. Unexpended funds. Any funds not expended within the grant period shall be de-obligated and revert to NOAA for redistribution through the CELCP process, including projects that fall through.

d. Projects that exceed planned costs. All requests for additional Federal funding for approved CELC projects must be submitted to the review process along with new grants.

e. Funds from the CELCP may be supplemented with funding from other Federal or non-federal sources, subject to any conditions that may apply to the expenditure of funds from such sources.

f. Amending a proposal. Any amendments to a proposal or request to reallocate funding within a grant proposal must be approved by NOAA. In general, if negotiations on a selected project fall through, the applicant cannot substitute an alternate site.

g. Performance reports. The state lead agency, and/or any other agency that received a financial assistance award directly from NOAA, is responsible for submitting to NOAA semi-annual reports documenting progress toward completion of each project, and a final report documenting completion of the projects and all terms and conditions of the award.

5.3 Conditions on Use of Funds

All CELCP financial assistance awards will contain the following special award conditions and/or other applicable requirements for the Department of Commerce described in the **Federal Register**, October 1, 2001 (66 FR 49917), as amended October 30, 2002 (67 FR 66109):

- In the event there are title discrepancies or encumbrances that NOAA deems interfere with the purpose for which these funds were granted, or if NOAA determines that the property is no longer used for the purpose for

which it was acquired, the recipient shall reimburse NOAA or its successor agencies for the Federal funds received for the project, subject to "use" and "disposition" instructions from NOAA or its successor agencies.

- Federal funds for this project will not be transferred to the recipient for the acquisition of land or interest(s) in land until the recipient has submitted the following to NOAA for review and approval: a completed and signed project checklist; appraisals of land made by a qualified independent appraiser and performed in accordance with Federal or state appraisal standards; evidence of title insurance or an opinion of title and a copy of the real estate contract for each parcel; and a map indicating the tract boundaries for the property or portion of property being acquired.

- Deeds for real property acquired with Federal funds provided through this award shall contain substantially the following provision:

"This property has been acquired with funds from a Federal financial assistance award. Title of the property conveyed by this deed shall vest in the [recipient of the award or other appropriate public agency designated by the recipient] subject to the condition that the property shall be managed for conservation purposes, consistent with the purposes for which it was entered into the CELCP, and shall not convert to other uses. In the event that the property is sold, exchanged, or converts to other uses, NOAA shall consult with the recipient before deciding to exercise any of the rights regarding disposition of the property and reimbursement of the Federal Government."

- Upon completion of all real estate closings, the recipient shall submit to NOAA/OCRM copies of the closing documents.

- The recipient shall cause to be erected and maintained at the site of any project, a permanent sign or plaque, satisfactory to NOAA, that identifies the project and indicates that the project has been funded under the Coastal and Estuarine Land Conservation Program by NOAA, in conjunction with the coastal state and/or National Estuarine Research Reserve or other partner.

5.4 Information the Recipient Must Retain on File

A grant recipient is expected to retain the following information for at least 3 years after a grant has been closed by NOAA at the end of the award period:

- A copy of the grant application, including project proposal, submitted to NOAA;
- Site location maps;

- Title opinion or certification;
- Appraisal;
- State Historic Preservation Officer's clearance; and
- Copies of any notices or determinations that pertain to compliance or consistency with Federal requirements.

6. Applicability of Other Federal Requirements

The approval of plans under this program and award of financial assistance are Federal activities subject to authorities such as the National Environmental Policy Act, Endangered Species Act, and the Federal consistency provisions of the CZMA. Before awarding funds, NOAA is responsible for ensuring that projects comply with these and other relevant authorities. A checklist, provided as part of the project application, will be used to determine whether additional information may be required to satisfy these requirements for any project.

6.1 National Flood Insurance Program (NFIP)

The NFIP prohibits the use of funds for acquisition or construction of buildings in special flood hazard areas in communities that are not participating in the Flood Insurance Program, as identified in the NFIP's Community Status Book. Construction of buildings is not an eligible use of CELCP funds. A community is not precluded from proposing projects within the floodplain for conservation purposes.

6.2 Coastal Barriers Resource Act (CoBRA)

In order to receive Federal funds, all proposed projects located on undeveloped coastal barriers designated in the CoBRA system must be consistent with the purposes of minimizing: the loss of human life; wasteful Federal expenditures; and damage to fish, wildlife, and other natural resources. For projects in these areas, the Office of Coastal and Resource Management (OCRM) must consult with the regional office of the U.S. Fish and Wildlife Service (USFWS) and allow 30 days for them to determine whether the project is consistent with CoBRA. Because OCRM defers to their opinion in these cases, some projects or grant awards may be conditioned pending the results of the consultation process. Early coordination by the applicant with the USFWS is advisable.

6.3 Endangered Species Act

An applicant shall indicate whether it believes that a proposed project may

affect threatened or endangered species or critical habitat as defined by the Endangered Species Act (ESA), and shall state the basis for its conclusion. If a proposed project may have minor and temporary effects, OCRM will informally consult with the relevant Federal agency either the USFWS or NOAA's National Marine Fisheries Service (NMFS). If a proposed project may significantly affect threatened or endangered species or critical habitat, OCRM will consult with the applicant regarding further steps that may need to be taken. If the applicant still wants to proceed, OCRM will enter into formal consultation with the USFWS or NMFS, pursuant to section 7 of the ESA. OCRM will not approve a proposed project that the USFWS or NMFS has determined will adversely and significantly affect threatened or endangered species or critical habitat.

6.4 National Environmental Policy Act (NEPA)

These guidelines are administrative and financial in nature, and therefore are considered a categorical exclusion under NEPA. Subsequent actions concerning the approval of CELC plans, or acquisition, restoration, or enhancement of properties may require further analysis on a programmatic or case-by-case basis to determine compliance with NEPA. As part of the application for each project, applicants must complete an environmental compliance checklist that will be used to determine whether additional information or an Environmental Assessment or Environmental Impact Statement is needed.

6.5 Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Act requires that Federal agencies consult with NMFS regarding any action authorized, funded, or undertaken that may adversely affect essential fish habitat (EFH) for federally managed fish. Consultation is generally initiated when a Federal agency notifies NMFS of an action that may adversely affect EFH, and provides NMFS with an assessment of the action. In response, NMFS provides Conservation Recommendations to avoid, minimize, mitigate, or otherwise offset adverse effects on EFH. Federal agencies must provide a detailed response in writing to NMFS that includes proposed measures for avoiding, mitigating, or offsetting the impact of the proposed activity on EFH. If the Federal agency chooses not to adopt NMFS' EFH Conservation Recommendations, it must provide an explanation. EFH consultation and

coordination should be consolidated, where appropriate, with interagency consultation, coordination, and environmental review procedures required by other statutes. Consultation procedures are outlined at 50 CFR 600.920.

6.6 National Historic Preservation Act

Under the provisions of Section 106 of the National Historic Preservation Act of 1966, the Secretary of the Interior has compiled a national register of sites and buildings of significant importance to America's history. Before submitting an application, the applicant must determine whether land acquisitions or other grant-supported activities will affect a property listed on the national register. If so, the applicant must obtain clearance from the appropriate State Historic Preservation Office before submitting the application.

6.7 Americans with Disabilities Act (ADA)

As a general rule, no qualified individual with a disability shall be subject to discrimination or be excluded from participation or benefits of the services, programs, or activities of a public entity. The ADA does not address issues of handicapped accessibility for outdoor recreation projects and public access projects that are needed to reduce harm to natural resources. Each project shall be handicapped accessible to the extent that conditions allow. Any construction associated with projects that provide for recreation, using funds other than CELCP, shall be handicapped accessible unless the construction of a handicapped accessible structure would damage coastal resources. Requirements for handicapped accessibility for the ADA are based on 42 U.S.C. 12101 *et. seq.*, and the U.S. Architectural and Transportation Barriers Compliance Board.

6.8 Uniform Relocation Assistance and Real Property Acquisitions Policies Act of 1970

This Act, Public Law 91-646, as amended, (42 U.S.C. 4601 *et. seq.*) requires certain assurances for projects conducted by a state agency or its agent that involve the acquisition and/or modernization of real property or cause the displacement of persons, businesses, or farm operations. Because CELCP only supports acquisition of property or interests in property from willing sellers, it is not anticipated that this program will result in any displacements. In cases of displacement, Public Law 91-646 requires that applicants ensure that fair and

reasonable relocation payments and advisory services will be provided to any displaced persons and that safe, decent, and sanitary replacement dwellings will be available to such persons within a reasonable period of time prior to displacement. The state agency must be guided by the real property acquisition policies of the Act, and the property owners must be paid or reimbursed for necessary expenses as specified in the Act. The Act provides for an exemption to the appraisal, review and certification rules for "voluntary transactions" that meet the conditions specified at 49 C.F.R. 24.101(a)(1), including written notification to the owner that the agency will not acquire the property in the event negotiations fail to result in an amicable agreement. Department of Commerce regulations implementing the Act can be found at 15 CFR part 11.

6.9 Environmental Justice

Consistent with the President's Executive Order on Environmental Justice (Feb. 11, 1994) and the Department of Commerce's Environmental Justice Strategy, applicants shall ensure that their CELCP projects will not have disproportionately high and adverse human health or environmental effects on minority or low income populations.

6.10 Commerce Pre-Award Notification Requirements for Grants and Cooperative Agreements

The Department of Commerce has published in the **Federal Register**, October 1, 2001 (66 FR 49917), as amended October 30, 2002 (67 FR 66109), a set of requirements that are applicable to all Federal financial assistance awards issued by the Department. These will be addressed as Special Award Conditions on financial assistance awards.

7. Classification

7.1 Administrative Procedure Act/Regulatory Flexibility Act

Prior notice and an opportunity for public comment are not required by the Administrative Procedure Act for rules concerning public property, loans, grants, benefits, and contracts (5 U.S.C. 553 (a) (2)). Because notice and opportunity for comment are not required pursuant to 5 U.S.C. 553 or any other law, the analytical requirements of the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*) are inapplicable. Therefore, a regulatory flexibility analysis is not required and has not been prepared.

7.2 Executive Order 12866

These draft guidelines do not constitute a "significant regulatory action" as defined by Executive Order 12866 because: (1) they will not have an annual effect on the economy of \$100 million or more, or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local or tribal governments or communities; (2) they will not create a serious inconsistency or otherwise interfere with an action taken or planned by another agency; (3) they will not materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; and (4) they will not raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

7.3 Paperwork Reduction Act

This document contains collection-of-information requirements subject to the Paperwork Reduction Act (PRA), and which have been approved by OMB. The use of Standard Forms 424, 424A, 424B, and SF-LLL have been approved by OMB under the respective control numbers 0348-0043, 0348-0044, 0348-0040, and 0348-0046. The information to be collected under these guidelines through conservation plans, the project application, checklist, and grant application materials has been approved by OMB under control number 0648-0459.

Notwithstanding any other provision of law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with a collection of information subject to the Paperwork Reduction Act unless that collection displays a currently valid OMB Control Number.

Dated: June 11, 2003.

Richard W. Spinrad,

Assistant Administrator, Ocean Services and Coastal Zone Management, National Oceanic and Atmospheric Administration.

[FR Doc. 03-15292 Filed 6-16-03; 8:45 am]

BILLING CODE 3510-22-S

COMMITTEE FOR THE IMPLEMENTATION OF TEXTILE AGREEMENTS

Adjustment of Import Limits for Certain Cotton, Wool and Man-Made Fiber Textile Products Produced or Manufactured in the Philippines

June 12, 2003.

AGENCY: Committee for the Implementation of Textile Agreements (CITA).

ACTION: Issuing a directive to the Commissioner, Bureau of Customs and Border Protection adjusting limits.

EFFECTIVE DATE: June 18, 2003.

FOR FURTHER INFORMATION CONTACT: Naomi Freeman, International Trade Specialist, Office of Textiles and Apparel, U.S. Department of Commerce, (202) 482-4212. For information on the quota status of these limits, refer to the Quota Status Reports posted on the bulletin boards of each Customs port, call (202) 927-5850, or refer to the Bureau of Customs and Border Protection website at <http://www.customs.gov>. For information on embargoes and quota re-openings, refer to the Office of Textiles and Apparel website at <http://otexa.ita.doc.gov>.

SUPPLEMENTARY INFORMATION:

Authority: Section 204 of the Agricultural Act of 1956, as amended (7 U.S.C. 1854); Executive Order 11651 of March 3, 1972, as amended.

The current limits for certain categories are being adjusted for carryover, carryforward, swing, and special shift.

A description of the textile and apparel categories in terms of HTS numbers is available in the Correlation: Textile and Apparel Categories with the Harmonized Tariff Schedule of the United States (*see Federal Register* notice 68 FR 1599, published on January 13, 2003). *Also see* 67 FR 63632, published on October 15, 2002.

D. Michael Hutchinson,

Acting Chairman, Committee for the Implementation of Textile Agreements.

Committee for the Implementation of Textile Agreements

June 12, 2003.

Commissioner,
Bureau of Customs and Border Protection,
Washington, DC 20229.

Dear Commissioner: This directive amends, but does not cancel, the directive issued to you on October 8, 2002, by the Chairman, Committee for the Implementation of Textile Agreements. That directive concerns imports of certain cotton, wool and man-made fiber textiles and textile products and silk blend and other vegetable fiber

apparel, produced or manufactured in the Philippines and exported during the twelve-month period which began on January 1, 2003 and extends through December 31, 2003.

Effective on June 18, 2003, you are directed to adjust the limits for the following categories, as provided for under the Uruguay Round Agreement on Textiles and Clothing:

Category	Adjusted twelve-month limit ¹
Levels in Group I	
237	2,905,952 dozen.
331pt./631pt. ²	2,783,927 dozen pairs.
333/334	484,624 dozen of which not more than 70,327 dozen shall be in Category 333.
335	318,668 dozen.
336	1,327,661 dozen.
338/339	3,685,690 dozen.
340/640	1,574,799 dozen.
341/641	1,363,330 dozen.
342/642	1,021,729 dozen.
345	331,194 dozen.
347/348	3,641,678 dozen.
351/651	1,061,115 dozen.
352/652	4,167,271 dozen.
359-C/659-C ³	1,011,205 kilograms.
361	3,287,514 numbers.
369-S ⁴	554,061 kilograms.
433	3,897 dozen.
443	48,956 numbers.
445/446	35,450 dozen.
447	9,856 dozen.
611	6,133,175 square meters.
633	87,610 dozen.
634	889,118 dozen.
635	426,602 dozen.
636	2,725,731 dozen.
638/639	3,043,469 dozen.
643	1,263,285 numbers.
645/646	1,212,768 dozen.
647/648	1,846,540 dozen.
659-H ⁵	2,015,424 kilograms.

¹ The limits have not been adjusted to account for any imports exported after December 31, 2002.

² Category 331pt.: all HTS numbers except 6116.10.1720, 6116.10.4810, 6116.10.5510, 6116.10.7510, 6116.92.6410, 6116.92.6420, 6116.92.6430, 6116.92.6440, 6116.92.7450, 6116.92.7460, 6116.92.7470, 6116.92.8800, 6116.92.9400 and 6116.99.9510; Category 631pt.: all HTS numbers except 6116.10.1730, 6116.10.4820, 6116.10.5520, 6116.10.7520, 6116.93.8800, 6116.93.9400, 6116.99.4800, 6116.99.5400 and 6116.99.9530.

³ Category 359-C: only HTS numbers 6103.42.2025, 6103.49.8034, 6104.62.1020, 6104.69.8010, 6114.20.0048, 6114.20.0052, 6203.42.2010, 6203.42.2090, 6204.62.2010, 6211.32.0010, 6211.32.0025 and 6211.42.0010; Category 659-C: only HTS numbers 6103.23.0055, 6103.43.2020, 6103.43.2025, 6103.49.2000, 6103.49.8038, 6104.63.1020, 6104.63.1030, 6104.69.1000, 6104.69.8014, 6114.30.3044, 6114.30.3054, 6203.43.2010, 6203.43.2090, 6203.49.1010, 6203.49.1090, 6204.63.1510, 6204.69.1010, 6210.10.9010, 6211.33.0010, 6211.33.0017 and 6211.43.0010.

⁴ Category 369-S: only HTS number 6307.10.2005.

⁵ Category 659-H: only HTS numbers 6502.00.9030, 6504.00.9015, 6504.00.9060, 6505.90.5090, 6505.90.6090, 6505.90.7090 and 6505.90.8090.

The Committee for the Implementation of Textile Agreements has determined that these actions fall within the foreign affairs exception to the rulemaking provisions of 5 U.S.C. 553(a)(1).

Sincerely,
D. Michael Hutchinson,
Acting Chairman, Committee for the Implementation of Textile Agreements.
[FR Doc.03-15272 Filed 6-16-03; 8:45 am]

BILLING CODE 3510-DR-S

COMMODITY FUTURES TRADING COMMISSION

Agency Information Collection Activities: Notice of Intent To Renew Collection 3038-0017, Market Surveys

AGENCY: Commodity Futures Trading Commission.

ACTION: Notice.

SUMMARY: The Commodity Futures Trading Commission (CFTC) is announcing an opportunity for public comment on the proposed collection of certain information by the agency. Under the Paperwork Reduction Act of 1995 (PRA), 44 U.S.C. 3501 *et seq.*, Federal agencies are required to publish notice in the **Federal Register** concerning each proposed collection of information, and to allow 60 days for comment in response to the notice. This notice solicits comments on requirements relating to information collected to assist the Commission in the prevention of market manipulation.

DATES: Comments must be submitted on or before August 18, 2003.

ADDRESSES: Comments may be mailed to Judith E. Payne, Division of Market Oversight, U.S. Commodity Futures Trading Commission, 1155 21st Street, NW., Washington, DC 20581.

FOR FURTHER INFORMATION CONTACT: Judith E. Payne, (202) 418-5268; FAX (202) 418-5527; e-mail: j_payne@cftc.gov.

SUPPLEMENTARY INFORMATION: Under the PRA, Federal agencies must obtain approval from the Office of Management and Budget (OMB) for each collection of information they conduct or sponsor. "Collection of information" is defined in 44 U.S.C. 3502(3) and 5 CFR 1320.3(c) and includes agency requests or requirements that members of the

public submit reports, keep records, or provide information to a third party. Section 3506(c)(2)(A) of the PRA, 44 U.S.C. 3506(c)(2)(A), requires Federal Agencies to provide a 60-day notice in the **Federal Register** concerning each proposed collection of information, including each proposed extension of an existing collection of information, before submitting the collection to OMB for approval. To comply with this requirement, the CFTC is publishing notice of the proposed collection of information listed below.

With respect to the following collection of information, the CFTC invites comments on:

- Whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information will have a practical use;

- The accuracy of the Commission's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;

- Ways to enhance the quality of, usefulness, and clarity of the information to be collected; and

- Ways to minimize the burden of collection of information on those who are to respond, including through the use of appropriate electronic, mechanical, or other technological collection techniques or other forms of information technology; *e.g.*, permitting electronic submission of responses.

Market Surveys, OMB Control No. 3038-0017—Extension

Under Commission rule 21.02, upon call by the Commission, information on open contracts in accounts carried or introduced by futures commission merchants, members of contract markets, introducing brokers, and foreign brokers must be furnished. This rule is designated to assist the Commission in prevention of market manipulation and is promulgated pursuant to the Commission's rulemaking authority contained in section 8a of the Commodity Exchange Act, 7 U.S.C. 7.

The Commission estimates the burden of this collection of information as follows:

Estimated Annual Reporting Burden

17 CFR section	Annual number of respondents	Frequency of response	Total annual responses	Hours per response	Total hours
17 CFR 21.02	400	Annually	400	1.75	700

Dated: June 11, 2003.

Jean A. Webb,

Secretary of the Commission.

[FR Doc. 03-15204 Filed 6-16-03; 8:45 am]

BILLING CODE 6251-01-M

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. RP03-493-001]

Columbia Gas Transmission Corporation; Notice of Tariff Filing

June 10, 2003.

Take notice that on June 4, 2003, Columbia Gas Transmission Corporation (Columbia) tendered for filing as part of its FERC Gas Tariff, Second Revised Volume No. 1, Original Sheet No. 503.01, with a proposed effective date of July 1, 2003.

Columbia states that on May 30, 2003, it submitted a filing in Docket No. RP03-493 that proposed revisions to Columbia's Tariff. Columbia states that the instant filing seeks to correct a pagination error by withdrawing Original Sheet No. 503A from the May 30 filing, and replacing it with Original Sheet No. 503.01.

Columbia states that copies of its filing have been mailed to all firm customers, interruptible customers and affected state commissions.

Any person desiring to protest said filing should file a protest with the Federal Energy Regulatory Commission, 888 First Street, NE., Washington, DC 20426, in accordance with § 385.211 of the Commission's Rules and Regulations. All such protests must be filed in accordance with § 154.210 of the Commission's Regulations. Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceedings. This filing is available for review at the Commission in the Public Reference Room or may be viewed on the Commission's Web site at <http://www.ferc.gov> using the "FERRIS" link. Enter the docket number excluding the last three digits in the docket number field to access the document. For assistance, please contact FERC Online Support at

FERCOnlineSupport@ferc.gov or toll-free at (866) 208-3676, or TTY, contact (202) 502-8659. The Commission strongly encourages electronic filings. See 18 CFR 385.2001(a)(1)(iii) and the instructions on the Commission's Web site under the "e-Filing" link. *Protest Date:* June 16, 2003.

Magalie R. Salas,

Secretary.

[FR Doc. 03-15178 Filed 6-16-03; 8:45 am]

BILLING CODE 6717-01-P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. RP96-389-087]

Columbia Gulf Transmission Company; Notice of Negotiated Rate Filing

June 10, 2003.

Take notice that on June 5, 2003, Columbia Gulf Transmission Company (Columbia Gulf) tendered for filing the following contract for disclosure of a negotiated rate transaction: FTS-1 Service Agreement No. 75839 between Columbia Gulf Transmission Company and EnergyUSA-TPC dated June 3, 2003.

In addition, Columbia Gulf tendered for filing the following revised tariff sheet to its FERC Gas Tariff Second Revised Volume No. 1 with a proposed effective date of June 6, 2003:

Twelfth Revised Sheet No. 316

Columbia Gulf states that transportation service is to commence June 6, 2003 and end July 31, 2003 under the agreement.

Columbia Gulf further states that it has served copies of the filing on all parties identified on the official service list in Docket No. RP96-389.

Any person desiring to be heard or to protest said filing should file a motion to intervene or a protest with the Federal Energy Regulatory Commission, 888 First Street, NE., Washington, DC 20426, in accordance with Sections 385.214 or 385.211 of the Commission's Rules and Regulations. All such motions or protests must be filed in accordance with § 154.210 of the Commission's Regulations. Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceedings. Any person wishing to become a party must file a motion to intervene. This filing is available for

review at the Commission in the Public Reference Room or may be viewed on the Commission's Web site at <http://www.ferc.gov> using the "FERRIS" link. Enter the docket number excluding the last three digits in the docket number field to access the document. For assistance, please contact FERC Online Support at FERCOnlineSupport@ferc.gov or toll-free at (866) 208-3676, or TTY, contact (202) 502-8659. The Commission strongly encourages electronic filings. See 18 CFR 385.2001(a)(1)(iii) and the instructions on the Commission's Web site under the "e-Filing" link. *Comment Date:* June 17, 2003.

Magalie R. Salas,

Secretary.

[FR Doc. 03-15179 Filed 6-16-03; 8:45 am]

BILLING CODE 6717-01-P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. CP03-80-000]

Eastern Shore Natural Gas Company; Notice of Site Visit

June 10, 2003.

On June 24, 2003, the staff of the Office of Energy Projects and representatives of Eastern Shore Natural Gas Company (Eastern Shore) will conduct a site visit of the proposed 2003-2005 System Expansion Project in New Castle County, Delaware, and Chester County, Pennsylvania.

All interested parties may attend. Those planning to attend must provide their own transportation. Interested parties can meet staff at 8:30 a.m. on June 24, 2003, in the parking lot at the Wawa, located at the intersection of MD Route 279 (Elkton Rd.) and MD Route 277 (Fletcherwood Rd.) in Cecil County, Maryland, near the Maryland-Delaware border. This is approximately 1 mile east of I-95 Exit 109.

For further information, please contact the Office of External Affairs at (202) 502-6088 or toll free at 1-866-208-3372.

Magalie R. Salas,

Secretary.

[FR Doc. 03-15171 Filed 6-16-03; 8:45 am]

BILLING CODE 6717-01-P

DEPARTMENT OF ENERGY

Federal Energy Regulatory
Commission

[Docket No. RP00-329-004]

Great Lakes Gas Transmission Limited
Partnership; Notice of Compliance
Filing

June 10, 2003.

Take notice that on June 5, 2003, Great Lakes Gas Transmission Limited Partnership (Great Lakes) tendered for filing as part of its FERC Gas Tariff, Second Revised Volume No. 1, the tariff sheets listed on Appendix A to the filing, proposed to be effective June 1, 2003.

Great Lakes states that these tariff sheets are being filed in compliance with the Commission's May 6, 2003 Order on Compliance Filings relative to Order Nos. 637, 587-G, and 587-L in Docket Nos. RP00-329-002 and RP00-329-003 (May 6 Order), wherein the Commission accepted Great Lakes' proposed revisions, with some modifications. Great Lakes states that it was directed to file revised tariff sheets within thirty (30) days of the May 6 Order consistent with the modifications set forth in that Order.

Any person desiring to protest said filing should file a protest with the Federal Energy Regulatory Commission, 888 First Street, NE., Washington, DC 20426, in accordance with § 385.211 of the Commission's Rules and Regulations. All such protests must be filed in accordance with § 154.210 of the Commission's Regulations. Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceedings. This filing is available for review at the Commission in the Public Reference Room or may be viewed on the Commission's Web site at <http://www.ferc.gov> using the "FERRIS" link. Enter the docket number excluding the last three digits in the docket number field to access the document. For assistance, please contact FERC Online Support at FERCOnlineSupport@ferc.gov or toll-free at (866) 208-3676, or TTY, contact (202) 502-8659. The Commission strongly encourages electronic filings. See 18 CFR 385.2001(a)(1)(iii) and the instructions on the Commission's Web site under the "e-Filing" link.

Protest Date: June 17, 2003.

Magalie R. Salas,
Secretary.

[FR Doc. 03-15177 Filed 6-16-03; 8:45 am]

BILLING CODE 6717-01-P

DEPARTMENT OF ENERGY

Federal Energy Regulatory
Commission

[Docket No. CP03-87-001]

Overthrust Pipeline Company; Notice
of Tariff Filing

June 10, 2003.

Take notice that on June 5, 2003, Overthrust Pipeline Company (Overthrust) tendered for filing as part of its FERC Gas Tariff, Original Volume No. 1, Fifth Revised Sheet No. 1, with an effective date of January 1, 2003.

Overthrust states that this filing is being made in compliance with the Commission's Order issued May 20, 2003 (May 20 Order), in Docket No. CP03-87-000.

Overthrust states that in the May 20 Order, the Commission granted Overthrust's request to abandon service and cancel its FERC Gas Tariff, Original Volume No. 1 effective January 1, 2003. Overthrust further states that the May 20 Order was conditioned upon Overthrust filing tariff sheets in compliance with part 154 of the Commission's Regulations within 15 days of the May 20 Order.

Overthrust states that a copy of this filing has been served upon its customers and the Public Service Commissions of Utah and Wyoming.

Any person desiring to protest said filing should file a protest with the Federal Energy Regulatory Commission, 888 First Street, NE., Washington, DC 20426, in accordance with § 385.211 of the Commission's Rules and Regulations. All such protests must be filed in accordance with § 154.210 of the Commission's Regulations. Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceedings. This filing is available for review at the Commission in the Public Reference Room or may be viewed on the Commission's Web site at <http://www.ferc.gov> using the "FERRIS" link. Enter the docket number excluding the last three digits in the docket number field to access the document. For assistance, please contact FERC Online Support at FERCOnlineSupport@ferc.gov or toll-free at (866) 208-3676, or TTY, contact (202) 502-8659. The Commission strongly encourages electronic filings. See 18 CFR 385.2001(a)(1)(iii) and the instructions on the Commission's Web site under the "e-Filing" link.

Protest Date: June 17, 2003.

Magalie R. Salas,
Secretary.

[FR Doc. 03-15172 Filed 6-16-03; 8:45 am]

BILLING CODE 6717-01-P

DEPARTMENT OF ENERGY

Federal Energy Regulatory
Commission

[Docket No. RP00-241-000]

Public Utilities Commission of the
State of California v. El Paso Natural
Gas Company, El Paso Merchant
Energy Gas, L.P. and El Paso Merchant
Energy Company; Notice Regarding
Release Information

June 10, 2003.

On May 9, 2003, in Docket No. RP00-241-000, the Commission issued an Order Directing the Release of Information, which released all privileged or protected information in the record. 103 FERC ¶ 61,154. Take notice that several of the documents released have been classified as "non-internet public" and, although publicly available, will not be available on the internet. These public files are accessible to a requester by mail or in person through the Public Reference Room. You may examine and copy documents from the Commission's public files at the Public Reference Room, Room 2A, 888 First Street, NE., Washington, DC 20426, between the hours of 8:30 a.m. and 5 p.m., Monday through Friday. You may also request public documents from the Public Reference Room by mail, by fax at (202) 502-8317, or by e-mail at public.reference@ferc.gov. All document requests must be in writing. As provided in the Commission's regulations at 18 CFR 388.109(a)(4), the charge for documents is 20 cents per page.

This notice is available for review at the Commission in the Public Reference Room or may be viewed on the Commission's Web site at <http://www.ferc.gov> using the "FERRIS" link. Enter the docket number excluding the last three digits in the docket number field to access the document. For assistance, please contact FERC Online Support at FERCOnlineSupport@ferc.gov or toll-free at (866) 208-3676, or TTY, contact (202) 502-8659.

Magalie R. Salas,
Secretary.

[FR Doc. 03-15176 Filed 6-16-03; 8:45 am]

BILLING CODE 6717-01-P

DEPARTMENT OF ENERGY**Federal Energy Regulatory Commission**[Docket No. EC03-53-003, *et al.*]**Ameren Energy Generating Company, et al.; Electric Rate and Corporate Filings**

June 10, 2003.

The following filings have been made with the Commission. The filings are listed in ascending order within each docket classification.

1. Ameren Energy Generating Company, and Union Electric Company, d/b/a Ameren UE

[Docket No. EC03-53-003]

Take notice that on June 4, 2003, Ameren Energy Generating Company and Union Electric Company d/b/a AmerenUE (AmerenUE), (collectively Applicants) tendered for filing with the Federal Energy Regulatory Commission (Commission) compliance filing containing the accounting entries and related details as required by Section 33.5 of the Commission's regulations in compliance with the Commission's order of May 5, 2003 in this docket. Ameren Energy Generating Co., 103 FERC 61,128 (2003) (May 5 Order).

Applicants state that copies of this filing were served on the affected state commissions and all parties included on the Commission's official service list established in the proceeding.

Comment Date: June 25, 2003.

2. Covanta Hennepin Energy Resource Co., Limited Partnership

[Docket No. EC03-95-000]

Take notice that on June 5, 2003, Covanta Hennepin Energy Resource Co., Limited Partnership (Hennepin Energy) filed with the Federal Energy Regulatory Commission (Commission) an application pursuant to Section 203 of the Federal Power Act for authorization to transfer a jurisdictional facility. Hennepin Energy requests authority to transfer its interest in a long-term power purchase agreement with Northern States Power Company to Hennepin County, Minnesota.

Comment Date: June 26, 2003.

3. NRG Energy Center Paxton, Inc.

[Docket No. ER00-2313-001]

Take notice that on June 6, 2003, NRG Energy Center Paxton, Inc., tendered for filing a triennial review in compliance with the Commission's Order in Docket No. ER00-2313-000.

Comment Date: June 27, 2003.

4. Arizona Public Service Company

[Docket No. ER03-889-001]

El Paso Electric Company
Public Service Company of New Mexico
Southern California Edison Company

Take notice that on June 6, 2003, Arizona Public Service Company, El Paso Electric Company, Public Service Company of New Mexico, and Southern California Edison Company tendered for filing a correction to El Paso Electric Company's designation number associated with the Service Agreement for the Interconnection and Operating Agreement related to the interconnection of the RUDD Transmission Line to the ANPP High Voltage Switchyard.

Comment Date: June 27, 2003.

5. White Pine Copper Refinery, Inc.

[Docket No. ER03-895-001]

Take notice that on June 6, 2003, White Pine Copper Refinery, Inc. (White Pine) tendered for filing with the Commission an amendment to their May 30, 2003 filing, requesting that the Commission accept, on a limited and temporary basis, White Pine's FERC Electric Rate Schedule No. 1; the granting of certain blanket approvals, including the authority to sell electricity at market-based rates; and the waiver of certain Commission regulations. White Pine states that the amended filing makes minor revisions to, and provides clarification of, discrete aspects of the May 30, 2003 filing.

Comment Date: June 27, 2003.

6. Portland General Electric Company

[Docket No. ER03-928-000]

Take notice that on June 5, 2003, Portland General Electric Company (PGE) tendered for filing an executed Facility Interconnection and Operation Agreement between PGE and SP Newsprint Co., (SP Newsprint).

PGE requests a waiver of the Commission's 60-day notice requirement and an effective date of May 12, 2003. PGE also states that a copy of the filing was served upon SP Newsprint and the Oregon Public Utility Commission.

Comment Date: June 26, 2003.

7. NRG Energy Center Paxton, Inc.

[Docket No. ER03-933-000]

Take notice that on June 6, 2003, NRG Energy Center Paxton, Inc., (Paxton) filed under section 205 of the Federal Power Act, Part 35 of the regulations of the Federal Energy Regulatory Commission (Commission), and Commission Order No. 614, a request that the Commission (1) accept for filing

a revised market-based rate tariff; (2) waive any obligation to submit a red-lined version of the currently effective tariff; and (3) grant any waivers necessary to make the revised tariff sheets effective on June 30, 2003. Paxton states that the proposed tariff revisions merely seek to properly update the name of the entity, as well as designate, update and conform the tariff to a format like those that the Commission has approved for Paxton's affiliates.

Comment Date: June 27, 2003.

8. Florida Power Corporation

[Docket No. ER03-934-000]

Take notice that on June 6, 2003, Florida Power Corporation (FPC), tendered for filing revisions to a service agreement between FPC and the City of Quincy, Florida. FPC requests that the revisions become effective on January 1, 2003.

FPC states that copies of the filing were served upon the Florida Public Service Commission and the City of Quincy, Florida.

Comment Date: June 27, 2003.

9. Florida Power Corporation

[Docket No. ER03-935-000]

Take notice that on June 6, 2003, Florida Power Corporation (FPC), tendered for filing revisions to Rate Schedule No.124, pursuant to which FPC provides to the City of Williston, Florida electric power and energy at wholesale. FPC requests that the revisions become effective on January 1, 2003.

FPC states that copies of the filing were served upon the Florida Public Service Commission and the City of Williston, Florida.

Comment Date: June 27, 2003.

10. Florida Power Corporation

[Docket No. ER03-936-000]

Take notice that on June 6, 2003, Florida Power Corporation (FPC), tendered for filing revisions to Rate Schedule No. 126, an agreement for the sale of electric power and energy at wholesale by FPC to the City of Chattahoochee, Florida. FPC requests that the revisions become effective on January 1, 2003.

FPC states that copies of the filing were served upon the Florida Public Service Commission and the City of Chattahoochee, Florida.

Comment Date: June 27, 2003.

Standard Paragraph

Any person desiring to intervene or to protest this filing should file with the Federal Energy Regulatory Commission, 888 First Street, NE., Washington, DC

20426, in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211 and 385.214). Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a motion to intervene. All such motions or protests should be filed on or before the comment date, and, to the extent applicable, must be served on the applicant and on any other person designated on the official service list. This filing is available for review at the Commission or may be viewed on the Commission's Web site at <http://www.ferc.gov>, using the "FERRIS" link. Enter the docket number excluding the last three digits in the docket number field to access the document. For assistance, contact FERC Online Support at FERCOnlineSupport@ferc.gov or toll-free at (866)208-3676, or for TTY, contact (202)502-8659. Protests and interventions may be filed electronically via the Internet in lieu of paper; *see* 18 CFR 385.2001(a)(1)(iii) and the instructions on the Commission's Web site under the "e-Filing" link. The Commission strongly encourages electronic filings.

Magalie R. Salas,

Secretary.

[FR Doc. 03-15267 Filed 6-16-03; 8:45 am]

BILLING CODE 6717-01-P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. EG03-73-000, *et al.*]

Tractebel Property Management, Inc., *et al.*; Electric Rate and Corporate Filings

June 9, 2003.

The following filings have been made with the Commission. The filings are listed in ascending order within each docket classification.

1. Tractebel Property Management, Inc.

[Docket No. EG03-73-000]

Take notice that on June 5, 2003, Tractebel Property Management, Inc. (TPMI), a Delaware corporation with its principal place of business in Houston, Texas, filed with the Federal Energy Regulatory Commission an application for determination of exempt wholesale generator status pursuant to part 365 of the Commission's regulations.

TPMI states that it will provide operating and maintenance services to a 350-MW power generation facility located in Ennis, Texas (the Facility). The Facility will generate electricity that will be sold into the wholesale power market of the Electric Reliability Council of Texas.

Comment Date: June 26, 2003.

2. California Independent System Operator Corporation

[Docket No. ER01-836-004]

Take notice that on June 5, 2003, the California Independent System Operator Corporation (ISO) submitted a filing in compliance with the Commission's May 6, 2003 Order issued in Docket No. ER01-836-000, 103 FERC ¶ 61,132.

The ISO states that it has also served copies of this filing upon all entities that are on the official service list for the docket.

Comment Date: June 26, 2003.

3. Devon Power LLC, Middletown Power LLC, Montville Power LLC, Norwalk Power LLC, and, NRG Power Marketing Inc.

[Docket No. ER03-563-008]

Take notice that on June 4, 2003, Devon Power LLC, Middletown Power LLC, Montville Power LLC, Norwalk Power LLC (collectively Applicants) and NRG Power Marketing Inc., tendered for filing Second Revised Cost of Service Agreements among each of the Applicants, NRG Power Marketing Inc., as agent for each Applicant, and ISO New England Inc.

Applicants state that the purpose of the filing is to permit Applicants to recover certain costs and expenses they incur in connection with escrow and trust agreements entered into pursuant to the Commission's Orders, issued March 25 and April 25, 2003 in Docket No. ER03-563-000. Applicants state that they have provided a copy of this filing to ISO-NE on the date of filing and to each person designated on the official service list compiled by the Secretary in this proceeding.

Comment Date: June 25, 2003.

4. Devon Power LLC, Middletown Power LLC, Montville Power LLC, Norwalk Power LLC, and NRG Power Marketing Inc.

[Docket No. ER03-563-009]

Take notice that on June 5, 2003, Devon Power LLC, Middletown Power LLC, Montville Power LLC, Norwalk Power LLC (collectively Applicants) and NRG Power Marketing Inc., tendered an Errata Filing to their Compliance filing submitted on May 28, 2003 in Docket No. ER03-563-006.

Applicants states that they have provided a copy of this filing to ISO-NE, provided courtesy copies to potentially affected state regulatory authorities, and served copies of the filing to each person designated on the official service list compiled by the Secretary in this proceeding.

Comment Date: June 26, 2003.

5. Maxim Energy Partners, LLC

[Docket No. ER03-827-001]

Take notice that on June 5, 2003, Maxim Energy Partners, LLC (Maxim) filed an amendment to its application for market-based rates as a power marketer originally filed on May 6, 2003. Maxim states that the amendment pertains to the request for market-based rate authority for ancillary services. Included in this supplement is a new rate schedule to reflect said changes.

Comment Date: June 26, 2003.

6. New York State Electric & Gas Corporation

[Docket No. ER03-927-000]

Take notice that on June 5, 2003, New York State Electric & Gas Corporation (NYSE) tendered for filing pursuant to Section 35.15 of the Federal Energy Regulatory Commission's (Commission) Rule, 18 CFR 35.15, a cancellation of the Service Agreements for Network Integrated Transmission Service and the accompanying Network Operating Agreements. NYSEG requests that the Notice of Cancellation be deemed effective as of July 1, 2003 for the following Service Agreements:

Purchaser	Number ¹
Bath Electric, Gas & Water Systems	100
Village of Endicott	101
Village of Groton	102
Village of Hamilton	103
Village of Rouses Point	104
Village of Sherburne	105
Village of Silver Springs	106
Village of Castile	107
Village of Greene	108

¹ Service Agreement Number.

NYSEG states that copies of the Notice of Cancellation have been served on the customers receiving service under the Service Agreements For Network Integrated Transmission Service and Network Operating Agreements, New York Municipal Power Agency and the New York State Public Service Commission.

Comment Date: June 26, 2003.

7. Sunlaw Energy Partners I, L.P.

[Docket No. ER03-929-000]

Take notice that on June 4, 2003, Sunlaw Energy Partners I, L.P. filed a

Notice of Cancellation of Rate Schedule FERC No. 1, Revision 1, and gave notice that it no longer seeks to maintain exempt wholesale generator status.

Comment Date: June 25, 2003.

8. Northeast Utilities Service Company

[Docket No. ER03-930-000]

Take notice that on June 5, 2003, Northeast Utilities Service Company (NUSCO), on behalf of The Connecticut Light and Power Company, Western Massachusetts Electric Company, Holyoke Water Power Company, and Select Energy, Inc., submitted pursuant to Section 205 of the Federal Power Act and part 35 of the Commission's regulations a rate schedule modification for sales of electricity to the City of Chicopee, Massachusetts (Chicopee).

NUSCO states that a copy of this filing has been mailed to Chicopee and the regulatory commission for the Commonwealth of Massachusetts. NUSCO requests that the rate schedule modification become effective on March 1, 2003.

Comment Date: June 26, 2003.

9. DTE East China, LLC

DTE Energy Trading, Inc.

[Docket No. ER03-931-000]

Take notice that on June 5, 2003, DTE East China, LLC (DTE East China) and DTE Energy Trading, Inc. (DTE Energy Trading) submitted for filing, pursuant to Section 205 of the Federal Power Act, and Part 35 of the Commission's regulations, an application (Application) for authorization by DTE East China to make sales of capacity and energy at market-based rates for resale outside of the Michigan Electric Coordinated Systems (MECS) control area; to reassign transmission capacity; to waive certain of the Commission's regulations promulgated under the FPA; and to grant certain blanket approvals under other such regulations. The Application also seeks acceptance for filing of conforming changes to the Rate Schedule FERC No. 1 of DTE Energy Trading to permit DTE East China to make sales of power at market-based rates to DTE Energy Trading for resale outside of the MECS control area.

Comment Date: June 26, 2003.

Standard Paragraph

Any person desiring to intervene or to protest this filing should file with the Federal Energy Regulatory Commission, 888 First Street, NE., Washington, DC 20426, in accordance with rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211 and 385.214). Protests will be considered by the Commission in

determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a motion to intervene. All such motions or protests should be filed on or before the comment date, and, to the extent applicable, must be served on the applicant and on any other person designated on the official service list. This filing is available for review at the Commission or may be viewed on the Commission's Web site at <http://www.ferc.gov>, using the "FERRIS" link. Enter the docket number excluding the last three digits in the docket number field to access the document. For assistance, contact FERC Online Support at FERCOnlineSupport@ferc.gov or toll-free at (866)208-3676, or for TTY, contact (202)502-8659. Protests and interventions may be filed electronically via the Internet in lieu of paper; see 18 CFR 385.2001(a)(1)(iii) and the instructions on the Commission's Web site under the "e-Filing" link. The Commission strongly encourages electronic filings.

Magalie R. Salas,
Secretary.

[FR Doc. 03-15268 Filed 6-16-03; 8:45 am]

BILLING CODE 6717-01-P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket Nos. CP03-302-000CP03-303-000, CP03-304-000PF03-1-000 and CP03-301-000]

Cheyenne Plains Gas Pipeline Company, Colorado Interstate Gas Company; Notice of Status Change of Environmental Review and Expiration of Scoping Period for the Proposed Cheyenne Plains Pipeline Project

June 10, 2003.

The staff of the Federal Energy Regulatory Commission (FERC or Commission) will prepare an environmental impact statement (EIS) that will discuss the environmental impacts of the construction and operation of the facilities proposed in the Cheyenne Plains Gas Pipeline Company's (CPG) project in various counties of Colorado and Kansas.¹ The purpose of this Notice is to give interested stakeholders a final opportunity to submit comments on the

¹ On May 20, 2003, in Docket No. CP03-302-000, CPG's application was filed with the Commission under Section 7 of the Natural Gas Act and part 157 of the Commission's regulations.

Cheyenne Plains Pipeline Project as we² conclude the scoping period for this project and begin writing the draft Environmental Impact Statement (EIS).

On March 14, 2003, the Commission issued a Notice of Pre-Filing Environmental Review and Scoping for the Cheyenne Plains Pipeline Project under Docket No. PF03-1-000.³ That notice announced that the FERC staff was initiating its National Environmental Policy Act (NEPA) review process on CPG's project prior to receipt of a formal application. The purpose of the NEPA Pre-filing Process is to involve landowners, government entities, and other interested parties early in the project planning and to address their issues before an application is filed with the FERC.

The EIS will discuss the environmental impacts of CPG's proposal, which involves the construction and operation of about 387 miles of natural gas pipeline and eight meter stations in Colorado and Kansas. Approximately 13 miles of the pipeline would be located on the Pawnee National Grassland in Weld County, Colorado. Colorado Interstate Gas Company (CIG) has filed a companion application that would add one new "jumper" compressor unit (at 2,443 horsepower) at its existing Cheyenne Compressor Station, which CIG states is necessary to deliver gas on the new Cheyenne Plains system.

The FERC will use the EIS in its decision-making process to determine whether the project is in the public convenience and necessity. The U.S. Department of Agriculture (USDA) Forest Service, Pawnee National Grassland will use the EIS in its decision-making process to determine whether or not to issue a Right-of-Way for occupancy of National Grassland System lands affected by the pipeline project. A general project location map is shown in appendix 1.^{4 5}

² "We," "us," and "our" refer to the environmental staff of the Office of Energy Projects.

³ The Notice of Pre-Filing Environmental Review and Scoping for this project can be viewed on the Commission's Internet Web site at the "FERRIS" link or from the Commission's Public Reference and Files Maintenance Branch, 888 First Street, NE., Washington, DC 20426, or call (202) 502-8371. For instructions on connecting to FERRIS refer to page 7 of this notice.

⁴ The appendices referenced in this notice are not being printed in the *Federal Register*. Copies are available on the Commission's Internet Web site at the "FERRIS" link or from the Commission's Public Reference and Files Maintenance Branch (see previous footnote). Copies of the appendices were sent to all those receiving this notice in the mail.

⁵ Requests for detailed maps of the facilities closest to your mailing area/property should be made to the project sponsor. Call or e-mail: Mr.

Continued

Similar to the March 14, 2003 notice, this Notice is being mailed to: Landowners whose properties are currently within a 200-foot-wide corridor centered on the proposed route; Federal, state, and local government agencies; elected officials; environmental and public interest groups; Native American tribes; and local libraries and newspapers. We encourage government representatives to notify their constituents of this planned action and encourage them to comment on their areas of concern.

If you are an affected landowner, you should have already been contacted by a pipeline company representative about the acquisition of an easement to construct, operate, and maintain the proposed facilities. The pipeline company will seek to negotiate a mutually acceptable easement agreement. However, if the project is certificated by the Commission, that approval conveys with it the right of eminent domain. At that time, if easement negotiations have failed to produce an agreement, the pipeline company could initiate condemnation proceedings in accordance with applicable state laws in Colorado and Kansas.

A fact sheet prepared by the FERC entitled "An Interstate Natural Gas Facility On My Land? What Do I Need To Know?" was attached to the project notice CPG provided to affected landowners. This fact sheet addresses a number of typically asked questions, including the use of eminent domain and how to participate in the Commission's proceedings. It is also available for viewing on the FERC Internet Web site (<http://www.ferc.gov>).

The EIS Process

NEPA requires the Commission to take into account the environmental impacts that could result from an action whenever it considers the issuance of a Certificate of Public Convenience and Necessity. NEPA also requires us to address issues and concerns the public may have about a proposed action. This process is referred to as "scoping." The main goal of the scoping process is to focus the analysis in the EIS on the important environmental issues.

For the Cheyenne Plains Pipeline Project, the scoping process began in February 2003 when the El Paso Corporation Western Pipelines Group/CPG⁶ held open houses at six locations

along the proposed pipeline route to provide an opportunity for the public to learn about the proposed facilities and ask questions and express concerns about the project. During the same time frame, the FERC staff held agency scoping meetings in the project area. The U.S. Department of Agriculture, Forest Service, Pawnee National Grassland; National Park Service, Long Distance Trails Office; U.S. Fish and Wildlife Service; U.S. Army Corps of Engineers; Colorado and Kansas State Historic Preservation Offices; Colorado Division of Wildlife; and Kansas Department of Wildlife and Parks participated in these agency scoping meetings. The FERC staff attended the open houses and agency scoping meetings to hear verbal comments and concerns and subsequently issued the March 14, 2003 notice requesting written comments and concerns about the project.

By this notice, we are requesting additional comments from you. Specifically, we are seeking new issues that were not identified during the pre-filing period. To ensure your comments are considered, please carefully follow the instructions in the public participation section beginning on page 5. We are also asking governmental agencies, including those which are participating agencies in the Commission's NEPA Pre-filing Process, to express their interest in becoming cooperating agencies for the preparation of the EIS. If you are an agency with jurisdiction and/or special expertise with respect to environmental issues in the project area and would like to request cooperating agency status, please file a written request by following the instructions for filing comments described in the public participation section. Cooperating agencies will be given special consideration for reviewing preliminary documents and requesting information from the project sponsors and their contractors. To date, only the USDA Forest Service, Pawnee National Grassland has agreed to be a cooperating agency in the preparation of the EIS.

Our independent analysis of the project-related impacts will be included in a draft EIS. The draft EIS will be mailed to Federal, state, and local government agencies; elected officials; environmental and public interest groups; Native American tribes; affected landowners; local libraries and newspapers; other interested parties; and the FERC's official service list for this proceeding. A 45-day comment

period will be allotted for review of the EIS. We will consider all comments on the draft EIS and revise the document, as necessary, before issuing a final EIS. In addition, we will consider all comments on the final EIS before we make our recommendations to the Commission.

Currently Identified Environmental Issues

In the March 14, 2003 notice, we listed several issues that we think deserve attention based on a preliminary review of the proposed facilities and the environmental information. Other issues that were raised by agencies and the public during the NEPA pre-filing process include construction or operation impacts on:

- Actively cultivated cropland and actively used grazing land;
- Crop irrigation systems;
- Federally listed endangered or threatened species;
- The Pawnee National Grassland;
- The Santa Fe Trail (listed on the National Register of Historic Places);
- Unmarked graves;
- Drought-plagued vegetation that is susceptible to wildfires; and
- Areas proposed for future use or development.

Copies of comment letters already filed with the Commission can be examined by following the instructions for using our FERRIS link at the end of this notice.

Public Participation

As described in the March 14, 2003 notice, you can make a difference by providing us with your specific comments or concerns about the project. If you provided comments to us during the pre-filing period, you do not need to resubmit them. For those who will submit comments for the first time, you should focus the comments on the potential environmental effects of the proposal, alternatives to the proposal (including alternative locations and routes), and measures to avoid or lessen environmental impact. The more specific your comments, the more useful they will be.

Please carefully follow these instructions to ensure that your comments are received in time and properly recorded:

- Send an original and two copies of your letter to: Magalie R. Salas, Secretary, Federal Energy Regulatory Commission, 888 First St., NE., Room 1A, Washington, DC 20426;
- Reference Docket Nos. CP03-302-000 and PF03-1-000 on the original and both copies;

David Anderson, Manager—Land Department, El Paso Corporation, (877) 598-5263, david.r.anderson@elpaso.com. Be as specific as you can about the location(s) of your area(s) of interest.

⁶ The original sponsor of the Cheyenne Plains Pipeline Project was El Paso Corporation Western

Pipelines Group (El Paso). El Paso's subsidiary, CPG, has taken over the role as project sponsor.

- Label one copy of your comments for the attention of DG2E, Gas Branch 1, (PJ-11.1, Room 62-49); and

- Mail your comments so that they will be received in Washington, DC on or before July 10, 2003. This is also the deadline for receipt of comments from the March 14, 2003 notice.

Please note that we are continuing to experience delays in mail deliveries from the U.S. Postal Service. Therefore, the Commission strongly encourages electronic filing of any comments or interventions or protests to this proceeding. See 18 CFR 385.2001(a)(1)(iii) and the instructions on the Commission's Internet Web site at <http://www.ferc.gov> under the "e-Filing" link and the link to the User's Guide. Prepare your submission in the same manner as you would if filing on paper and save it to a file on your hard drive. Before you can file comments you will need to create an account by clicking on "Login to File" and then "New User Account." You will be asked to select the type of filing you are making. This filing is considered a "Comment on Filing."

If you do not want to send comments at this time but still want to remain on our mailing list, please return the Mailing List Retention Form included in appendix 3. Anyone who returned a similar form in response to the March 14, 2003 notice, does not need to return the form again. If you did not return the form in response to either this notice or the March 14, 2003 notice, you will be taken off the mailing list.

The transcripts from CPG's open house meetings are available for public review in the PF-docket. Because the Commission received only a few written comments on the project in response to the March 14 notice, the Commission staff will not hold additional public scoping meetings at this time. However, we will conduct public meetings in the project area to receive comments on the draft EIS after it is issued.

Becoming an Intervenor

Also discussed in the March 14, 2003 notice is the Commission's intervention process. As an "intervenor" you can play a more formal role in the process. Among other things, intervenors have the right to receive copies of case-related Commission documents and filings by other intervenors. Likewise, each intervenor must provide 14 copies of its filings to the Secretary of the Commission and must send a copy of its filings to all other parties on the Commission's service list for this proceeding. If you want to become an intervenor you must file a motion to intervene according to Rule 214 of the

Commission's Rules of Practice and Procedure (18 CFR 385.214; see appendix 2).⁷ Only intervenors have the right to seek rehearing of the Commission's decision.

Affected landowners and parties with environmental concerns may be granted intervenor status upon showing good cause by stating that they have a clear and direct interest in this proceeding that would not be adequately represented by any other parties. You do not need intervenor status to have your environmental comments considered.

Availability of Additional Information

Additional information about the project is available from the Commission's Office of External Affairs, at 1-866-208 FERC (3372) or on the FERC Internet Web site (<http://www.ferc.gov>). Using the "FERRIS" link, select "General Search" from the FERRIS menu, enter the selected date range and "Docket Number" (i.e., PF03-1-000 and CP03-302-000), and follow the instructions. Searches may also be done using the phrase "Cheyenne Plains" in the "Text Search" field. For assistance with access to FERRIS, the helpline can be reached at 1-866-208-3676, TTY (202) 502-8659, or at FERCOnlineSupport@ferc.gov. The FERRIS link on the FERC Internet Web site also provides access to the texts of formal documents issued by the Commission, such as orders, notices, and rule makings.

In addition, the Commission now offers a free service called eSubscription that allows you to keep track of all formal issuances and submittals in specific dockets. This can reduce the amount of time you spend researching proceedings by automatically providing you with notification of these filings, document summaries, and direct links to the documents. To register for this service, go to <http://www.ferc.gov/esubscribenow.htm>.

Magalie R. Salas,

Secretary.

[FR Doc. 03-15170 Filed 6-16-03; 8:45 am]

BILLING CODE 6717-01-P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. CP03-300-000]

Columbia Gas Transmission Corporation; Notice of Intent To Prepare an Environmental Assessment for the Proposed Laurel Storage Field Pipeline Abandonment and Request for Comments on Environmental Issues

June 10, 2003.

The staff of the Federal Energy Regulatory Commission (FERC or Commission) will prepare an environmental assessment (EA) that will discuss the environmental impacts of the Laurel Storage Field Pipeline Abandonment proposed by Columbia Gas Transmission Corporation (Columbia) in Hocking County, Ohio.¹ Columbia proposes to abandon in place approximately 1.3 miles of 12-inch-diameter pipeline that is no longer in use. The one storage well that was connected to the pipe segment proposed for abandonment was connected to a short crossover line built in 2002 pursuant to Columbia's Blanket Certificate. This EA will be used by the Commission in its decision-making process to determine whether the project is in the public convenience and necessity.

Summary of the Proposed Project

Columbia wants to abandon certain facilities in Hocking County, Ohio. Columbia seeks authority to abandon:

- Approximately 1.3 miles of 12-inch-diameter pipeline, in place;
- Remove three service tap risers from previously relocated residential taps;
- Remove the road casing and carrier pipe segment under State Route 374; and
- Cut and cap each end of the abandoned pipe segment.

The general location of the project facilities is shown in appendix 1.²

¹ Columbia's application was filed with the Commission under Section 7 of the Natural Gas Act and Part 157 of the Commission's regulations.

² The appendices referenced in this notice are not being printed in the **Federal Register**. Copies of all appendices, other than appendix 1 (maps), are available on the Commission's Web site at the "FERRIS" link or from the Commission's Public Reference and Files Maintenance Branch, 888 First Street, NE., Washington, DC 20426, or call (202) 502-8371. For instructions on connecting to FERRIS refer to the last page of this notice. Copies of the appendices were sent to all those receiving this notice in the mail.

⁷ Interventions may also be filed electronically via the Internet in lieu of paper. See the previous discussion on filing comments electronically.

Land Requirements for Construction

Abandonment of the proposed facilities would require disturbance of about 0.02 acre of land. Three small dig-outs (4 × 4 × 4 feet each) are proposed to remove risers from previously relocated residential taps. The road casing and carrier pipe segment under and across State Route 374 would be removed, requiring two disturbance areas of 40 × 10 × 4 feet and 15 × 10 × 4 feet. The line would be cut and capped at each end of the abandonment, requiring two disturbance areas of 10 × 10 × 10 feet each. The 0.02 acre of land would be restored and allowed to revert to its former use. Columbia does not propose to abandon the right-of-way.

The EA Process

The National Environmental Policy Act (NEPA) requires the Commission to take into account the environmental impacts that could result from an action whenever it considers the issuance of a Certificate of Public Convenience and Necessity. NEPA also requires us³ to discover and address concerns the public may have about proposals. This process is referred to as “scoping”. The main goal of the scoping process is to focus the analysis in the EA on the important environmental issues. By this Notice of Intent, the Commission requests public comments on the scope of the issues it will address in the EA. All comments received are considered during the preparation of the EA. State and local government representatives are encouraged to notify their constituents of this proposed action and encourage them to comment on their areas of concern.

The EA will discuss impacts that could occur as a result of the construction and operation of the proposed project under these general headings:

- Geology and soils
- land use
- Water resources and fisheries
- cultural resources
- Vegetation and wildlife
- air quality and noise
- Endangered and threatened species
- Public safety

We will not discuss impacts to the following resource areas since they are not present in the project area, or would not be affected by the proposed facilities.

- Wetlands
- Hazardous waste

We will also evaluate possible alternatives to the proposed project or

portions of the project, and make recommendations on how to lessen or avoid impacts on the various resource areas.

Our independent analysis of the issues will be in the EA. Depending on the comments received during the scoping process, the EA may be published and mailed to Federal, state, and local agencies, public interest groups, interested individuals, affected landowners, newspapers, libraries, and the Commission's official service list for this proceeding. A comment period will be allotted for review if the EA is published. We will consider all comments on the EA before we make our recommendations to the Commission.

To ensure your comments are considered, please carefully follow the instructions in the public participation section below.

Public Participation

You can make a difference by providing us with your specific comments or concerns about the project. By becoming a commentator, your concerns will be addressed in the EA and considered by the Commission. You should focus on the potential environmental effects of the proposal, alternatives to the proposal, and measures to avoid or lessen environmental impact. The more specific your comments, the more useful they will be. Please carefully follow these instructions to ensure that your comments are received in time and properly recorded:

- Send an original and two copies of your letter to: Magalie R. Salas, Secretary, Federal Energy Regulatory Commission, 888 First St., NE., Room 1A, Washington, DC 20426.
- Label one copy of the comments for the attention of Gas Branch 3.
- Reference Docket No. CP03-300-000.
- Mail your comments so that they will be received in Washington, DC on or before July 10, 2003.

Please note that we are continuing to experience delays in mail deliveries from the U.S. Postal Service. As a result, we will include all comments that we receive within a reasonable time frame in our environmental analysis of this project. However, the Commission strongly encourages electronic filing of any comments or interventions or protests to this proceeding. See 18 CFR 385.2001(a)(1)(iii) and the instructions on the Commission's Web site at <http://www.ferc.gov> under the “e-Filing” link and the link to the User's Guide. Before you can file comments you will need to create a free account which can be

created by clicking on “Login to File” and then “New User Account.”

We may mail the EA for comment. If you are interested in receiving it, please return the Information Request (appendix 4). If you do not return the Information Request, you will be taken off the mailing list.

Becoming an Intervenor

In addition to involvement in the EA scoping process, you may want to become an official party to the proceeding known as an “intervenor”. Intervenor play a more formal role in the process. Among other things, intervenors have the right to receive copies of case-related Commission documents and filings by other intervenors. Likewise, each intervenor must provide 14 copies of its filings to the Secretary of the Commission and must send a copy of its filings to all other parties on the Commission's service list for this proceeding. If you want to become an intervenor you must file a motion to intervene according to Rule 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.214) (see appendix 2).⁴ Only intervenors have the right to seek rehearing of the Commission's decision.

Affected landowners and parties with environmental concerns may be granted intervenor status upon showing good cause by stating that they have a clear and direct interest in this proceeding which would not be adequately represented by any other parties. You do not need intervenor status to have your environmental comments considered.

Environmental Mailing List

This notice is being sent to individuals, organizations, and government entities interested in and/or potentially affected by the proposed project. It is also being sent to all identified right-of-way grantors. By this notice we are also asking governmental agencies to express their interest in becoming cooperating agencies for the preparation of the EA.

Additional Information

Additional information about the project is available from the Commission's Office of External Affairs, at 1-866-208-FERC or on the FERC Internet Web site (<http://www.ferc.gov>) using the FERRIS link. Click on the FERRIS link, enter the docket number excluding the last three digits in the Docket Number field. Be sure you have selected an appropriate date range. For

³ “We”, “us”, and “our” refer to the environmental staff of the Office of Energy Projects (OEP).

⁴ Interventions may also be filed electronically via the Internet in lieu of paper. See the previous discussion on filing comments electronically.

assistance, contact FERC Online Support at FERCOnlineSupport@ferc.gov or toll-free at (866)208-3676, or for TTY, contact (202)502-8659. The FERRIS link on the FERC Internet Web site also provides access to the texts of formal documents issued by the Commission, such as orders, notices, and rulemakings.

In addition, the Commission now offers a free service called eSubscription which allows you to keep track of all formal issuances and submittals in specific dockets. This can reduce the amount of time you spend researching proceedings by automatically providing you with notification of these filings, document summaries and direct links to the documents. Go to <http://www.ferc.gov/esubscribenow.htm>.

Magalie R. Salas,

Secretary.

[FR Doc. 03-15169 Filed 6-16-03; 8:45 am]

BILLING CODE 6717-01-P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. DI03-3-000]

Notice of Declaration of Intention and Soliciting Comments, Motions To Intervene, and Protests

June 10, 2003.

Take notice that the following application has been filed with the Commission and is available for public inspection:

- a. *Application Type:* Declaration of Intention.
- b. *Docket No:* DI03-3-000.
- c. *Date Filed:* May 23, 2003.
- d. *Applicant:* Board of Public Works, Borough of Park Ridge, New Jersey.
- e. *Name of Project:* Borough of Park Ridge Hydroelectric Project.
- f. *Location:* The Borough of Park Ridge Hydroelectric Project would be located on Pascack Brook at the existing Mill Pond Dam in the Borough of Park Ridge in Bergen County, New Jersey. The project will not occupy Federal land.

g. *Filed Pursuant to:* Section 23(b)(1) of the Federal Power Act, 16 U.S.C. 817(b).

h. *Applicant Contact:* Mr. William Beattie, Director of Operations, Borough of Park Ridge, 53 Park Avenue, Park Ridge, NJ 07656, telephone (201) 391-2129, FAX (201) 391-7130.

i. *FERC Contact:* Any questions on this notice should be addressed to Diane M. Murray (202) 502-8838, or E-mail address: diane.murray@ferc.gov.

j. *Deadline for filing comments and/or motions:* July 18, 2003.

All documents (original and eight copies) should be filed with: Magalie R. Salas, Secretary, Federal Energy Regulatory Commission, 888 First Street, NE., Washington, DC 20426. Comments, protests, and interventions may be filed electronically via the Internet in lieu of paper. Any questions, please contact the Secretary's Office. See 18 CFR 385.2001(a)(1)(iii) and the instructions on the Commission's Web site at <http://www.ferc.gov>

Please include the docket number (DI03-3-000) on any comments or motions filed.

k. *Description of Project:* The proposed Borough of Park Ridge Hydroelectric Project would consist of: (1) An existing reservoir with a normal storage capacity of 22 acre-feet and a surface area of about 7 acres; (2) an 18-foot-high dam consisting of two concrete overflow spillways and an emergency spillway, including a long earthen section; (3) a powerhouse containing one generating unit, with a total rated capacity of 15 kW; and (4) appurtenant facilities. The project will not be connected to the local utility or any other power company.

When a Declaration of Intention is filed with the Federal Energy Regulatory Commission, the Federal Power Act requires the Commission to investigate and determine if the interests of interstate or foreign commerce would be affected by the project. The Commission also determines whether or not the project: (1) Would be located on a navigable waterway; (2) would occupy or affect public lands or reservations of the United States; (3) would utilize surplus water or water power from a government dam; or (4) if applicable, has involved or would involve any construction subsequent to 1935 that may have increased or would increase the project's head or generating capacity, or have otherwise significantly modified the project's pre-1935 design or operation.

l. *Locations of the Application:* Copies of this filing are on file with the Commission and are available for public inspection. This filing may be viewed on the web at <http://www.ferc.gov> using the "FERRIS" link, select "Docket#" and follow the instructions. For assistance, please contact FERC Online Support at FERCOnlineSupport@ferc.gov or toll-free at (866) 208-3676, or TTY, contact (202) 502-8659.

m. Individuals desiring to be included on the Commission's mailing list should so indicate by writing to the Secretary of the Commission.

n. *Comments, Protests, or Motions to Intervene*—Anyone may submit comments, a protest, or a motion to intervene in accordance with the requirements of Rules of Practice and Procedure, 18 CFR 385.210, .211, .214. In determining the appropriate action to take, the Commission will consider all protests or other comments filed, but only those who file a motion to intervene in accordance with the Commission's Rules may become a party to the proceeding. Any comments, protests, or motions to intervene must be received on or before the specified comment date for the particular application.

o. *Filing and Service of Responsive Documents*—Any filings must bear in all capital letters the title "COMMENTS", "PROTEST", OR "MOTION TO INTERVENE", as applicable, and the Docket Number of the particular application to which the filing refers. A copy of any motion to intervene must also be served upon each representative of the Applicant specified in the particular application.

p. *Agency Comments:* Federal, state, and local agencies are invited to file comments on the described application. A copy of the application may be obtained by agencies directly from the Applicant. If an agency does not file comments within the time specified for filing comments, it will be presumed to have no comments. One copy of an agency's comments must also be sent to the Applicant's representatives.

Magalie R. Salas,

Secretary.

[FR Doc. 03-15173 Filed 6-16-03; 8:45 am]

BILLING CODE 6717-01-P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

Notice of Intent To File Application for a New License

June 10, 2003.

Take notice that the following notice of intent has been filed with the Commission and is available for public inspection:

a. *Type of filing:* Notice of Intent to File an Application for New License.

b. *Project No:* 946.

c. *Date filed:* April 28, 2003.

d. *Submitted By:* Hyrum City, UT.

e. *Name of Project:* Hyrum City Hydroelectric Project.

f. *Location:* The project is located on the Blacksmith Fork River, near the the City of Hyrum, Cache County, Utah, on

Cache National Forest lands and private in-holdings.

g. *Filed Pursuant to:* Section 15 of the Federal Power Act, 18 CFR 16.6.

h. Pursuant to Section 16.19 of the Commission's regulations, the licensee is required to make available the information described in Section 16.7 of the regulations. Such information is available from Guy McBride, Electric Power Superintendent, Hyrum City Offices, 83 West Main, Hyrum, UT 84319, (435) 245-6033.

i. *FERC Contact:* Gaylord Hoisington, 202-502-6032.
Gaylord.Hoisington@ferc.gov.

j. *Expiration Date of Current License:* April 30, 2008.

k. *Project Description:* The project includes an earth-filled diversion dam containing a concrete spillway 35 feet wide, a concrete penstock inlet with trash racks, a concrete block powerhouse housing a 400-kilowatt turbine generator, and 100 feet of underground transmission lines.

l. The licensee states its unequivocal intent to submit an application for a new license for Project No. 946. Pursuant to 18 CFR 16.9(b)(1) each application for a new license and any competing license applications must be filed with the Commission at least 24 months prior to the expiration of the existing license. All applications for license for this project must be filed by April 28, 2006.

This filing is available for review at the Commission or may be viewed on the Commission's Web site at <http://www.ferc.gov>, using the "FERRIS" link. Enter the docket number excluding the last three digits in the docket number field to access the document. For assistance, contact FERC Online Support at *FERCOnlineSupport@ferc.gov* or toll-free at (866)208-3676, or for TTY, contact (202)502-8659. A copy is also available for inspection and reproduction at the address in item h above.

Magalie R. Salas,
Secretary.

[FR Doc. 03-15174 Filed 6-16-03; 8:45 am]

BILLING CODE 6717-01-P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

Notice of Applications Accepted for Filing and Soliciting Comments, Motions To Intervene, and Protests

June 9, 2003.

Take notice that the following hydroelectric applications have been filed with the Commission and are available for public inspection:

a. *Type of Applications:* Preliminary Permit (Competing).

b. *Applicants, Project Numbers, and Dates Filed:*

Stuyvesant Falls Hydro Corporation (SFHC) filed the application for Project No. 12438-000 on February 3 and clarified Exhibit 1 on March 5, 2003.

Intermountain Hydro Resources (Intermountain) filed the application for Project No. 12439-000 on February 3 and supplemented Exhibits 1 and 4 on April 14 and 28, 2003, respectively.

SFHC also filed the application for Project No. 12438-001 on February 4, clarified Exhibit 1 on March 5, and verified its application on March 13, 2003.

c. Name of the project is Stuyvesant Falls Hydroelectric Project. Each application is for a proposed redevelopment of the previously licensed Project No. 2696. The project would be located on Kinderhook Creek in Columbia County, New York. It would not occupy federal or tribal lands.

d. *Filed Pursuant to:* Federal Power Act, 16 U.S.C. 791a-825r.

e. *Applicants Contacts:* For SFHC: Mr. James A Besha, Stuyvesant Falls Hydro Corporation, c/o Albany Engineering Corporation, 447 New Karner Road, Albany, NY 12205, (518) 456-7712. For Intermountain: Mr. Douglas A. Spaulding, Spaulding Consultants, 1433 Utica Avenue South, Suite 162, Minneapolis, MN 55416, (952) 544-8133.

f. *FERC Contact:* Robert Bell, (202) 502-6062.

g. *Deadline for filing comments, protests, and motions to intervene:* 60 days from the issuance date of this notice.

The Commission's Rules of Practice and Procedure require all interveners filing documents with the Commission to serve a copy of that document on each person in the official service list for the project. Further, if an intervener files comments or documents with the Commission relating to the merits of an issue that may affect the responsibilities of a particular resource agency, they

must also serve a copy of the document on that resource agency.

h. *Description of Projects:* The project proposed by SFHC would be operated in a run-of-river mode and would utilize existing project works consisting of: (1) A 240-foot-long, 13-foot-high masonry gravity dam, (2) a reservoir with a surface area of 46 acres at spillway crest elevation 174.3 feet, (3) a gated intake structure, (4) two 2,860-foot-long, 7.5-foot-diameter steel pipelines, (5) a 25-foot-diameter surge tank, (6) two 200-foot-long, 7.5-foot-diameter steel penstocks, (7) a powerhouse containing a 2.8 megawatt (MW) generating unit, (8) 40-foot-long, 34.5-kilovolt primary leads connecting to an existing substation, and (9) appurtenant facilities. SFHC proposes to repair or replace sections of the two 2,860-foot pipelines and add: (1) A 35-kilowatt (kW) minimum flow generating unit at the dam, (2) a 3.6-MW generating unit, and (3) a 440-kW minimum flow generating unit in the powerhouse. The SFHC project would have an average annual generation of 16.5 gigawatt hours.

The project proposed by Intermountain would be operated in a run-of-river mode and would utilize the existing project works described above. Intermountain proposes to study the feasibility of repairing the two pipelines or replacing them with a single 10-foot-diameter pipeline. Intermountain does not propose to add capacity to the project.

i. These filings are available for review at the Commission in the Public Reference Room or may be viewed on the Commission's Web site at <http://www.ferc.gov> using the "FERRIS" link. Enter the docket number, here P-12438 or P-12439, in the docket number field to access the document. For assistance, call toll-free 1-866-208-3676 or e-mail *FERCOnlineSupport@ferc.gov*. For TTY, call (202) 502-8659. Copies are also available for inspection and reproduction at the addresses in item e. above.

j. *Competing Preliminary Permit—* Anyone desiring to file a competing application for preliminary permit for a proposed project must submit the competing application itself, or a notice of intent to file such an application, to the Commission on or before the specified comment date for the particular application (see 18 CFR 4.36). Submission of a timely notice of intent allows an interested person to file the competing preliminary permit application no later than 30 days after the specified comment date for the particular application. A competing

preliminary permit application must conform with 18 CFR 4.30(b) and 4.36.

k. **Competing Development Application**—Any qualified development applicant desiring to file a competing development application must submit to the Commission, on or before a specified comment date for the particular application, either a competing development application or a notice of intent to file such an application. Submission of a timely notice of intent to file a development application allows an interested person to file the competing application no later than 120 days after the specified comment date for the particular application. A competing license application must conform with 18 CFR 4.30(b) and 4.36.

l. **Notice of Intent**—A notice of intent must specify the exact name, business address, and telephone number of the prospective applicant, and must include an unequivocal statement of intent to submit, if such an application may be filed, either a preliminary permit application or a development application (specify which type of application). A notice of intent must be served on the applicant(s) named in this public notice.

m. **Proposed Scope of Studies under Permit**—A preliminary permit, if issued, does not authorize construction. The term of the proposed preliminary permit would be 36 months. The work proposed under the preliminary permit would include economic analysis, preparation of preliminary engineering plans, and a study of environmental impacts. Based on the results of these studies, the Applicant would decide whether to proceed with the preparation of a development application to construct and operate the project.

n. **Comments, Protests, or Motions to Intervene**—Anyone may submit comments, a protest, or a motion to intervene in accordance with the requirements of Rules of Practice and Procedure, 18 CFR 385.210, .211, .214. In determining the appropriate action to take, the Commission will consider all protests or other comments filed, but only those who file a motion to intervene in accordance with the Commission's Rules may become a party to the proceeding. Any comments, protests, or motions to intervene must be received on or before the specified comment date for the particular application.

o. **Filing and Service of Responsive Documents**—Any filings must bear in all capital letters the title "COMMENTS", "NOTICE OF INTENT TO FILE COMPETING APPLICATION", "COMPETING APPLICATION",

"PROTEST", or "MOTION TO INTERVENE", as applicable, and the Project Number of the particular application to which the filing refers. Any of the above-named documents must be filed by providing the original and eight copies to: Magalie R. Salas, Secretary, Federal Energy Regulatory Commission, 888 First Street, NE., Washington, DC 20426. An additional copy must be sent to Director, Division of Hydropower Administration and Compliance, Federal Energy Regulatory Commission, at the above-mentioned address. A copy of any notice of intent, competing application or motion to intervene must also be served upon each representative of the Applicant specified in the particular application.

p. **Comments, protests, and interventions** may be filed electronically via the Internet in lieu of paper; *see* 18 CFR 385.2001(a)(1)(iii) and the instructions on the Commission's Web site under the "e-Filing" link. The Commission strongly encourages electronic filings.

q. **Agency Comments**: Federal, state, and local agencies are invited to file comments on the described application. A copy of the application may be obtained by agencies directly from the Applicant. If an agency does not file comments within the time specified for filing comments, it will be presumed to have no comments. One copy of an agency's comments must also be sent to the Applicant's representatives.

Magalie R. Salas,

Secretary.

[FR Doc. 03-15175 Filed 6-16-03; 8:45 am]

BILLING CODE 6717-01-P

ENVIRONMENTAL PROTECTION AGENCY

[FRL-7514-2]

Prevention of Significant Deterioration (PSD) Program; Massachusetts; Notice of Ending of Delegation Agreement Between EPA and Massachusetts Department of Environmental Protection

AGENCY: Environmental Protection Agency (EPA).

ACTION: Information notice.

SUMMARY: This notice announces that effective March 3, 2003, the Massachusetts Department of Environmental Protection (DEP) ended its agreement with EPA to implement the Prevention of Significant Deterioration (PSD) program. Therefore, effective that date, EPA is the implementing authority for the PSD

program in Massachusetts. This notice explains the consequences of this change for owners and operators of sources that have PSD permits or that will need such permits in the future.

DATES: Massachusetts' decision to end the agreement between the State and EPA that allowed DEP to implement the Federal PSD program became effective on March 3, 2003.

ADDRESSES: Copies of the documents relevant to Massachusetts PSD program delegation are available for public inspection during normal business hours, by appointment at the Office of Ecosystem Protection, U.S. Environmental Protection Agency, Region I, One Congress Street, 11th floor, Boston, MA during normal business hours.

FOR FURTHER INFORMATION CONTACT: Brendan McCahill, EPA Region I, (617) 918-1652, or send email to Mccahill.Brendan@epa.gov.

SUPPLEMENTARY INFORMATION: By letter dated February 27, 2003, the DEP has notified the Regional Administrator of EPA New England that the DEP will not accept authority for the implementation of the amended PSD program and is ending its June 30, 1982, agreement with EPA to assume responsibility for implementing the Federal PSD regulations (1982 Agreement).

On December 31, 2002, EPA published in the **Federal Register** revisions to the Federal PSD regulations (67 FR 80186). A final rule revising the Federal portions of implementation plans in 40 CFR part 52 to include the revisions to the Federal PSD regulations was published in the **Federal Register** on March 10, 2003. Both of these actions were effective on March 3, 2003.

The letter from the DEP explained that the DEP will no longer implement the Federal PSD program as of March 3, 2003. Consequently, as of March 3, 2003, sources of air pollution located in Massachusetts that are subject to the Federal PSD program must apply for and receive a PSD permit from EPA New England before beginning actual construction. Developers planning projects in Massachusetts that are expected to increase air pollution should refer to 40 CFR 52.21 or contact Brendan McCahill (*see* "FOR FURTHER INFORMATION CONTACT" above) at the EPA New England office for information regarding program applicability and permit application requirements.

Please note that the DEP's air permitting requirements under 310 CMR 7.02 are not affected by the state's decision to end the 1982 Agreement. The DEP interprets its regulations as

requiring PSD project applicants to apply for a 310 CMR 7.02 Plan Approval. For the convenience of the project applicants and to reduce duplicative efforts, EPA New England will coordinate closely with the DEP on the application process and the development of permit requirements. When preparing PSD application submissions for EPA New England, we will work with applicants to develop the appropriate information that meets both the Federal PSD and State permitting requirements. For information regarding the application of the State permitting rules, please contact Donald Squires at Donald.Squires@state.ma.us or refer to the DEP's Web site at <http://www.state.ma.us/dep/bwp/daqc/aqforms.htm>.

The 1982 Agreement also gave the DEP lead responsibility for "preliminary enforcement" of all PSD permits issued by EPA before 1982 and for all future PSD permits issued by the DEP. Preliminary enforcement included activities such as inspection, compliance testing, information requirements and identification of violations. The DEP has identified the following facilities that are currently operating under a PSD permit issued by EPA or the DEP:

Stony Brook Energy Center (formally the Massachusetts Municipal Wholesale Electric Company);
Fall River Sewage Sludge Incinerator;
FlexCon Company;
Norton Company;
Natick Paperboard;
Covanta Haverhill (formally the Haverhill Resource Recovery Facility);
Wheelabrator North Andover (formally NESWC Resource Recovery Facility);
SEMASS Partnership (formally Rochester Resource Recovery Facility);
Berkshire Power LLC;
ANP Bellingham;
Bellingham Cogeneration;
ANP Blackstone;
Millennium Power Partners LP;
Mirant—Kendall LLC;
Cabot Power Corporation;
Exelon Mystic LLC (formally Sithe Mystic Development LLC);
General Electric;
SEMASS Partnership (formally SEMASS RRF);
Masspower Cogeneration;
Exelon Fore River Development;
Lowell Cogeneration;
Wheelabrator Milbury;
ECO Springfield LLC.

With the DEP's decision to end the 1982 Agreement, the DEP no longer has preliminary enforcement authority for

the PSD program. EPA will conduct these activities. Therefore, as of March 3, 2003, the facilities listed above must now submit to EPA all emission data reports used to show compliance with a PSD permit limit. These facilities may already be submitting some of this data to EPA pursuant to Federal 40 CFR part 60 New Source Performance Standards, 40 CFR part 72 and 75 Acid Rain regulations or other Federal programs. Thus, for some pollutants, there would be no change in reporting.

As noted previously, the ending of the 1982 Agreement has no impact on obligations under Massachusetts law in general and Plan Approvals under 310 CMR 7.02 in particular. Therefore, the change in reporting for purposes of the PSD program does not change any requirement to submit to the DEP any emission report used to show compliance with any applicable 310 CMR 7.02 Plan Approval.

Dated: June 4, 2003.

Robert W. Varney,

Regional Administrator, EPA New England.

[FR Doc. 03-15256 Filed 6-16-03; 8:45 am]

BILLING CODE 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

[IL217-1;FRL-7513-7]

Notice of Prevention of Significant Deterioration (PSD); Final Determination for Kendall New Century Development, Plano, Kendall County, IL

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of final action.

SUMMARY: The purpose of this notice is to announce that on April 29, 2003, the Environmental Appeals Board (EAB) of the United States Environmental Protection Agency (EPA) dismissed a petition for review of certain conditions of a permit issued by the Illinois Environmental Protection Agency (IEPA) pursuant to the Prevention of Significant Deterioration of Air Quality (PSD) regulations.

DATES: The effective date for the Board's decision is April 29, 2003. Judicial review of this permit decision, to the extent it is available pursuant to section 307(b)(1) of the Clean Air Act, may be sought by filing a petition for review in the United States Court of Appeals for the Seventh Circuit within 60 days of today's date.

ADDRESSES: The documents relevant to the above action are available for public inspection during normal business hours at the following address by calling to arrange a visit: IEPA, Bureau of Air, 1021 North Grand Avenue East, Springfield, Illinois 62702, at (217) 782-3397.

FOR FURTHER INFORMATION CONTACT:

Constantine Blathras (AR-18J), EPA Region 5, 77 W. Jackson Boulevard., Chicago, Illinois, 60604 at (312) 886-0671.

SUPPLEMENTARY INFORMATION: On January 14, 2000, IEPA issued a PSD permit to Kendall New Century Development (Kendall). However, Kendall did not begin construction of the facility within the 18-month period allowed by the PSD regulations. Shortly before the construction period expired, on June 28, 2001, Kendall submitted an application for extension of the PSD permit for an additional 18-month period. IEPA required Kendall to submit a new Best Available Control Technology (BACT) demonstration and air quality impact analysis, and it reviewed the application as if it were a new PSD permit. IEPA issued the new PSD permit on November 27, 2002 (PSD permit number 093801AAN).

On January 7, 2003, the EAB received an undated petition filed by Verena Owen, asking the EAB to review a PSD determination by IEPA. Ms. Owen argues (1) that the carbon monoxide (CO) BACT limit of 25 parts per million on a dry volume basis (ppmdv) is too high (she contends it should be as low as 7.4 ppmv); (2) that IEPA improperly eliminated use of a catalyst as BACT for CO; (3) that the CO BACT limit should take into account the size and magnitude of this facility; and (4) that IEPA should have processed the permit as a request for an extension of Kendall's previous PSD permit, rather than as a new permit application.

On April 29, 2003, the EAB denied the petition for review on the grounds that: (1) The reasons stated in general terms in IEPA's response to comments are not clearly erroneous nor otherwise warrant review; (2) the issues were not raised during the public comment period; and (3) the plaintiff had not shown clear error in IEPA's decision.

Dated: June 6, 2003.

Bharat Mathur,

Acting Regional Administrator, Region 5.

[FR Doc. 03-15258 Filed 6-16-03; 8:45 am]

BILLING CODE 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY**[FRL -7513-6]****Science Advisory Board, Request for Nominations for Experts for the Panel on the EPA's Report on the Environment (ROE)****AGENCY:** Environmental Protection Agency (EPA).**ACTION:** Notice.

SUMMARY: The EPA Science Advisory Board (SAB, Board) announces the formation of a new SAB Panel on the EPA's Report on the Environment, and is soliciting nominations for members of the panel.

DATES: Nominations should be submitted by July 8, 2003.

ADDRESSES: Nominations should be submitted in electronic format through the Form for *Nominating Individuals to Panels of the EPA Science Advisory Board* provided on the SAB Web site. The form can be accessed through a link on the blue navigational bar on the SAB Web site, www.epa.gov/sab. To be considered, all nominations must include the information required on that form. Anyone who is unable to submit nominations via this form may contact Dr. James Rowe, Designated Federal Officer (DFO) as indicated below.

FOR FURTHER INFORMATION CONTACT: Any member of the public wishing further information regarding this Request for Nominations may contact Dr. James Rowe, Designated Federal Officer, EPA Science Advisory Board by telephone/voice mail at (202) 564-6488, by fax at (202) 501-0323; or via email at rowe.james@epa.gov. Dr. Rowe can also be reached via mail at U.S. EPA Science Advisory Board (1400A), Washington DC 20460. General information about the SAB can be found in the SAB Web site at <http://www.epa.gov/sab>.

SUPPLEMENTARY INFORMATION:

Summary: The SAB is announcing the formation of a new Panel to provide advice to the Agency on the EPA's Report on the Environment (ROE). The ROE is a report which seeks to address the status of and trends in environmental conditions and their impacts on human health and the nation's natural resources. The SAB is soliciting nominations to establish the membership of this new Panel.

This Panel is being formed to provide advice to the Agency, as part of the EPA SAB mission, established by 42 U.S.C. 4365, to provide independent scientific and technical advice, consultation, and recommendations to the EPA

Administrator on the technical bases for EPA regulations.

The Board is a chartered Federal Advisory Committee, which reports directly to the Administrator. Members of the Panel will provide advice to the Agency, through the SAB's Executive Committee. The Panel will comply with the provisions of FACA and all appropriate SAB procedural policies, including the SAB process for panel formation described in the *EPA Science Advisory Board (SAB) Panel Formation Process: Immediate Steps to Improve Policies and Procedures—An SAB Commentary* (EPA-SAB-EC-COM-002-003), <http://www.epa.gov/sab/pdf/ecm02003.pdf>.

This project is intended as a six month advisory effort which may be repeated yearly to revise the ROE as needed or requested; the background for the effort and the charge to the Panel is described below.

Background: The Agency is seeking the SAB's advice in the development of the Agency's Report on the Environment. EPA's "Environmental Indicators Initiative" will improve the Agency's ability to report on the status of and trends in environmental conditions and their impacts on human health and the nation's natural resources. Background materials are provided on the EPA Web site at <http://www.epa.gov/indicators>. Using available data and indicators, EPA and its partners are drafting a "Report on the Environment" (ROE) that will address many of the public's frequently-asked questions and document the progress that the United States is making in meeting our national environmental and health protection goals. The ROE will:

- (1) Describe current national environmental trends using existing data and indicators;
- (2) Identify data gaps and research needs;
- (3) Discuss the challenges government and our partners face in filling those gaps; and
- (4) Be accompanied by supporting technical information.

The report consists of two parts, a technical document and a summary or synthesis document designed for general public review. The report covers five "theme" areas:

- (1) *Cleaner Air:* Impacts of indoor air quality on human health and of outdoor air quality on health and ecosystems.
- (2) *Purer Water:* Drinking water, recreational water use, the condition of the nation's water resources, and the living resources sustained by them.
- (3) *Better Protected Land:* Land use and activities that affect the condition of the American landscape, including

information on agricultural practices, Integrated Pesticide Management, waste management, emergency response and preparedness, and recycling.

(4) *Human Health:* Trends in diseases, human exposure to environmental pollutants, and diseases thought to be related to environmental pollution.

(5) *Ecological Condition:* A look at our living and natural resources, current pressures or stressors on those resources, and a look at their sustainability into the future.

A final chapter discusses key challenges and proposed partnerships and "next steps" to address those challenges.

Charge to the Panel: The specific details of the charge remain to be finalized, however, in general, the SAB Review Panel is requested to: (1) Assess the adequacy of the report in defining the purpose, scope and value to public health of the report, (2) consider the adequacy of the technical content of the five theme areas with regard to completeness of the technical data used to identify and establish the environmental indicators and their relevance to the area of concern, and, (3) evaluate appropriateness of the conclusions/future directions identified. The review will occur in two stages, with a review of the technical chapters of the report, and a review of the Synthesis chapter of the report. The reviews will be held in Washington, DC with the first meeting tentatively planned for September, 2003.

SAB Request for Nominations: The EPA requests nominations of individuals who are highly regarded national level experts with one or more of the following disciplines necessary to address the charge:

- (a) Epidemiology of environmental pollutants
- (b) Human exposure to environmental pollutants
- (c) Human health risk assessment of environmental pollutants
- (d) Natural resources management
- (e) Whole ecosystems research
- (f) Ecological risk assessment
- (g) Ecosystems sustainability
- (h) Environmental indicators
- (i) Water resources management
- (j) Land use management
- (k) Waste management
- (l) Emergency response and preparedness
- (m) Air quality

Process and Deadline for Submitting Nominations: Any interested person or organization may nominate qualified individuals to add expertise to the Panel in the areas of expertise described above. Individuals may self-nominate. Nominations should be submitted in electronic format through the *Form for Nominating Individuals to Panels of the*

EPA Science Advisory Board provided on the SAB Web site. The form can be accessed through a link on the blue navigational bar on the SAB Web site, www.epa.gov/sab. To be considered, all nominations must include the information required on that form.

Anyone who is unable to submit nominations using this form, and who has any questions concerning any aspects of the nomination process may contact Dr. James Rowe as indicated above in this FR notice. Nominations should be submitted in time to arrive no later than July 17, 2003.

The EPA Science Advisory Board will acknowledge receipt of the nomination and inform nominators of the panel selected. From the nominees identified by respondents to this **Federal Register** notice (termed the "Widecast"), SAB Staff will develop a smaller subset (known as the "Short List") for more detailed consideration. Criteria used by the SAB Staff in developing this Short List are given at the end of the following paragraph. The Short List will be posted on the SAB Web site at: <http://www.epa.gov/sab>, and will include, for each candidate, the nominee's name and their biosketch. Public comments will be accepted for 21 calendar days on the Short List. During this comment period, the public will be requested to provide information, analysis or other documentation on nominees that the SAB Staff should consider in evaluating candidates for Panel.

For the EPA SAB, a balanced review panel (*i.e.*, committee, subcommittee, or panel) is characterized by inclusion of candidates who possess the necessary domains of knowledge, the relevant scientific perspectives (which, among other factors, can be influenced by work history and affiliation), and the collective breadth of experience to adequately address the charge. Public responses to the Short List candidates will be considered in the selection of the panel, along with information provided by candidates and information gathered by EPA SAB Staff independently on the background of each candidate (*e.g.*, financial disclosure information and computer searches to evaluate a nominee's prior involvement with the topic under review). Specific criteria to be used in evaluating an individual subcommittee member include: (a) Scientific and/or technical expertise, knowledge, and experience (primary factors); (b) absence of financial conflicts of interest; (c) scientific credibility and impartiality; (d) availability and willingness to serve; and (e) ability to work constructively and effectively in committees.

Short List candidates will also be required to fill-out the "Confidential Financial Disclosure Form for Special Government Employees Serving on Federal Advisory Committees at the U.S. Environmental Protection Agency" (EPA Form 3110-48). This confidential form, which is submitted by EPA SAB Members and Consultants, allows government officials to determine whether there is a statutory conflict between that person's public responsibilities (which includes membership on an EPA Federal advisory committee) and private interests and activities, or the appearance of a lack of impartiality, as defined by Federal regulation. The form may be viewed and downloaded from the following URL address: <http://www.epa.gov/sab/pdf/epaform3110-48.pdf>. Subcommittee members will likely be asked to attend at least two public face-to-face meetings and several public conference call meetings over the anticipated course of the advisory activity.

Dated: June 10, 2003.

Vanessa T. Vu,

Director, EPA Science Advisory Board Staff Office.

[FR Doc. 03-15259 Filed 6-16-03; 8:45 am]

BILLING CODE 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

[FRL -7513-4]

Interim Guidance for Community Involvement in Supplemental Environmental Projects

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: The Office of Enforcement and Compliance Assurance (OECA) is noticing an interim guidance document entitled, "Interim Guidance for Community Involvement in Supplemental Environmental Projects." This document is intended to encourage EPA personnel to involve communities in supplemental environmental projects. EPA solicited public comments on a draft of this guidance on June 30, 2000 (65 FR 40639). The public comment period lasted sixty (60) days. EPA received five (5) comments on the draft guidance. The response to these comments follows below.

ADDRESSES: Copies of the interim guidance can be obtained by writing the Enforcement and Compliance Docket and Information Center (2201A), Docket Number EC-G-2000-055, Office of

Enforcement and Compliance Assurance, U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW., Washington, DC 20460, or by contacting the office via email at docket.oeca@epa.gov.

FOR FURTHER INFORMATION CONTACT: For further information contact Melissa Raack, 202-564-7039 or Beth Cavalier, 202-564-3271, Office of Regulatory Enforcement, Mail Code 2248-A, United States Environmental Protection Agency, 1200 Pennsylvania Avenue, NW., Washington, DC 20460, e-mail: raack.melissa@epa.gov, cavalier.beth@epa.gov. The interim guidance can also be found at <http://www.epa.gov/compliance/resources/policies/civil/seps/sepcomm2003-intrm.pdf>.

Response to Comments: Today, the United States Environmental Protection Agency (EPA) or (Agency) is issuing an interim guidance entitled "Interim Guidance for Community Involvement in Supplemental Environmental Projects." This interim guidance is designed to provide information to EPA staff on involving communities in the selection and implementation of Supplemental Environmental Projects ("SEPs"), in appropriate cases. The Agency has decided to issue this guidance as "interim" in order to evaluate its effectiveness in involving communities in SEP selection and implementation, and to assess the establishment of SEP libraries. This interim guidance is effective immediately upon publication.

On June 30, 2000, EPA published a draft of the guidance in the **Federal Register** (65 FR 40639) and allowed 60 days for public comment. The comment period closed on August 29, 2000. EPA received five comments. With one exception (discussed below), the comments on the draft guidance were generally favorable. Several commenters stated they believed the guidance could better define the meaning of the term "communities." They also suggested that EPA clarify the guidance to provide that EPA should consult with the community adversely affected by the environmental violation, in addition to consulting community officials. These commenters suggested that the Agency should weigh input from the affected community more heavily than input from community officials or others in communities not directly affected by the violation. The Agency has clarified the guidance to indicate that EPA staff should give particular attention to input from communities affected by the violation that is the subject of the enforcement settlement.

A few commenters suggested that EPA should not accept SEPs from defendants who are unwilling to seek community input on potential SEPs. While the Agency agrees that the possibility of substantial penalties should provide an incentive for defendants to settle with EPA, the Agency will continue to enter into some settlements that include SEPs where the community has not been involved in the SEPs selection. This is because the Agency has placed a high priority on including SEPs in settlements. While the Agency has provided incentives for defendants to agree to involve the community in that process, such as informing defendants of the positive results of community input and considering a defendant's efforts in seeking community input on potential SEPs as a factor in determining the SEP mitigation percentage, nevertheless, some defendants may remain reluctant to involve the community. In addition, timetables, such as court-ordered deadlines, may not permit community involvement. EPA may decide in some cases that a settlement with a SEP—even if not obtained with community involvement—is better than a settlement without a SEP. In some circumstances, EPA may elect to involve the community without the participation of the defendant. Every settlement and every defendant is unique, and EPA must take many factors into consideration when negotiating a settlement.

One commenter proposed that EPA not use the term “SEP Bank” because it is confusing. The commenter suggested the term “SEP Library” instead, which conveys more clearly what the term means, *i.e.*, a collection of ideas for possible SEP projects. The Agency agrees with this comment, and has revised the guidance accordingly.

Another commenter stated that the draft guidance places too much emphasis on the limitations on community participation and not enough emphasis on empowering communities. As an example of the limitations, the commenter noted that the guidance suggests that, in some instances, “it may be desirable to delay the community involvement until after the consent decree is entered.” (65 FR 40641). The commenter was concerned that this may result in a final settlement document that does not take into account the needs of the affected community. In addition, the commenter believed that the Miscellaneous Receipts Act (31 U.S.C. 3302) (“MRA”),¹

may impede efforts to “assign penalties to SEPs” once the decree is entered, and in effect, preclude communities from shaping the SEP. The Agency agrees that including communities as early in the process as possible, given the circumstances of a particular case, is desirable, and the guidance certainly does not suggest restricting community participation to circumstances where the consent decree has already been signed. Moreover, EPA does not intend to suggest that penalty money could be converted to a SEP based on comments received during the public comment period. Rather, the consent decree between EPA and the defendant must define the type, scope and costs of the project, as discussed in the SEP policy. The Agency believes that in some instances, given the timing of settlement negotiations within the context of litigation deadlines, a defendant and EPA may reach agreement on the SEP, but may not be able to finalize all details of the SEP before entry of the consent decree. In these circumstances, the Agency still believes community involvement after the consent decree is entered will help ensure the successful implementation of the SEP.

With respect to the commenter's statement concerning the MRA, the Agency's SEP policy has been designed to ensure compliance with the MRA. All monetary penalties assessed against violators are deposited into the Treasury. An acceptable SEP is a mitigating factor that EPA may consider in deciding whether to settle a matter and what the terms of such a settlement are. SEPs are not substitutes for monetary penalties. Another commenter stated that the Agency should not wait, as it currently does, to include a community in SEP proposal/selection until after it has identified a violation, conducted an investigation, and filed a lawsuit. This commenter also stated that the Agency should work first with communities to identify opportunities for projects, then work such projects into settlements, instead of selecting the best approach for a specific case at hand. The Agency believes both approaches are meritorious and the guidance allows EPA a significant degree of flexibility. However, in no event will the desirability of a community SEP affect the Agency's decision to pursue an enforcement action. The guidance attempts to remain as flexible as possible with respect to all aspects of community involvement. The differences in cases and communities

deposited into the Treasury as soon as practicable unless the Federal agency receiving the money has statutory authority to use the funds differently.

will dictate the particular approach that will work best for a specific case. In addition, the defendant must be willing to undertake a SEP; EPA cannot mandate that a SEP be part of a settlement. As such, EPA needs to ensure that the defendant is willing to conduct a SEP, to include the community in the SEP process, and to abide by Agency and court-ordered deadlines. However, the Agency does agree that working with communities to identify potential SEPs is a good way to expedite the SEP element of the settlement process and to include SEPs that are important to the affected community. The Agency believes that a SEP library is an excellent vehicle for collecting potential projects. Several Regional offices have already begun to collect ideas for SEPs from communities, and the interim guidance encourages Agency enforcement staff to consider development of SEP libraries.

The commenter also raised concerns that the draft guidance may discourage some SEPs because they are too “resource intensive” with respect to EPA oversight. Although the Agency seeks SEPs with the maximum favorable environmental impact, the Agency must also consider its resource limitations and balance those limitations against the benefits of the proposed SEP when deciding whether or not to agree to a particular SEP.

One commenter proposed a SEP idea for its community but did not comment on the draft guidance. EPA has forwarded the comment to the appropriate regional office for evaluation and possible inclusion in a regional SEP library.

One commenter stated that the Agency should retain its existing approach to community input. The commenter suggested that the draft guidance created the presumption that communities would be involved in the earliest stages in most enforcement proceedings and act as a “third party” to the settlement. Although the commenter claimed that including communities in the SEP suggestion/selection process would create a substantial disincentive for companies to conduct SEPs, the commenter did not include any support for this claim, nor did it include any further details on the “substantial disincentive” the commenter envisioned.

EPA disagrees with these comments. First, the guidance makes clear that there is no formula for determining whether or not community involvement in SEP selection is appropriate and it does not dictate the level or timing of any such involvement. The guidance does not impose any requirements or

¹ The MRA, 31 U.S.C. 3302(b), requires that money received for the use of the United States be

obligations on EPA, defendants, or the community. Rather, the guidance identifies a number of factors for EPA staff to consider in evaluating what is appropriate in any given case. Second, the Agency believes that there are substantial benefits for defendants who involve affected communities in SEP selection. One particularly important incentive is that, under the SEP policy, a defendant's inclusion of community input into a SEP may be considered as a factor supporting increased penalty mitigation. The interim guidance encourages enforcement staff to consider giving more credit to a defendant who agrees to implement a SEP where there has been a commitment to include affected communities into the SEP selection. As to the commenter's suggestion that including a community will unreasonably delay resolution of enforcement actions, the Agency does not believe that this will be a significant problem. The Agency can set milestones and objectives for community involvement that are consistent with litigation deadlines. There will be times when inclusion of a SEP, or community involvement in the SEP process, in a particular settlement is not appropriate, specifically where deadlines or other circumstances do not make inclusion of a project or community involvement possible, even if the community supports a particular project. Lastly, because EPA (and the Department of Justice (DOJ) in judicial actions) is the final decision maker on SEP selection, the Agency can ensure that all legal requirements are met.

The same commenter noted that DOJ and EPA already have opportunities to seek community/public input on cases, *e.g.*, pursuant to DOJ's provision for public comment on consent decrees under 28 CFR 50.7. While this is one opportunity for input, it occurs after the parties have signed a consent decree, which is late in the enforcement process. As stated in the interim guidance, the Agency would like to remain flexible, and where appropriate, include community involvement in selecting or implementing SEPs that address the needs and concerns of all involved: the Agency, the defendant, and the affected community.

The commenter also noted that the revised Consolidated Rules of Practice ("CROP"), 64 FR 40138 (July 23, 1999)², did not include modifications to the "settlement process." The Agency did

not include such provisions because it is not requiring community involvement. The Agency encourages community involvement where appropriate and possible, and is issuing this guidance to provide helpful information to EPA staff to facilitate community involvement. The guidance specifically notes that there will be situations in which community involvement is not appropriate. This guidance is not intended to alter any current administrative or judicial settlement process requirements. Furthermore, the guidance is not intended to and does not alter statutory requirements for public participation in settlements, or change DOJ requirements for public comment on settlements. Finally, both the defendant and the Agency must agree to enter into a SEP as part of a settlement. If the defendant does not agree to a SEP, the settlement will not include a SEP.

The commenter also expressed concern about public participation as it relates to the finality of settlements. The Agency believes that if an affected community is involved in the selection of a SEP that is included in the final settlement, the community will be less likely to submit an adverse comment on the settlement as a whole.

In addition, this commenter also stated that by asking a defendant to "actively participate" in reaching out to communities, the Agency may, in effect, indirectly or directly supplement Agency outreach activities for which Congress has provided funding. The commenter specifically raised concerns about the MRA. The Agency has not sought nor has Congress specifically appropriated money for SEP outreach activities. Moreover, EPA carefully considered the MRA when designing the SEP Policy. The SEP Policy includes specific "Legal Guidelines" intended to preclude improper augmentation of EPA's appropriations. *See* section C., item 5., of the May 1, 1998, SEP Policy. Nevertheless, EPA has clarified in the final guidance that should any costs be incurred when conducting community outreach, each party must bear its own costs throughout the settlement process in any enforcement action, including those which involve SEPs. Finally, a number of commenters suggested editorial, non-substantive comments on the guidance. The Agency has made these changes in the final guidance, where appropriate.

Interim Guidance on Community Involvement in Supplemental Environmental Projects

Introduction

In its Supplemental Environmental Projects Policy (SEP Policy) of May 1, 1998, EPA included a section on community involvement³. Seeking community involvement in a SEP, especially from the community directly affected by the facility's violations, can have a number of benefits. It can promote environmental justice, enhance community awareness of EPA's enforcement activities, and improve relations between the community and the violating facility.

While community involvement is not possible or appropriate in all settlements involving SEPs, in many cases community involvement may be a valuable part of SEP consideration without adversely affecting the enforcement process. This document encourages EPA staff to include community involvement in settlements, where appropriate, and to strive to meet the community involvement goals of the SEP Policy. In addition, this interim guidance suggests resources that may be utilized to foster community involvement.

This interim guidance recognizes that not every settlement can include a SEP, or a SEP that is proposed or favored by community members. SEPs are projects undertaken voluntarily by defendants⁴, and not all defendants are interested in performing SEPs. Defendants may not be willing to solicit input from the community, or may not be receptive to community input. Further, final approval of all SEPs rests with EPA,⁵

³ The SEP Policy allows EPA to consider a defendant's or respondent's willingness to perform an environmentally beneficial project when setting an appropriate penalty to settle an enforcement action. The purpose of a SEP is to secure significant environmental or public health protection improvements beyond those achieved by bringing the defendant into compliance. The SEP must be a new project, where EPA has the opportunity to shape the scope of the project before it is implemented, and the defendant must not be otherwise legally required to do the work. Community participation in SEP consideration is just one of the factors considered in valuing a SEP. This summary of the SEP Policy should not be considered a full summary of the SEP requirements and persons interested in such requirements should consult EPA's Final SEP Policy, available at 63 FR 24796 (May 5, 1998), or <http://www.epa.gov/compliance/resources/policies/civil/seps/index.html>.

⁴ SEPs can only be obtained in settlement agreements, not imposed by a court or administrative tribunal. Under the MRA, 31 U.S.C. 3302(b), all court- or administratively-imposed penalties must be paid to the treasury. Only in settlement, before a penalty is imposed, can a penalty be mitigated by a SEP.

⁵ Throughout this interim guidance, the term "EPA," when used in the context of a judicial

² The CROP are procedural rules for the administrative assessment of civil penalties, issuance of compliance or corrective action orders, and the revocation, termination or suspension of permits, under most environmental statutes.

must review project proposals to ensure consistency with the SEP Policy and the law. A proposed project may not be able to be approved because it may not have the required nexus to the underlying violation, or may violate other legal requirements. Also, if different community groups support different SEP projects, some part of the community is likely to be disappointed no matter what the outcome of the SEP consideration process might be. Finally, court imposed deadlines on the parties may not allow for community input into the SEP selection.

Nevertheless, EPA believes that community involvement is an important factor that should be considered along with other factors surrounding the particular facts of a potential settlement, such as quick response to environmental threats, timely resolution of enforcement actions, and using limited resources effectively to achieve the maximum benefit for human health and the environment. This guidance encourages Regions to think creatively about how to engage communities, particularly communities affected by the facility's violations, even though direct community participation will not be possible in every case that includes a SEP. For example, Regions can consider setting up a SEP library to solicit community project ideas outside of the context of a particular enforcement action so that community project ideas are available to draw from in appropriate cases. Also, settlements can be structured to provide for community input on implementation of the SEP, even if participation in SEP consideration itself is not feasible.

Building trust between EPA and communities is the foundation of effective community involvement in the SEP consideration process. Even where community outreach does not result in a community-supported or proposed SEP being included in a settlement, effective community outreach can help increase the community's confidence in the process and may encourage the community to work with EPA in the future.

Including communities, when possible, in the consideration of SEPs, may benefit the defendant⁶ the community, the environment, and EPA. First, because SEPs help to protect the environment and public health, and can redress environmental harm, involving communities in SEP consideration

enables EPA and the defendant to focus on the particular environmental priorities and concerns of a community, which is especially important if several different SEPs are being considered. The community also can be a valuable source of SEP ideas, including ideas that result in creative or innovative SEPs that might not otherwise have been considered.

Furthermore, pursuant to the SEP Policy, a defendant's participation and inclusion of public input into a SEP is one of the factors EPA uses to determine the degree to which penalty mitigation is appropriate in a particular case. (SEP Policy, p. 16). Enforcement staff should consider giving a defendant who conducts outreach to communities in development of an acceptable SEP proposal, a greater mitigation percentage for a SEP than a defendant who does not conduct such outreach. Defendants may also benefit from community involvement because it can result in better relationships with the community.

Given the wide range of settlement scenarios, types of violations and communities, there is not standard formal to determine when community involvement in the consideration of a SEP is appropriate. There are a number of factors that may help EPA staff determine whether or not community involvement may be appropriate in a particular case. Generally these factors may include:

1. The parameters surrounding the specifics of each case, *e.g.*, court-ordered deadlines, imminent and substantial endangerment situations;
2. The willingness of the defendant to conduct a SEP, and a willingness to solicit and respond in a meaningful way to community input;
3. The impact of the violations on the community, especially the community most directly affected by the facility's violations;
4. The level of interest of the community in the facility and the potential SEP; and
5. The amount of the proposed penalty and the settlement amount that is likely to be mitigated by the SEP.

An excellent way to include communities in SEPs is to establish a "SEP library." A SEP library is an inventory of potential SEPs that can be consulted in individual cases where the defendant requests assistance in identifying appropriate SEPs. Several EPA Regional offices have established SEP libraries; others are considering development of a SEP library. A SEP library can include specific projects identified as priorities by communities, non-governmental organizations and

others. SEP libraries can be developed from project ideas obtained from the affected community through town meetings, publications, the internet, or public hearings. Collecting ideas for possible SEPs for inclusion in a SEP library can happen at any time. Therefore, the enforcement action in which a SEP may ultimately be selected from the SEP library will be unknown at the time the potential SEP is placed into the library. Therefore, inclusion of SEP in the SEP library does not ensure that a project will be chosen and/or implemented in any particular settlement.

Finally, SEPs are developed in the context of settlement negotiations. As such, confidentiality between the government and the defendant is essential to the exchange of ideas and exploration of settlement options. Because of this, EPA must consider how to provide information to the public to facilitate its involvement in SEP consideration and development without undermining the confidentiality of settlement negotiations. Much of the information developed by the government may be privileged and therefore not appropriate for release to the public. In addition, a defendant may provide information to the government that must be kept confidential. For example, a defendant may provide confidential business information ("CBI") to EPA. CBI, by law, cannot be provided to the public.⁷ Thus, each case will have limits on what information EPA can make available to the public. In judicial cases, DOJ will also retain authority to determine what information can be released to the community.

EPA believes that community involvement in SEPs is an important goal, and is committed to involving communities in the consideration of SEPs. This interim guidance is intended to encourage enforcement staff to consider community involvement in SEPs, and to help effectuate the best possible SEPs in the settlement of enforcement cases in a manner that promotes mutual trust and confidence, and builds positive relationships between the community and the Agency.

John Peter Suarez,

Assistant Administrator, Office of Enforcement and Compliance Assurance.

This document is interim guidance intended for use of the EPA personnel and does not create any right or benefit, substantive or procedural, enforceable at law by a party against the United States,

enforcement action, also includes the Department of Justice.

⁶ "Defendant," when used herein, includes defendants in civil judicial actions and respondents in EPA administrative actions.

⁷ See 40 CFR part 2, subpart B.

its agencies, its officers, or any person. This interim guidance is not intended to supercede any statutory or regulatory requirements, or EPA policy. Any inconsistencies between this interim guidance and any statute, regulation, or policy should be resolved in favor of the statutory or regulatory requirement, or policy document, at issue.

Appendix A

Resources for Identifying Communities

Below are some suggested resources within and outside of EPA that may be useful in targeting community outreach efforts.

Suggested Internal Sources

1. Community involvement coordinators at EPA's Office of Emergency and Remedial Response Community Involvement and Outreach Center;
2. Headquarters offices, including: Office of Environmental Justice, American Indian Environmental Office, Federal Facilities Enforcement;
3. Colleagues in other media programs or regions;
4. Regional offices or coordinators who handle community involvement, environmental justice, tribal issues, or community-based environmental problems.

Suggested External Sources

1. State, local or tribal governments;
2. Education or spiritual organizations;
3. Other Federal agencies
4. Neighborhood organizations or groups, and individuals in neighborhoods closest to the defendant's facility;
5. Community activists;
6. Environmental and environmental justice organizations and groups;
7. Local unions, business groups, and civic groups;
8. The defendant or other members of the regulated community (e.g., trade associations);
9. Local newspapers, radio, television, local Internet sites.

Appendix B

Community Outreach Techniques

- This list is intended to provide a library of options available for use in conducting community outreach, and is not intended to suggest that all of these techniques be used in any given case.

1. *Interview:* Face to face or telephone discussions with community members provide information about local concerns and issues. A significant time commitment may be required to gather feedback representative of the community;
2. *Small Group Meeting:* Convening community members in a local meeting place stimulates dialogue, generates information, and may build rapport among participants;
3. *Focus Group Meeting:* Focus group participants are convened by a trained facilitator to provide answers to specific questions. The direct approach is an efficient information gathering tool if participants represent a cross-section of the community.
4. *Public Meeting:* Public meetings are useful for hearing what people have to say

about current issues and engaging community members in the process. At public meetings, EPA should focus on active listening and learning from the public.

5. *Public Availability Session/Open House:* A public availability session is a less structured alternative to a public meeting that provides everyone an opportunity to ask questions, express concerns, react to what is being proposed, and make suggestions. Typically, a public official announces she or he will be available at a convenient time and place where community members can talk informally.

6. *Public Notice:* Public notices in the print media or on radio and television are a relatively inexpensive way to publicize community participation opportunities. In addition to the mainstream media, minority publications, church bulletins and other such vehicles offered by local organizations can reach a more diverse audience.

7. *Workshop:* Workshops are participatory seminars to educate small groups of citizens on particular site issues.

8. *Site Tour:* Site tours can familiarize citizens, the media and local officials with the nature or environmental concerns affecting a community near a specific site. Tours may result in better communication among the community, facility and Agency.

9. *Information Repository:* An information repository is a project file containing timely information on site-specific activities and accurate detailed and current data about a site or enforcement action. Project files are typically kept at convenient public locations, e.g., libraries, and publicized through various media.

[FR Doc. 03-15260 Filed 6-16-03; 8:45 am]

BILLING CODE 6560-50-P

FEDERAL LABOR RELATIONS AUTHORITY

[FLRA Docket No. AT-CA-01-0093]

Notice of Opportunity to Submit Amicus Curiae Briefs in an Unfair Labor Practice Proceeding Pending Before the Federal Labor Relations Authority

AGENCY: Federal Labor Relations Authority.

ACTION: Notice of the opportunity to file briefs as amici curiae in a proceeding before the Federal Labor Relations Authority in which the Authority has been asked to modify its standard for determining whether an agency has a statutory obligation to notify and bargain with a union regarding changes in conditions of employment that are substantively negotiable.

SUMMARY: The Federal Labor Relations Authority provides an opportunity for all interested persons to file briefs as amici curiae on a significant issue in a case pending before the Authority. The Authority is considering the case

pursuant to its responsibilities under the Federal Service Labor-Management Relations Statute, 5 U.S.C. 7101-7135 (the Statute). The issue concerns whether the Authority should modify its standard for determining whether an agency has a statutory obligation to notify and bargain with a union regarding changes in conditions of employment that are substantively negotiable.

DATES: Briefs submitted in response to this notice will be considered if received by mail or personal delivery in the Authority's Case Control Office by 5 p.m. on Thursday, July 17, 2003. Placing submissions in the mail by this deadline will not be sufficient. Extensions of time to submit briefs will not be granted.

FORMAT: All briefs shall be captioned "*Social Security Administration, Office of Hearings and Appeals, Charleston, South Carolina, Case No. AT-CA-01-0093.*" Parties must submit five copies, one of which must contain an original signature, of each amicus brief, on 8½ by 11 inch paper. Briefs must include a signed and dated statement of service that complies with the Authority's regulations showing service of one copy of the brief on all counsel of record or other designated representatives. 5 CFR 2429.27(a) and (c).

The designated representatives in *Social Security Administration, Office of Hearings and Appeals, Charleston, South Carolina, Case No. AT-CA-01-0093*, are John J. Barrett, Agency Representative, Social Security Administration, 6401 Security Boulevard, Room G-H-10, West High Rise Building, Baltimore, MD 21235-6401; J. E. Van Slate, Union Representative, AALJ, IFPTE, c/o Social Security Administration, Office of Hearings and Appeals, 200 Meeting Street, Suite 202, Charleston, SC 29401; Tameka West, Counsel for the General Counsel, Federal Labor Relations Authority, Marquis Two Tower, Suite 701, 285 Peachtree Center Avenue, Atlanta, GA 30303-1270.

ADDRESSES: Mail or deliver briefs to Gail D. Reinhart, Director, Case Control Office, Federal Labor Relations Authority, Docket Room, Suite 201, 1400 K St. NW., Washington, DC 20424-0001.

FOR FURTHER INFORMATION CONTACT: Gail D. Reinhart, Director, Case Control Office, Federal Labor Relations Authority, (202) 218-7740.

SUPPLEMENTARY INFORMATION: The case presenting the issue on which amicus briefs are being solicited is before the Authority on exceptions to a recommended decision and order of an

Administrative Law Judge (Judge) resolving unfair labor practice allegations.

A. Summary of Current Authority Precedent

To assist interested persons in responding, the Authority offers the following summary of current Authority precedent. The cases cited below are not intended as a complete description of Authority precedent in this area, and amici are encouraged to address any federal or private sector precedent deemed applicable.

Under section 7116(a)(1) and (5) of the Statute, prior to implementing a change in conditions of employment of bargaining unit employees, an agency is required to provide the exclusive representative with notice of the change and the opportunity to bargain over those aspects of the change that are within the duty to bargain. *U.S. Army Corps of Eng'rs, Memphis Dist.*, 53 FLRA 79, 81 (1997). Where an agency institutes a change in a condition of employment and the change is itself negotiable, the extent of the impact of the change on unit employees has not been a factor or element in the analysis of whether an agency is obligated to bargain. *92 Bomb Wing, Fairchild Air Force Base, Spokane, Wash.*, 50 FLRA 701, 704 (1995). Conversely, where the substance of a change is not itself negotiable, an agency must nonetheless give the exclusive representative an opportunity to bargain over the impact and implementation of the change, provided that the change has more than a *de minimis* effect on unit employees' conditions of employment. *AFGE, Local 940*, 52 FLRA 1429, 1436 (1997).

B. The Judge's Decision

The Judge found that the agency violated section 7116(a)(1) and (5) of the Statute by refusing to bargain with the Association of Administrative Law Judges, International Federation of Professional and Technical Engineers, AFL-CIO (Union) over the Agency's reduction in the number of reserved parking spaces for the Administrative Law Judges (ALJs) from 6 to 2. Relying on Authority precedent, the Judge found that providing all 6 ALJs at its Charleston location with reserved, assigned parking was a condition of employment, and that the Agency was obligated to give the Union notice and an opportunity to negotiate the substance of any proposed change of this established condition of employment. In addition, the Judge stated that since the issue of employee parking is substantively negotiable, it was unnecessary to decide whether the

impact of the change was more than *de minimis*. However, the Judge noted that if the agency were only obligated to bargain over impact and implementation, "there might be grave doubt that the impact was more than *de minimis*." Judge's Decision at 12. The Judge found that the record did not show any difficulty by employees finding non-reserved parking in the building after the change was implemented. As a remedy, the Judge recommended that the agency restore the *status quo ante* by providing 6 reserved parking spaces to the ALJs.

C. Agency's Exceptions

The Agency filed exceptions, contending in part that the Authority should apply the *de minimis* doctrine that has been used for impact and implementation bargaining to changes that are substantively negotiable. The Agency asserts that the Authority adopted the *de minimis* doctrine in line with the mandate of section 7101 of the Statute that the Statute should be interpreted consistent with the requirement of an effective and efficient Government, and that this same mandate should apply to substantive as well as impact and implementation bargaining.

D. General Counsel's Opposition

The General Counsel requests the Authority to reject the Agency's request to apply the *de minimis* standard to substantively negotiable issues, such as the one in this case. The General Counsel maintains that the Judge's decision is consistent with Authority precedent addressing changes in parking as substantively negotiable.

E. Questions on Which Briefs are Solicited

Since the issue raised by the Agency in this case is likely to be of concern to the federal sector labor-management relations community in general, the Authority finds it appropriate to provide for the filing of amicus briefs addressing the following questions:

What standard should the Authority apply in determining an agency's statutory obligation to bargain when an agency institutes changes in conditions of employment that are substantively negotiable? Why? Should the Authority eliminate the distinction between substantively negotiable changes, where the *de minimis* standard has not been applied, and changes that are not substantively negotiable, where the *de minimis* standard has been applied? Why?

For the Authority.

Dated: June 12, 2003.

Gail D. Reinhart,

Director, Case Control Office.

[FR Doc. 03-15273 Filed 6-16-03; 8:45 am]

BILLING CODE 6727-01-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Office of the Secretary

Federal Financial Participation in State Assistance Expenditures; Temporary Increase of Federal Matching Shares for Medicaid for the Last 2 Calendar Quarters of Fiscal Year 2003 and the First 3 Quarters of Fiscal Year 2004

AGENCY: Office of the Secretary, DHHS.

ACTION: Notice.

SUMMARY: The revised Medicaid "Federal Medical Assistance Percentages" (FMAP) for the last 2 calendar quarters of Fiscal Year 2003 and the first 3 calendar quarters of Fiscal Year 2004 have been calculated pursuant to Title IV of the Jobs and Growth Tax Relief Reconciliation Act of 2003. These revised Federal Medical Assistance Percentages replace the percentages previously published for the applicable quarters during Fiscal Year 2003 (**Federal Register**, November 30, 2001) and Fiscal Year 2004 (**Federal Register**, November 15, 2002). This notice announces the revised Federal Medical Assistance Percentages that we will use in determining the amount of Federal matching for State medical assistance (Medicaid) expenditures under Title XIX, effective only for the 2 calendar quarters from April 1 through September 30, 2003, and the 3 quarters from October 1, 2003 through June 30, 2004. The table gives figures for each of the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands. Programs under Title XIX of the Act exist in each jurisdiction. The percentages in this notice apply to State expenditures for most medical services only for the last 2 quarters of Fiscal Year 2003 and the first 3 quarters of Fiscal Year 2004.

Federal Medical Assistance Percentages are normally used to determine the amount of Federal matching for State expenditures for assistance payments for certain social services including Temporary Assistance for Needy Families (TANF) Contingency Funds, the federal share of Child Support Enforcement collections, Child Care Mandatory and Matching Funds for the Child Care and

Development Fund, Foster Care Title IV-E Maintenance payments, and Adoption Assistance payments, and State medical and medical insurance expenditures for Medicaid and the State Children's Health Insurance Program (SCHIP). However, the temporary increases in the Federal Medical Assistance Percentages under the Jobs and Growth Tax Relief Reconciliation Act of 2003 affect only Medicaid medical expenditure payments under Title XIX. The percentages in this notice do not apply to disproportionate share hospital payments, payments under Title IV or XXI of the Act, or any payments under Title XIX that are based on the enhanced FMAP described in section 2105(b) of such Act. In addition, the statute provides separately for Federal matching of administrative costs, which is not affected by the Jobs and Growth Tax Relief Reconciliation Act of 2003.

Section 401 of the Jobs and Growth Tax Relief Reconciliation Act of 2003 provides for a temporary increase of the Medicaid FMAP. The provisions permit a maintenance of Fiscal Year 2002 FMAP for the last 2 calendar quarters of Fiscal Year 2003 for a State whose 2003 FMAP as calculated pursuant to section 1905(b) of the Act is less than its 2002 FMAP, and a maintenance of Fiscal Year 2003 FMAP for the first 3 calendar quarters of Fiscal Year 2004 for a State whose 2004 FMAP as calculated pursuant to section 1905(b) of the Act is less than its 2003 FMAP. In addition, after adjusting FMAP due to the maintenance of the 2002 or 2003 FMAP where applicable, each State is eligible to receive a 2.95 percentage point increase for each of the last 2 calendar quarters of Fiscal Year 2003 and the first 3 calendar quarters of Fiscal Year 2004.

There are conditions that a State must meet in order to receive the 2.95 percentage point FMAP increase for the last 2 calendar quarters of Fiscal Year 2003 and the first 3 calendar quarters of Fiscal Year 2004. Eligibility under its Medicaid State plan (including any waiver under title XIX of the Social Security Act or under section 1115 of the Act) can be no more restrictive than the eligibility under such plan or waiver as in effect on September 2, 2003. If any State has restricted eligibility under its Medicaid State plan (including any waiver under title XIX of the Social Security Act or under section 1115 of the Act) after September 2, 2003, it will become eligible for the 2.95 percentage point increase in its FMAP in the first calendar quarter (and subsequent calendar quarters) in which the State has reinstated eligibility that is no more restrictive than the eligibility in effect

on September 2, 2003. These rules do not affect States' flexibility with respect to benefits offered under their Medicaid State plan (including any waiver under title XIX of the Social Security Act or under section 1115 of the Act).

In addition, in order to receive the 2.95 percentage point FMAP increase, in the case of a State that requires political subdivisions within the State to contribute toward the non-Federal share of expenditures under the State Medicaid plan, the State cannot require that such political subdivisions pay a greater percentage of the non-Federal share of such expenditures for the last 2 calendar quarters of Fiscal Year 2003 and the first 3 calendar quarters of Fiscal Year 2004, than the percentage that was required by the State under such plan on April 1, 2003.

In addition to the increases in FMAP, Title IV of the Jobs and Growth Tax Relief Reconciliation Act of 2003 increases the amounts of Medicaid payments to territories pursuant to section 1108 of the Social Security Act by 5.90 percent of such amounts, for the last 2 calendar quarters of Fiscal Year 2003 and the first 3 calendar quarters of Fiscal Year 2004.

The Jobs and Growth Tax Relief Reconciliation Act of 2003 also provides \$10 billion for other temporary state fiscal relief payments based on population. These payments are under the jurisdiction of the Secretary of the Treasury, and are not reflected in the Federal Medical Assistance Percentages.

EFFECTIVE DATES: The percentages listed will be effective only for the last 2 calendar quarters of Fiscal Year 2003 and the first 3 calendar quarters of Fiscal Year 2004.

FOR FURTHER INFORMATION CONTACT: Adelle Simmons or Robert Stewart, Office of Health Policy, Office of the Assistant Secretary for Planning and Evaluation, Hubert H. Humphrey Building, 200 Independence Avenue, SW., Room 442E, Washington, DC 20201, (202) 690-6870.

(Catalog of Federal Domestic Assistance Program No. 93.778: Medical Assistance Program)

Dated: June 12, 2003.

Tommy G. Thompson,

Secretary of Health and Human Services.

REVISED FEDERAL MEDICAL ASSISTANCE PERCENTAGE (TITLE IV OF JOBS AND GROWTH TAX RELIEF RECONCILIATION ACT OF 2003)

[Temporary Increase in Medicaid FMAP for the last 2 Quarters of FY 2003 and First 3 Quarters of FY 2004]

	2003 Qtrs	2004 Qtrs
Alabama	73.55	73.70
Alaska	61.22	61.34
American Samoa	52.95	52.95
Arizona	70.20	70.21
Arkansas	77.23	77.62
California	54.35	52.95
Colorado	52.95	52.95
Connecticut	52.95	52.95
Delaware	52.95	52.95
District of Columbia	72.95	72.95
Florida	61.78	61.88
Georgia	62.55	62.55
Guam	52.95	52.95
Hawaii	61.72	61.85
Idaho	73.97	73.91
Illinois	52.95	52.95
Indiana	64.99	65.27
Iowa	66.45	66.88
Kansas	63.15	63.77
Kentucky	72.89	73.04
Louisiana	74.23	74.58
Maine	69.53	69.17
Maryland	52.95	52.95
Massachusetts	52.95	52.95
Michigan	59.31	58.84
Minnesota	52.95	52.95
Mississippi	79.57	80.03
Missouri	64.18	64.42
Montana	75.91	75.91
Nebraska	62.50	62.84
Nevada	55.34	57.88
New Hampshire	52.95	52.95
New Jersey	52.95	52.95
New Mexico	77.51	77.80
New York	52.95	52.95
North Carolina	65.51	65.80
North Dakota	72.82	71.31
Northern Mariana Islands	52.95	52.95
Ohio	61.78	62.18
Oklahoma	73.51	73.51
Oregon	63.11	63.76
Pennsylvania	57.64	57.71
Puerto Rico	52.95	52.95
Rhode Island	58.35	58.98
South Carolina	72.76	72.81
South Dakota	68.88	68.62
Tennessee	67.54	67.54
Texas	63.12	63.17
Utah	74.19	74.67
Vermont	66.01	65.36
Virgin Islands	52.95	52.95
Virginia	54.40	53.48
Washington	53.32	52.95
West Virginia	78.22	78.14
Wisconsin	61.52	61.38
Wyoming	64.92	64.27

[FR Doc. 03-15274 Filed 6-13-03; 8:45 am]

BILLING CODE 4150-05-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention

Cooperative Research and Development Agreement

AGENCY: Centers for Disease Control and Prevention (CDC), Health and Human Services (HHS).

ACTION: Notice.

SUMMARY: The Division of Bacterial and Mycotic Diseases (in the National Center for Infectious Disease, Centers for Disease Control and Prevention) is seeking to explore possible partnerships in applied research to improve public health preparedness and response to bioterrorism associated with use of bacterial and fungal agents. The Division of Bacterial and Mycotic Diseases (DBMD) through its component Branches has lead CDC technical responsibility for a number of Category A, B and C bioterrorism agents and their associated toxins (*Bacillus anthracis*, *Clostridium botulinum*, *Brucella* spp., *Burkholderia* spp., *Staphylococcus enterotoxin B*, other food- or waterborne bacterial pathogens, and other bacterial agents). DBMD uses epidemiologic, laboratory, clinical, and biostatistical sciences to control and prevent bacterial and mycotic infectious disease. The division conducts applied research in a variety of settings, and translates the findings of this research into public health practice.

The division works in partnership with a variety of public, academic, and for-profit and not-for-profit private sector organizations to achieve public health goals.

Broad categories of bioterrorism-related research of interest to the DBMD include:

1. Rapid evaluation of powder, food, water, and other potential vehicles for presence of bioterrorism agents, and their associated toxins;
2. Epidemiologic investigation of suspected and confirmed bioterrorism events;
3. Pre-, during, and post-bioterrorism event surveillance;
4. Diagnosis of suspect and confirmed bioterrorism-related illness;
5. Treatment of suspect and confirmed bioterrorism-related illness;
6. Post-exposure prophylaxis for prevention of bioterrorism-related illness among exposed persons;
7. Remediation of health risks in environments contaminated or potentially contaminated as a result of BT events.

DBMD is currently involved in a number of bioterrorism-related research activities including, but not limited to:

1. Development and revision of agent- (and toxin-) specific National Bioterrorism Response Plans;
2. Anthrax vaccines;
3. Immunotherapy for anthrax and botulism;
4. Anthrax diagnostics;
5. Antimicrobial susceptibility testing;
6. Epidemiologic and clinical research;
7. Building representative stain collections;
8. Molecular subtyping (and electronic networks for sharing associated data);
9. Identification of virulence factors;
10. Methods for rapid detection of foodborne agents in food and water;
11. Evaluation of unexplained deaths and critical illnesses.

Because CRADA's are designed to facilitate the development of scientific and technological knowledge into useful, marketable products, a great deal of freedom is given to Federal agencies in implementing collaborative research. The CDC may accept staff, facilities, equipment, supplies, and money from the other participants in a CRADA; CDC may provide staff, facilities, equipment, and supplies to the project. CDC MAY NOT PROVIDE FUNDS to the other participants in a CRADA. Responses will be accepted through one year after publication of this notice.

FOR FURTHER INFORMATION CONTACT:

Technical

Bradley Perkins, MD, Division of Bacterial and Mycotic Diseases, National Center for Infectious Diseases, Centers for Disease Control and Prevention (CDC), 1600 Clifton Rd. NE., Mail stop C-09, Atlanta, GA 30333. Telephone (404) 639-4721, E-Mail at BPerkins@CDC.GOV.

Business

Lisa Blake-DiSpigna, Technology Development Coordinator, National Center for Infectious Diseases, Centers for Disease Control and Prevention (CDC), 1600 Clifton R. NE., Mail stop E-51, Atlanta, GA 30333. Telephone (404) 498-3262, E-Mail at LCBS3@CDC.GOV.

SUPPLEMENTARY INFORMATION:

DBMD is seeking to identify organizations that are interested in a partnership for the common goal of improving the Nation's preparedness and ability to respond to bioterrorism based on mutually agreed rule and principles. Partnerships may be based on existing products—systems or tests, development of new products—systems

or tests, evaluation of specific issues, communications strategies, or other exchange of knowledge. Partnerships must be constructed in a way that does not create a real or perceived conflict of interest for CDC, the Department of Health and Human Services, or the Federal Government. DBMD will not engage in partnerships which benefit a partner but provide no clear benefit to the Nation's preparedness and ability to respond to bioterrorism.

Respondents should provide evidence of expertise in the conduct of research that focuses on accomplishments and current capabilities, with supporting documentation (e.g., publications, certifications, resumes, etc.), along with qualifications for the principal investigator who would be involved in the CRADA. A proposed research plan outline should be included with sufficient detail to allow for its merit to be judged on the criteria below. Respondents selected for a CRADA will develop the final research plan in collaboration with CDC.

The key criteria by which CDC will judge a potential partnership are whether:

(1) The partnership leads to significant gains in the Nation's preparedness and ability to respond to bioterrorism.

(2) These gains are worth the effort involved in establishing and maintaining the partnership.

With respect to Government Intellectual Property (IP) rights to any invention not made solely by a CRADA partner's employees for which a patent or other IP application is filed, CDC has the authority to grant to the CRADA partner an exclusive option to elect an exclusive or nonexclusive commercialization license. This option does not apply to inventions conceived prior to the effective date of a CRADA that are reduced to practice under the CRADA, if prior to that reduction to practice, CDC has filed a patent application on the invention and has licensed it or offered to licensed it to a third party. The terms of the license will fairly reflect the nature of the invention, the relative contributions of the Parties to the invention and the CRADA, the risks incurred by the CRADA partner and the costs of subsequent research and development needed to bring the invention to the marketplace. The field of use of the license will be commensurate with the scope of the research plan.

This CRADA(s) is proposed and implemented under the 1986 Federal Technology Transfer Act: Public Law 99-502, as amended.

Projects that involve the collection of information from 10 or more individuals may be subject to review by the Office of Management and Budget (OMB) under the Paperwork Reduction Act.

Responses are preferred in electronic format and can be e-mailed to the attention of Michael J. Detmer at MDetmer@cdc.gov. Mailed responses can be sent to the following address: Michael J. Detmer, Division of Bacterial and Mycotic Diseases, National Center for Infectious Diseases, Centers for Disease Control and Prevention, 1600 Clifton Rd. NE., Mail stop C-09, Atlanta, GA 30333.

Dated: June 11, 2003.

Joseph R. Carter,

Associate Director for Management and Operations, Centers for Disease Control and Prevention.

[FR Doc. 03-15218 Filed 6-16-03; 8:45 am]

BILLING CODE 4163-18-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention

[Program Announcement 03094]

Perinatal HIV Prevention in the United States: National Organizations Working Toward Elimination; Notice of Availability of Funds

Application Deadline: August 1, 2003.

A. Authority and Catalog of Federal Domestic Assistance Number

This program is authorized under section 301(a) and 317K(2) of the Public Health Service Act, (42 U.S.C. 241(a) and 274b (k)(2)), as amended. The Catalog of Federal Domestic Assistance number is 93.943.

B. Purpose

The Centers for Disease Control and Prevention (CDC) announces the availability of fiscal year (FY) 2003 funds for a cooperative agreement program for "Perinatal HIV Prevention in the United States: National Organizations Working Toward Elimination." This program addresses the "Healthy People 2010" focus area(s) of HIV and Maternal, Infant and Child Health.

The purpose of this program is to: (1) Develop, provide and disseminate technical assistance and other educational and training materials needed to improve perinatal HIV prevention efforts nationally; (2) promote the integration of: universal voluntary HIV testing into prenatal care across the United States, rapid HIV

testing for women with unknown HIV status in labor, and offering repeat HIV testing to women at risk for seroconversion during pregnancy; and (3) foster the exchange of information, ideas and experiences of perinatal HIV prevention among maternal and child health providers, HIV care providers and consumers.

Measurable outcomes of the program will be in alignment with one or more of the following performance goals for the National Center for HIV, STD and TB Prevention (NCHSTP): (1) Reduce the number of new HIV infections; (2) increase the proportion of HIV-infected people who know they are infected; (3) increase the proportion of HIV-infected people who are linked to appropriate prevention, care, and treatment services; and (4) strengthen the capacity nationwide to monitor the epidemic, develop and implement effective HIV prevention interventions and evaluate prevention programs.

C. Eligible Applicants

Applications may be submitted by national organizations having demonstrated experience providing needs assessments, capacity building, curricula, and training about prevention of mother to child transmission of HIV (PMTCT) for consumers and health care workers, including: Pediatricians, obstetricians, family practitioners, nurses, nurse-midwives, nurse practitioners, counselors, health educators, PMTCT program managers, and other health care providers. These national organizations may be:

- Public nonprofit organizations
- Private nonprofit organizations
- Faith-based organizations

This program is limited to national organizations that have the capability to serve the broadest U.S. audiences by supporting national efforts to assure consistent messages in training and education.

Note: Title 2 of the United States Code section 1611 states that an organization described in section 501(C)(4) of the Internal Revenue Code that engages in lobbying activities is not eligible to receive Federal funds constituting an award, grant or loan.

D. Funding

Availability of Funds

Approximately \$700,000 is available in FY 2003, to fund approximately three to four awards. It is expected that the average award will be \$175,000, ranging from \$50,000 to \$225,000. It is expected that the awards will begin on or about September 15, 2003, and will be made for a 12-month budget period within a

project period of up to four years. Funding estimates may change.

Continuation awards within an approved project period will be made on the basis of satisfactory progress as evidenced by required reports and the availability of funds.

Use of Funds

Funds from this cooperative agreement should not be used for major purchase of equipment or construction. Requests for equipment such as computers and Liquid Crystal Display (LCD) Projectors for training require detailed justification.

Recipient Financial Participation

Matching funds are not required for this program.

Funding Preferences

Funding preference will be given to national organizations with prior experience providing training to health care providers regarding: (1) Incorporation of PMTCT into health care provider education; (2) offering of universal voluntary HIV testing to pregnant women as a routine part of prenatal care; (3) implementation of voluntary rapid HIV testing programs in labor and delivery settings; and (4) to national organizations that have developed and disseminated patient educational materials on HIV, perinatal HIV and its prevention.

E. Program Requirements

In conducting activities to achieve the purpose of this program, the recipient will be responsible for the activities listed in 1. Recipient Activities and CDC will be responsible for the activities listed in 2. CDC Activities.

1. Recipient Activities

a. Provide training and technical assistance to programs and health care providers in sharing and applying knowledge and expertise regarding HIV prevention and perinatal transmission. Specifically, disseminate educational materials, and provide training and technical assistance on approaches to help providers achieve high rates of prenatal HIV testing by using recommended HIV screening practices including opt-out strategies, offering rapid HIV testing for women in labor who present with undocumented HIV status and linking HIV-at risk and HIV-infected women and their infants to comprehensive medical and social services.

b. Sponsor a variety of forums for presentation of information on HIV perinatal reduction (*i.e.*, policies, programs, materials, and other technical

information) and other public health information related to HIV prevention and pregnancy among Maternal and Child Health (MCH) populations.

c. Collaborate with other funded national organizations and the CDC, Division of HIV/AIDS and other Centers, Institutes, and Offices (CIOs) within CDC which address HIV prevention relevant to MCH populations, to assess needs and provide technical assistance.

d. Participate in an annual CDC-sponsored meeting on perinatal HIV prevention.

2. CDC Activities

a. Facilitate and assist in the development of training materials and curricula, administrative tools and policy manuals.

b. Participate in defining the scope of perinatal HIV transmission and other prevention needs relevant to MCH populations, and provide information and technical assistance in meeting those needs.

c. Work with each awardee to facilitate and support collaboration among funded national organizations as well as CDC-funded perinatal HIV prevention and surveillance programs.

d. Provide a synthesis of known best practices and interventions regarding prevention of perinatal transmission of HIV for all pregnant women, including women with little or no prenatal care and unknown HIV status at labor and delivery.

e. Collaborate in the development of forums that focus on perinatal HIV transmission and other public health information that relates to HIV prevention among maternal-child health populations.

f. Assist in the evaluation of perinatal HIV prevention education, training, and materials.

g. Collaborate in the presentation and publication of evaluation findings.

h. Conduct site visits to monitor progress of the programs.

F. Content

Applications

The Program Announcement title and number must appear in the application. Use the information in the Program Requirements, Other Requirements, and Evaluation Criteria sections to develop the application content. Your application will be evaluated on the criteria listed, so it is important to follow them in laying out your program plan. The narrative should be no more than 18 pages, single-spaced, printed on one side, with one-inch margins, and un-reduced 12-point font.

The narrative should consist of:

1. Abstract (not to exceed one page): An executive summary of your program covered under this announcement.

2. Program Plan (Not to exceed 17 pages): In developing the application under this announcement, please review the recipient activities and, in particular, evaluation criteria and respond concisely and completely. The program plan should address activities to be conducted over the entire four-year budget period.

3. *Budget*: Submit an itemized budget and supporting justification that is consistent with your proposed program plan.

G. Submission and Deadline

Application Forms

Submit the signed original and two copies of PHS 5161-1 (OMB Number 0920-0428). Forms are available at the following Internet address: <http://www.cdc.gov/od/pgo/forminfo.htm>.

If you do not have access to the Internet, or if you have difficulty accessing the forms on-line, you may contact the CDC Procurement and Grants Office Technical Information Management Section (PGO-TIM) at: 770-488-2700. Application forms can be mailed to you.

Submission Date, Time, and Address:

The application must be received by 4 p.m. Eastern Time August 1, 2003. Submit the application to: Technical Information Management-PA# 03094, CDC Procurement and Grants Office, 2920 Brandywine Road, Atlanta, GA 30341-4146.

Applications may not be submitted electronically.

CDC Acknowledgement of Application Receipt

A postcard will be mailed by PGO-TIM, notifying you that CDC has received your application.

Deadline

Applications shall be considered as meeting the deadline if they are received before 4 p.m. Eastern Time on the deadline date. Any applicant who sends their application by the United States Postal Service or commercial delivery services must ensure that the carrier will be able to guarantee delivery of the application by the closing date and time. If an application is received after closing due to (1) carrier error, when the carrier accepted the package with a guarantee for delivery by the closing date and time, or (2) significant weather delays or natural disasters, CDC will upon receipt of proper documentation, consider the application as having been received by the deadline.

Any application that does not meet the above criteria will not be eligible for competition, and will be discarded. The applicant will be notified of their failure to meet the submission requirements.

H. Evaluation Criteria

Application

Applicants are required to provide measures of effectiveness that will demonstrate the accomplishment of the various identified objectives of the cooperative agreement regarding educational material and training on perinatal HIV prevention. Measures of effectiveness must relate to the performance goals stated in the purpose section of this announcement. Measures must be objective and quantitative and must measure the intended outcome. These measures of effectiveness must be submitted with the application and will be an element of evaluation.

An independent review group appointed by CDC will evaluate each application against the following criteria:

1. *Scope of Plan (30 points)*: a succinct statement of the intent and desired outcome(s) of the project and clearly stated and measurable outcome objectives to be achieved by the project. These objectives must be quantifiable in terms of outputs and time frame for achievement. The statement of intent and outcome objectives should address the purpose of the cooperative agreement, which is to: (1) Develop, provide and disseminate technical assistance and other educational and training materials needed to improve perinatal HIV prevention efforts nationally; (2) promote the integration of universal voluntary HIV testing into prenatal care across the United States, rapid HIV testing for women with unknown HIV status in labor, and offering repeat HIV testing to women at risk for seroconversion during pregnancy; and (3) foster the exchange of information, ideas and experiences of perinatal HIV prevention among maternal and child health providers, HIV care providers and consumers.

2. *Personnel and Staffing (30 points)*: the qualifications and experience of key personnel, other professional staff and support staff available to carry out the perinatal HIV prevention activities.

3. *Methods (25 points)*: Clear statement of approach and activities required to achieve the stated perinatal HIV prevention outcome objectives. The relationship between activities and objectives must be explicitly demonstrated. Description of activities must include a delineation of resources required, identification of the personnel

who will perform the work, and a management plan with description of the systems and procedures which will be used to manage the progress, budget and operations of the project.

4. *Evaluation (15 points)*: Detailed plans for evaluating the degree to which the program achieves the purpose of the cooperative agreement (as listed in the purpose section, and above in the description of the scope of plan.) Measures must be objective and quantitative and must measure the intended outcome. The submission of these measures shall be a data element to be submitted with, or incorporated into the semiannual progress reports.

5. *Budget (reviewed, but not scored)*: There is an upper limit of \$250,000. An application submitted with a budget over \$250,000, will be reviewed and, if awarded, only partially funded. The budget will be reviewed to determine the extent to which it is reasonable, clearly justified, consistent with the intended use of the funds, and allowable. All budget categories should be itemized.

I. Other Requirements

Technical Reporting Requirements

Provide CDC with original plus two copies of:

1. Interim progress report, no less than 90 days before the end of the budget period. The progress report will serve as your non-competing continuation application, and must contain the following elements:

a. Current Budget Period Activities Objectives.

b. Current Budget Period Financial Progress.

c. New Budget Period Program Proposed Activity Objectives.

d. Detailed Line-Item Budget and Justification.

e. Additional Requested Information.

2. Financial status report, no more than 90 days after the end of the budget period.

3. Final financial and performance reports, no more than 90 days after the end of the project period.

Send all reports to the Grants Management Specialist identified in the "Where to Obtain Additional Information" section of this announcement.

Additional Requirements

The following additional requirements are applicable to this program. For a complete description of each, see Attachment I of the program announcement, as posted on the CDC Web site.

AR-4 HIV/AIDS Confidentiality Provisions

AR-5 HIV Program Review Panel Requirements
AR-7 Executive Order 12372 Review
AR-9 Paperwork Reduction Act Requirements
AR-10 Smoke-Free Workplace Requirements
AR-11 Healthy People 2010
AR-12 Lobbying Restrictions
AR-14 Accounting System Requirements
AR-21 Small, Minority, and Women-Owned Business
AR-22 Research Integrity

J. Where To Obtain Additional Information

This and other CDC announcements, the necessary applications, and associated forms can be found on the CDC Web site, Internet address: <http://www.cdc.gov>. Click on "Funding" then "Grants and Cooperative Agreements".

For general questions about this announcement, contact: Technical Information Management, CDC Procurement and Grants Office, 2920 Brandywine Road, Atlanta, GA 30341-4146, Telephone: 770-488-2700.

For business management and budget assistance, contact: Carlos Smiley, Grants Management Specialist, Procurement and Grants Office, Centers for Disease Control and Prevention, 2920 Brandywine Road, Atlanta, GA 30341-4146, Telephone: 770-488-2722, E-mail address: anx3@cdc.gov.

For program technical assistance, contact: Margaret A. Lampe, RN, Project Officer, Division of HIV/AIDS Prevention, Centers for Disease Control and Prevention, 1600 Clifton Road, Mailstop E-45, Atlanta, GA 30333, Telephone: 404-639-5189, E-mail address: m1lampe@cdc.gov.

Dated: June 7, 2003.

Sandra R. Manning,

*Director, Procurement and Grants Office,
Centers for Disease Control and Prevention.*

[FR Doc. 03-15217 Filed 6-16-03; 8:45 am]

BILLING CODE 4163-18-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention

[60Day-03-78]

Proposed Data Collections Submitted for Public Comment and Recommendations

In compliance with the requirement of section 3506(c)(2)(A) of the

Paperwork Reduction Act of 1995 for opportunity for public comment on proposed data collection projects, the Centers for Disease Control and Prevention (CDC) will publish periodic summaries of proposed projects. To request more information on the proposed projects or to obtain a copy of the data collection plans and instruments, call the CDC Reports Clearance Officer on (404)498-1210.

Comments are invited on: (a) Whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; (b) the accuracy of the agency's estimate of the burden of the proposed collection of information; (c) ways to enhance the quality, utility, and clarity of the information to be collected; and (d) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or other forms of information technology. Send comments to Seleda Perryman, CDC Assistant Reports Clearance Officer, 1600 Clifton Road, MS-D24, Atlanta, GA 30333. Written comments should be received within 60 days of this notice.

Proposed Project

Delayed symptoms associated with the convalescent period of a dengue infection.—New—National Center for Infectious Diseases (NCID)—Centers for Disease Control and Prevention (CDC). Dengue is a vector-borne febrile disease of the tropics transmitted most often by the mosquito *Aedes aegypti*. Symptoms of the acute disease include fever, headache, rash, retro-orbital pain, myalgias, arthralgias, vomiting, abdominal pain and hemorrhagic manifestations.

Many symptoms are mentioned in the medical literature as associated with the convalescent period (three-eight weeks) after dengue infection, including depression, dementia, loss of sensation, paralysis of lower and upper extremities and larynx, epilepsy, tremors, manic psychosis, amnesia, loss of visual acuity, hair loss, and peeling of skin. No epidemiologic study has been conducted to define the timing, frequency, and risk factors for these symptoms. The objective of this study is to examine the incidence and characteristics of mental health disorders and other delayed complications associated with dengue infection and convalescence. The study will be conducted in Puerto Rico, where dengue is endemic and causes severe sporadic epidemics. Laboratory positive confirmed cases of dengue, laboratory

negative suspected dengue cases, and neighborhood controls will be prospectively enrolled in the study. Person-to-person interviews with adults

(age 18 years or greater), will be conducted and information will be collected regarding symptoms experienced during the convalescent

phase of the infection. There are no costs to respondents.

Respondents	Number of respondents	Number of responses per respondent	Average burden per response (in hrs.)	Total burden (in hrs.)
Laboratory positive confirmed dengue	200	2	60/60	400
Dengue negative control	200	2	60/60	400
Neighborhood control	200	2	60/60	400
Total .....	.....	.....	.....	1200

Dated: June 10, 2003.

Thomas A. Bartenfeld,

Acting Associate Director for Policy, Planning and Evaluation, Centers for Disease Control and Prevention.

[FR Doc. 03-15214 Filed 6-16-03; 8:45 am]

BILLING CODE 4163-18-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention

[30 DAY-47-03]

Agency Forms Undergoing Paperwork Reduction Act Review

The Centers for Disease Control and Prevention (CDC) publishes a list of information collection requests under review by the Office of Management and Budget (OMB) in compliance with the Paperwork Reduction Act (44 U.S.C. chapter 35). To request a copy of these requests, call the CDC Reports Clearance Officer at (404) 498-1210. Send written comments to CDC, Desk Officer, Human Resources and Housing Branch, New Executive Office Building, Room 10235, Washington, DC 20503 or by fax to (202) 395-6974. Written comments should be received within 30 days of this notice.

Proposed Project

A Research Program to Develop Optimal NIOSH Alerts in Farming (OMB No. 0920-0501)—REVISION—National Institute for Occupational Safety and Health (NIOSH), Centers for Disease Control and Prevention (CDC).

The mission of the National Institute for Occupational Safety and Health (NIOSH) is to promote “safety and health at work for all people through research and prevention.” Alerts are some of the primary publications by which NIOSH communicates health and safety recommendations to at-risk

workers. Each Alert is mailed to workers affected by a particular health or safety hazard and contains information about the nature of the hazard, as well as recommendations for avoiding or controlling it. Despite the important role of Alerts in conveying health and safety information to workers, these publications have not been routinely pretested and evaluated for effectiveness. Therefore, it is important to continue research that examines the degree to which the NIOSH Alerts produce risk awareness, as well as comprehension, acceptance and use of the recommended health and safety measures.

The OMB-approved project, “A Research Program to Develop Optimal NIOSH Alerts in Farming” (0920-0501), applied theoretical advances in communication research to the development of NIOSH Alerts to ensure maximal effectiveness in conveying health and safety information to workers. This project applied psychology and communication theories to experimentally manipulate features of the NIOSH Alerts and examine the effects of these manipulations on the effectiveness of the Alert. To design these theory-based Alerts, the concepts of goal attainment imagery and risk imagery were applied. Goal attainment imagery asks the readers to imagine themselves carrying out the safety recommendations provided in the Alert, while risk imagery asks the readers to imagine themselves in a high risk situation where the safety recommendations are not followed.

Field research from the project, which applied these two types of imagery, has shown that farmers who received an Alert containing goal attainment imagery found the Alert easier to visualize, stronger, more convincing and more attention getting than a standard Alert. Farmers who received an Alert

with goal attainment imagery reported heightened perceptions of risk awareness and more positive attitudes toward engaging in safety recommendations. In addition, they reported that they would be more likely to pass the information on to other farmers. No differences were found between farmers who received Alerts containing risk imagery and farmers who received a standard Alert. Therefore, goal attainment imagery seemed to have the strongest effect when included in the Alerts.

The original OMB-approved protocol proposed that a national mail-out survey would be conducted in order to test the generalizability of the data collected in the field. Farmers would receive an experimental (high imagery) or a standard version of an Alert along with a survey to complete and return to NIOSH. However, based on results from similar projects, we have learned that mail surveys generate low response rates. We propose changing the data collection format from a mail survey to a telephone survey. Farmers would receive an experimental version of the Alert and then be contacted approximately two weeks later to complete a telephone survey.

This change to the data collection format would serve three purposes. It is expected that the response rate for the telephone survey would be considerably higher than the response rate for the mail survey. Also, surveying a national sample of farmers would allow us to generalize the results to the broader population of farmers. Finally, the distribution of the experimental Alerts is similar to the way in which NIOSH Alerts are distributed to at risk workers and would present an opportunity to test the effectiveness of this distribution method. The annual burden for this data collection is 133 hours.

Respondent	Number of respondents	Number of responses per respondent	Average burden per response (in hours)
Farmers	400	1	20/60

Dated: June 11, 2003.

Thomas A. Bartenfeld,

Acting Associate Director for Policy, Planning and Evaluation, Centers for Disease Control and Prevention.

[FR Doc. 03-15215 Filed 6-16-03; 8:45 am]

BILLING CODE 4163-18-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention

[30 DAY-48-03]

Agency Forms Undergoing Paperwork Reduction Act Review

The Centers for Disease Control and Prevention (CDC) publishes a list of information collection requests under review by the Office of Management and Budget (OMB) in compliance with the Paperwork Reduction Act (44 U.S.C. chapter 35). To request a copy of these requests, call the CDC Reports Clearance Officer at (404) 498-1210. Send written comments to CDC, Desk Officer, Human Resources and Housing Branch, New Executive Office Building, Room 10235, Washington, DC 20503 or by fax to (202) 395-6974. Written comments should be received within 30 days of this notice.

Proposed Project

The National Tobacco Control Program (NTCP) Chronicle Progress Reporting System—New—National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP), Centers for Disease Control and Prevention (CDC). Tobacco use is the single most preventable cause of death and disease in the United States. Most people begin using tobacco in early adolescence. Tobacco use causes more than 430,000 deaths annually in the nation and costs approximately \$50-70 billion in medical expenses alone. The Centers for Disease Control and

Prevention's (CDC) Office on Smoking and Health (OSH) provides funding to health departments of states and territories to develop, implement and evaluate comprehensive Tobacco Control Programs (TCPs) based on CDC guidelines provided in Best Practices for Comprehensive Tobacco Control Programs-August 1999 (Atlanta, GA, HHS). TCPs are population-based, public health programs that design, implement and evaluate public health prevention and control strategies to reduce disease, disability and death related to tobacco use and to reach those communities most impacted by the burden of tobacco use (e.g., racial/ethnic populations, rural dwellers, and the economically disadvantaged). Support for these programs is a cornerstone of the OSH's strategy for reducing the burden of tobacco use throughout the nation. CDC, Office on Smoking and Health is authorized under sections 301 and 317(k) of the Public Health Service Act (42 U.S.C. section 241 and 247b(k)).

As outlined in 45 CFR subtitle A, § 92.40, funding recipients are required to submit twice yearly progress reports to CDC. These reports are used by both the Procurement and Grants Office (PGO) to monitor program compliance, and by OSH managers and Project Officers (POs) to identify training and technical assistance needs; monitor compliance with cooperative agreement requirements; evaluate the progress made in achieving national and program-specific goals; and respond to inquiries regarding program activities and effectiveness. Funding recipients currently have a wide latitude in the content of the information they report with some recipients providing extensive and detailed programmatic information and others providing minimal detail regarding TCP operations. Historically, information has been collected and transmitted via hard-copy paper document. The manual

reporting system significantly impacts the OSH's staff ability to accomplish its responsibilities resulting from providing TCP funds, particularly with respect to compiling, summarizing and reporting aggregate TCP program information.

In responding to the federal government's E-Government initiative, the proposed change in progress report collection methodology is driven by OSH's development of an electronic progress reporting system to collect state TCP information. The proposed reporting system will utilize a more formal, systematic method of collecting information that has historically been requested from individual TCPs and will standardize the content of this information. This will facilitate OSH staff's ability to fulfill its obligations under the cooperative agreements; to monitor, evaluate and compare individual programs; and to assess and report aggregate information regarding the overall effectiveness of OSH's National Tobacco Control Program (NTCP). It will also support OSH's broader mission of reducing the burden of tobacco use by enabling OSH staff to more effectively identify the strengths and weaknesses of individual TCPs; to identify the strength of national movement toward reaching the goals specified in Healthy People 2010; and to disseminate information related to successful public health interventions implemented by these organizations to prevent and control the burden of tobacco use. The OSH anticipates that the state burden of providing hard-copy reports will be reduced with the introduction of the web-based progress reporting system. It is assumed that states will experience a learning curve in using this application, and the reported burden will be reduced once they have familiarized themselves with this system. The annual burden for this data collection is 612 hours.

Respondents	Number of respondents	Number of responses per respondent	Average burden per respondent (in hours)
States and DC	51	2	6

Dated: June 11, 2003.

Thomas A. Bartenfeld,

Acting Associate Director for Policy, Planning and Evaluation, Centers for Disease Control and Prevention.

[FR Doc. 03-15216 Filed 6-16-03; 8:45 am]

BILLING CODE 4163-18-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Medicare & Medicaid Services

Privacy Act of 1974; Report of New System

AGENCY: Department of Health and Human Services (HHS), Centers for Medicare & Medicaid Services (CMS).

ACTION: Notice of New System of Records (SOR).

SUMMARY: In accordance with the requirements of the Privacy Act of 1974, we are proposing to establish a new system of records, called the "MLN Registration and Product Ordering System (MLNR-POS)," HHS/CMS/CMM No. 09-70-0542. The primary purpose of the system of records is to provide CMS with greater efficiency in MLNR-POS product fulfillment and improve management of MLNR-POS educational product inventory. This system will also provide CMS with an automated registration system that will allow health care providers to register for CMS educational programs and order CMS educational products. If in the event that CMS becomes an accredited provider of continuing education credits, this system will provide CMS with the ability to track awarded continuing education credits as required by the accrediting organizations.

Information retrieved from this system of records will be used to support regulatory, reimbursement, and policy functions performed within the agency or by a contractor or consultant; support constituent requests made to a Congressional representative; and support litigation involving the agency.

We have provided background information about the proposed system in the **SUPPLEMENTARY INFORMATION** section, below. Although the Privacy Act requires only that the "routine use" portion of the system be published for comment, CMS invites comments on all portions of this notice. See **EFFECTIVE DATES** section for comment period.

DATES: CMS filed a new system report with the Chair of the House Committee on Government Reform and Oversight, the Chair of the Senate Committee on Governmental Affairs, and the

Administrator, Office of Information and Regulatory Affairs, Office of Management and Budget (OMB) on May 23, 2003. In any event, we will not disclose any information under a routine use until forty (40) calendar days after publication. We may defer implementation of this system of records or one or more of the routine use statements listed below if we receive comments that persuade us to defer implementation.

ADDRESSES: The public should address comments to: Director, Division of Privacy Compliance Data Development (DPCDD), CMS, Room N2-04-27, 7500 Security Boulevard, Baltimore, Maryland 21244-1850. Comments received will be available for review at this location, by appointment, during regular business hours, Monday through Friday from 9:00 a.m.-3:00 p.m., eastern time zone.

FOR FURTHER INFORMATION CONTACT:

Mary Case, Division of Provider Information Planning and Development (DPIPD), CMS, Mail Stop C4-10-07, 7500 Security Boulevard, Baltimore, Maryland 21244-1850.

SUPPLEMENTARY INFORMATION:

I. Description of the New System of Records

A. Statutory and Regulatory Basis for System of Records

Title IV of the Benefits Improvement Protection Act of 2000 (Pub. L. 106-554, Appendix F)

Title IV of the Balanced Budget Act of 1997 Sections 1816(a) and 1842 (a) (3) of the Social Security Act

B. Background

Studies have shown that providers are very interested in obtaining information that will help them improve their billing procedures and improve patient care. These studies have also shown that providers are limited on the amount of time they can spend away from their practice to attend conferences and sort through the multitude of correspondence that they receive on a daily basis. Distance learning is an educational avenue that physicians find an appealing alternative. Studies have shown that health care providers better utilize educational products that provide continuing education credits.

This registration and product ordering system will allow health care providers to register for computer/web-based training courses, satellite broadcasts and train-the-trainer sessions. The system will also allow learners to order provider educational materials.

CMS is considering applying to become an accredited provider of

continuing education. If accredited, CMS will use this system to track continuing education credit information as required by the accrediting organizations.

According to Donna S. Queeney in the American Society for Training and Development Handbook, Fourth Edition, "continuing professional education often is used as a component of credentialing with the intention that it will help practitioners keep knowledge, skills and performance abilities current." Ms. Queeney also states "required continuing education must be accessible to practitioners regardless of their work schedules, geographic locations, or other mitigating factors. The solo practitioner in a rural area needs ready access to continuing education just as much as the group practitioner in a major metropolitan area."

II. Collection and Maintenance of Data in the System

A. Scope of the Data Collected

The MLNR-POS database will collect and store the health care provider's first and last name, mailing address, provider type, facility type, telephone number, fax number and email address. If CMS becomes an accredited provider of continuing education credits, this system may also contain social security number, provider number, UPIN number or contractor ID number.

This information will be used by CMS and CMS contractors to confirm registration and report aggregate data and allow health care providers to retrieve their own educational information.

B. Agency Policies, Procedures, and Restrictions on the Routine Use

The Privacy Act permits us to disclose information without an individual's consent if the information is to be used for a purpose that is compatible with the purpose(s) for which the information was collected. Any such disclosure of data is known as a "routine use." The government will only release MLNR-POS information that can be associated with an individual as provided for under "Section III. Entities Who May Receive Disclosures Under Routine Use." Both identifiable and non-identifiable data may be disclosed under a routine use. Identifiable data includes individual records with MLNR-POS information and identifiers. Non-identifiable data includes individual records with MLNR-POS information and masked identifiers or MLNR-POS information with identifiers stripped out of the file.

CMS will only disclose the minimum personal data necessary to achieve the purpose of the MLNR-POS. CMS has the following policies and procedures concerning disclosures of information that will be maintained in the system. In general, disclosure of information from the SOR will be approved only for the minimum information necessary to accomplish the purpose of the disclosure after CMS:

1. Determines that the use or disclosure is consistent with the reason that the data are being collected; *e.g.*, tracking, reporting and accounting the disclosures made from all CMS systems of records as permitted by the Privacy Act and HIPAA.

2. Determines that:

- a. The purpose for which the disclosure is to be made can only be accomplished if the record is provided in individually identifiable form;

- b. The purpose for which the disclosure is to be made is of sufficient importance to warrant the effect and/or risk on the privacy of the individual that additional exposure of the record might bring; and

- c. There is a strong probability that the proposed use of the data would, in fact, accomplish the stated purpose(s).

3. Requires the information recipient to:

- a. Establish administrative, technical, and physical safeguards to prevent unauthorized use of disclosure of the record;

- b. Remove or destroy at the earliest time all individually, identifiable information; and

- c. Agree to not use or disclose the information for any purpose other than the stated purpose under which the information was disclosed.

- d. Determines that the data are valid and reliable.

III. Proposed Routine Use Disclosures of Data in the System

A. Entities That May Receive Disclosures Under Routine Use

These routine uses specify circumstances, in addition to those provided by statute in the Privacy Act of 1974, under which CMS may release information from the MLNR-POS without the consent of the individual to whom such information pertains. Each proposed disclosure of information under these routine uses will be evaluated to ensure that the disclosure is legally permissible, including but not limited to ensuring that the purpose of the disclosure is compatible with the purpose for which the information was collected. CMS proposes to establish the following routine use disclosures of information maintained in the system:

1. To agency contractors, or consultants that have been contracted by the agency to assist in the performance of a service related to this system of records and that need to have access to the records in order to perform the activity.

CMS contemplates disclosing information under this routine use only in situations in which CMS may enter into a contractual or similar agreement with a third party to assist in accomplishing agency business functions relating to purposes for this system of records.

CMS occasionally contracts out certain of its functions when doing so would contribute to effective and efficient operations. CMS must be able to give a contractor whatever information is necessary for the contractor to fulfill its duties. In these situations, safeguards are provided in the contract prohibiting the contractor from using or disclosing the information for any purpose other than that described in the contract and requires the contractor to return or destroy all information at the completion of the contract.

2. To a Member of Congress or to a Congressional staff member in response to an inquiry of the Congressional Office made at the written request of the constituent about whom the record is maintained.

Individuals sometimes request the help of a Member of Congress in resolving some issue relating to a matter before CMS. The Member of Congress then writes CMS, and CMS must be able to give sufficient information to be responsive to the inquiry.

3. To the Department of Justice (DOJ), court or adjudicatory body when:

- a. The agency or any component thereof, or

- b. Any employee of the agency in his or her official capacity; or

- c. Any employee of the agency in his or her individual capacity where the DOJ has agreed to represent the employee, or

- d. The United States Government; is a party to litigation or has an interest in such litigation, and by careful review, CMS determines that the records are both relevant and necessary to the litigation.

Whenever CMS is involved in litigation, or occasionally when another party is involved in litigation and CMS's policies or operations could be affected by the outcome of the litigation, CMS would be able to disclose information to the DOJ, court or adjudicatory body involved. A determination would be made in each instance that, under the circumstances involved, the purposes

served by the use of the information in the particular litigation is compatible with a purpose for which CMS collects the information.

B. Additional Provisions Affecting Routine Use Disclosures

In addition, CMS policy will be to prohibit release even of non-identifiable data, except pursuant to one of the routine uses, if there is a possibility that an individual can be identified through implicit deduction based on small cell sizes (instances where the patient population is so small that individuals who are familiar with the enrollees could, because of the small size, use this information to deduce the identity of the beneficiary).

This System of Records contains Protected Health Information as defined by the Department of Health and Human Services' regulation "Standards for Privacy of Individually Identifiable Health Information" (45 CFR Parts 160 and 164, 65 **Federal Register** 82462 as amended by 66 **Federal Register** 12434). Disclosures of Protected Health Information authorized by these routine uses may only be made if, and as, permitted or required by the "Standards for Privacy of Individually Identifiable Health Information."

IV. Safeguards

The MLNR-POS will conform to applicable law and policy governing the privacy and security of Federal automated information systems. These include but are not limited to: the Privacy Act of 1974, Computer Security Act of 1987, the Paperwork Reduction Act of 1995, the Clinger-Cohen Act of 1996, and OMB Circular A-130, Appendix III, "Security of Federal Automated Information Resources." CMS has prepared a comprehensive system security plan as required by OMB Circular A-130, Appendix III. This plan conforms fully to guidance issued by the National Institute for Standards and Technology (NIST) in NIST Special Publication 800-18, "Guide for Developing Security Plans for Information Technology Systems." Paragraphs A-C of this section highlight some of the specific methods that CMS is using to ensure the security of this system and the information within it.

A. Authorized Users

Personnel having access to the system have been trained in Privacy Act requirements. Employees who maintain records in the system are instructed not to release any data until the intended recipient agrees to implement appropriate administrative, technical, procedural, and physical safeguards

sufficient to protect the confidentiality of the data and to prevent unauthorized access to the data. Records are used in a designated work area and system location is attended at all times during working hours.

To ensure security of the data, the proper level of class user is assigned for each individual user level. This prevents unauthorized users from accessing and modifying critical data. The system database configuration includes five classes of database users:

- Database Administrator class owns the database objects (*e.g.*, tables, triggers, indexes, stored procedures, packages) and has database administration privileges to these objects.
- Quality Control Administrator class has read and write access to key fields in the database;
- Quality Index Report Generator class has read-only access to all fields and tables;
- Policy Research class has query access to tables, but are not allowed to access confidential patient identification information; and
- Submitter class has read and write access to database objects, but no database administration privileges.

B. Physical Safeguards

All server sites will implement the following minimum requirements to assist in reducing the exposure of computer equipment and thus achieve an optimum level of protection and security for the CMS system:

Access to all servers is to be controlled, with access limited to only those support personnel with a demonstrated need for access. Servers are to be kept in a locked room accessible only by specified management and system support personnel. Each server is to require a specific log-on process. All entrance doors are identified and marked. A log is kept of all personnel who were issued a security card, key and/or combination, which grants access to the room housing the server, and all visitors are escorted while in this room. All servers are housed in an area where appropriate environmental security controls are implemented, which include measures implemented to mitigate damage to Automated Information Systems (AIS) resources caused by fire, electricity, water and inadequate climate controls.

Protection applied to the workstations, servers and databases include:

- User Log-on—Authentication is to be performed by the Primary Domain Controller/Backup Domain Controller of the log-on domain.

- Workstation Names—Workstation naming conventions may be defined and implemented at the agency level.

- Hours of Operation—May be restricted by Windows NT. When activated all applicable processes will automatically shut down at a specific time and not be permitted to resume until the predetermined time. The appropriate hours of operation are to be determined and implemented at the agency level.

- Inactivity Lockout—Access to the NT workstation is to be automatically locked after a specified period of inactivity.

- Warnings—Legal notices and security warnings are to be displayed on all servers and workstations.

- Remote Access Security—Windows NT Remote Access Service (RAS) security handles resource access control. Access to NT resources is to be controlled for remote users in the same manner as local users, by utilizing Windows NT file and sharing permissions. Dial-in access can be granted or restricted on a user-by-user basis through the Windows NT RAS administration tool.

C. Procedural Safeguards

All automated systems must comply with Federal laws, guidance, and policies for information systems security. These include, but are not limited to: the Privacy Act of 1974; the Computer Security Act of 1987; OMB Circular A-130, revised; Information Resource Management Circular #10; HHS AIS Security Program; the CMS Information Systems Security Policy, Standards, and Guidelines Handbook; and other CMS systems security policies. Each automated information system should ensure a level of security commensurate with the level of sensitivity of the data, risk, and magnitude of the harm that may result from the loss, misuse, disclosure, or modification of the information contained in the system.

V. Effects of the New System on Individual Rights

CMS proposes to establish this system in accordance with the principles and requirements of the Privacy Act and will collect, use, and disseminate information only as prescribed therein. Data in this system will be subject to the authorized releases in accordance with the routine uses identified in this system of records.

CMS will monitor the collection and reporting of MLNR-POS data. MLNR-POS information is submitted to CMS through standard systems. CMS will use a variety of onsite and offsite edits and

audits to increase the accuracy of MLNR-POS data.

CMS will take precautionary measures (*see* item IV., above) to minimize the risks of unauthorized access to the records and the potential harm to individual privacy or other personal or property rights of patients whose data are maintained in the system. CMS will collect only that information necessary to perform the system's functions. In addition, CMS will make disclosure from the proposed system only with consent of the subject individual, or his/her legal representative, or in accordance with an applicable exception provision of the Privacy Act.

CMS, therefore, does not anticipate an unfavorable effect on individual privacy as a result of maintaining this system of records.

Dated: May 23, 2003.

Thomas A. Scully,
Administrator, Centers for Medicare & Medicaid Services.

09-70-0542

SYSTEM NAME:

MLN Registration and Product Ordering System, (MLNR-POS), HHS/CMS/CMM.

SECURITY CLASSIFICATION:

Level 3, Privacy Act Sensitive.

SYSTEM LOCATION:

HCFA Data Center, 7500 Security Boulevard, North Building, First Floor, Baltimore, Maryland 21244-1850. CMS contractors and agents at various locations.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

This system will contain the health care provider's first and last name, mailing address, provider type, facility type, telephone number, fax numbers and e-mail address. The data submission by the health care provider is voluntary. This system may collect social security number, provider number, UPIN number or contractor ID number.

CATEGORIES OF RECORDS IN THE SYSTEM:

This system will contain the health care provider's first and last name, mailing address, provider type, facility type, telephone number, fax numbers and e-mail address. The data submission by the health care provider is voluntary. This system may collect social security number, provider number, UPIN number or contractor ID number.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

Title IV of the Benefits Improvement Protection Act of 2000 (Pub. L. 106–554, Appendix F) Title IV of the Balanced Budget Act of 1997 Sections 1816(a) and 1842(a)(3) of the Social Security Act

PURPOSE(S):

The primary purpose of the system of records is to provide CMS with greater efficiency in MLNR–POS product fulfillment and improve management of MLNR–POS educational product inventory. This system will also provide CMS with an automated registration system that will allow health care providers to register for CMS educational programs and order CMS educational products. If in the event that CMS becomes an accredited provider of continuing education credits, this system will provide CMS with the ability to track awarded continuing education credits as required by the accrediting organizations.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OR USERS AND THE PURPOSES OF SUCH USES:

These routine uses specify circumstances, in addition to those provided by statute in the Privacy Act of 1974, under which CMS may release information from the MLNR–POS Registration and Product Ordering System without the consent of the individual to whom such information pertains. Each proposed disclosure of information under these routine uses will be evaluated to ensure that the disclosure is legally permissible, including but not limited to ensuring that the purpose of the disclosure is compatible with the purpose for which the information was collected. In addition, CMS policy will be to prohibit release even of non-identifiable data, except pursuant to one of the routine uses, if there is a possibility that an individual can be identified through implicit deduction based on small cell sizes (instances where the patient population is so small that individuals who are familiar with the enrollees could, because of the small size, use this information to deduce the identity of the beneficiary). Be advised, this System of Records contains Protected Health Information as defined by the Department of Health and Human Services' (HHS) regulation "Standards for Privacy of Individually Identifiable Health Information" (45 CFR parts 160 and 164, 65 FR 8462 as amended by 66 FR 12434). Disclosures of Protected Health Information authorized by these routine uses may only be made if, and as, permitted or required by the

"Standards for Privacy of Individually Identifiable Health Information."

1. To agency contractors, or consultants that have been contracted by the agency to assist in the performance of a service related to this system of records and that need to have access to the records in order to perform the activity.

2. To a Member of Congress or to a Congressional staff member in response to an inquiry of the Congressional Office made at the written request of the constituent about whom the record is maintained.

3. To the Department of Justice (DOJ), court or adjudicatory body when:

a. The agency or any component thereof; or

b. Any employee of the agency in his or her official capacity; or

c. Any employee of the agency in his or her individual capacity where the DOJ has agreed to represent the employee; or

d. The United States Government; is a party to litigation or has an interest in such litigation, and by careful review, CMS determines that the records are both relevant and necessary to the litigation.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:**STORAGE:**

Records are stored on paper and magnetic media.

RETRIEVABILITY:

The health care provider, through their self-identified user ID and password can retrieve their own records. Those with database administrative access may also access the database information.

SAFEGUARDS:

CMS has safeguards for authorized users and monitors such users to ensure against excessive or unauthorized use. Personnel having access to the system have been trained in the Privacy Act and systems security requirements. Employees who maintain records in the system are instructed not to release any data until the intended recipient agrees to implement appropriate administrative, technical, procedural, and physical safeguards sufficient to protect the confidentiality of the data and to prevent unauthorized access to the data.

In addition, CMS has physical safeguards in place to reduce the exposure of computer equipment and thus achieve an optimum level of protection and security for the CMS system. For computerized records,

safeguards have been established in accordance with HHS standards and National Institute of Standards and Technology guidelines; e.g., security codes will be used, limiting access to authorized personnel. System securities are established in accordance with HHS, Information Resource Management Circular #10, Automated Information Systems Security Program; CMS Information Systems Security, Standards Guidelines Handbook and OMB Circular No. A–130 (revised) Appendix III.

RETENTION AND DISPOSAL:

Records are disposed of in accordance with established CMS, Privacy Act and HIPAA retention guidelines. CMS will conduct periodic reviews to determine if these records are historical and should be placed in permanent files after established retention periods and administrative needs of CMS have elapsed.

The records are maintained online in the system for 8 years. After an 8-year period, the records are transferred to an inactive file and destroyed 2 months later.

Note: The Department of Justice issued a directive in 1992 prohibiting the destruction of Medicare claims/administrative records. Therefore, all Medicare claims-related/administrative data will be retained until the freeze is lifted."

SYSTEM MANAGER(S) AND ADDRESS:

Director, Provider Communications Group (PCG), Center for Medicare Management, CMS, Mail Stop S1–05–06, 7500 Security Boulevard, Baltimore, Maryland, 21244–1850.

NOTIFICATION PROCEDURE:

For purpose of access, the subject individual should write to the system manager, who will require the system name, the subject individual's name (woman's maiden name, if applicable), social security number (SSN) (furnishing the SSN is voluntary, but it may make searching for a record easier and prevent delay), address, date of correspondence and control number.

RECORD ACCESS PROCEDURE:

For purpose of access, use the same procedures outlined in Notification Procedures above. Requestors should also reasonably specify the record contents being sought. (These procedures are in accordance with Department regulation 45 CFR 5b.5(a)(2).)

CONTESTING RECORD PROCEDURES:

The subject individual should contact the system manager named above, and

reasonably identify the record and specify the information to be contested. State the corrective action sought and the reasons for the correction with supporting justification. (These procedures are in accordance with Department regulation 45 CFR 5b.7.)

RECORD SOURCE CATEGORIES:

Data submission is voluntary and is self reported by the health care provider.

SYSTEMS EXEMPTED FROM CERTAIN PROVISIONS OF THE ACT:

None.

[FR Doc. 03-15120 Filed 6-16-03; 8:45 am]

BILLING CODE 4120-03-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES**Food and Drug Administration**

[Docket No. 2003D-0229]

Draft Guidance for Industry on Continuous Marketing Applications: Pilot 2—Scientific Feedback and Interactions During Development of Fast Track Products Under the Prescription Drug User Fee Act

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice.

SUMMARY: The Food and Drug Administration (FDA) is announcing the availability of a draft guidance for industry entitled "Continuous Marketing Applications: Pilot 2—Scientific Feedback and Interactions During Development of Fast Track Products Under PDUFA." This guidance discusses how the agency will implement a pilot program for frequent scientific feedback and interactions between FDA and applicants during the investigational phase of the development of certain Fast Track drug and biological products. Applicants are being asked to apply to participate in the Pilot 2 program.

DATES: Submit written comments on the draft guidance by August 1, 2003. General comments on agency guidance documents are welcome at any time. Submit written or electronic comments on the collection of information by August 15, 2003.

ADDRESSES: Submit written requests for single copies of the guidance to the Division of Drug Information (HFD-240), Center for Drug Evaluation and Research (CDER), Food and Drug Administration, 5600 Fishers Lane, Rockville, MD 20857; or the Office of Communications, Training, and

Manufacturers Assistance (HFM-40), Center for Biologics Evaluation and Research (CBER), 1401 Rockville Pike, Rockville, MD 20852-1448. Send one self-addressed adhesive label to assist either office in processing your request. See the **SUPPLEMENTARY INFORMATION** section for electronic access to the guidances.

Submit written comments on the draft guidance and on the collection of information to the Division of Dockets Management (HFA-305), Food and Drug Administration, 5630 Fishers Lane, rm. 1061, Rockville, MD 20852. Submit electronic comments on the draft guidance and the collection of information to <http://www.fda.gov/dockets/ecomments>.

FOR FURTHER INFORMATION CONTACT: John Jenkins, Center for Drug Evaluation and Research (HFD-020), Food and Drug Administration, 5600 Fishers Lane, Rockville, MD 20857, 301-594-3937, or Robert A. Yetter, Center for Biologics Evaluation and Research (HFM-25), Food and Drug Administration, 1401 Rockville Pike, Rockville, MD 20852, 301-827-0373.

SUPPLEMENTARY INFORMATION:**I. Description of the Guidance**

FDA is announcing the availability of a draft guidance for industry entitled "Continuous Marketing Applications: Pilot 2—Scientific Feedback and Interactions During Development of Fast Track Products Under PDUFA." In conjunction with the June 2002 reauthorization of the Prescription Drug User Fee Act of 1992 (PDUFA), FDA agreed to meet specific performance goals (PDUFA Goals). The PDUFA Goals include two pilot programs to explore the continuous marketing application (CMA) concept. The CMA concept builds on the current practice of interaction between FDA and applicants during drug development and application review and proposes opportunities for improvement.

Under this CMA pilot program, Pilot 2, certain drug and biologic products that have been designated as Fast Track (i.e., products intended to treat a serious and/or life-threatening disease for which there is an unmet medical need) are eligible to participate in Pilot 2. Pilot 2 is an exploratory program that will allow FDA to evaluate the impact of frequent scientific feedback and interactions with applicants during the investigational new drug application (IND) phase. Under the pilot program, a maximum of one Fast Track product per review division in CDER and CBER will be selected to participate. This guidance provides information regarding the

selection of participant applications for Pilot 2, the formation of agreements between FDA and applicants on the IND communication process, and other procedural aspects of Pilot 2. The FDA will begin accepting applications for participation in Pilot 2 on October 1, 2003.

This draft guidance is being issued consistent with FDA's good guidance practices regulation (21 CFR 10.115). The draft guidance, when finalized, will represent the agency's current thinking on this topic. It does not create or confer any rights for or on any person and does not operate to bind FDA or the public. An alternative approach may be used if such approach satisfies the requirements of the applicable statutes and regulations.

II. Comments

Interested persons may submit to the Division of Dockets Management (*see ADDRESSES*) written or electronic comments on the draft guidance and the information collection. Two copies of mailed comments are to be submitted, except that individuals may submit one copy. Comments are to be identified with the docket number found in brackets in the heading of this document. The draft guidance and received comments are available for public examination in the Division of Dockets Management between 9 a.m. and 4 p.m., Monday through Friday.

III. The Paperwork Reduction Act of 1995

Under the Paperwork Reduction Act (the PRA) (44 U.S.C. 3501-3520), Federal agencies must obtain approval from the Office of Management and Budget (OMB) for each collection of information they conduct or sponsor. Section 3506(c)(2)(A) of the PRA (44 U.S.C. 3506(c)(2)(A)) requires Federal agencies to provide a 60-day notice in the **Federal Register** concerning each proposed collection of information before submitting the collection to OMB for approval. To comply with this requirement, FDA is publishing notice of the proposed collection of information set forth in this document.

With respect to the following collection of information, FDA invites comments on: (1) Whether the proposed collection of information is necessary for the proper performance of FDA's functions, including whether the information will have practical utility; (2) the accuracy of FDA's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used; (3) ways to enhance the quality, utility, and clarity of the information to be

collected; and (4) ways to minimize the burden of the collection on respondents, including through the use of automated collection techniques and other forms of information technology, when appropriate.

Title: Draft guidance for industry “Continuous Marketing Applications: Pilot 2—Scientific Feedback and Interactions During Development of Fast Track Products Under PDUFA.

Description: FDA is issuing a draft guidance on the implementation of a pilot program to provide selected applicants of Fast Track drugs or biologics with frequent scientific feedback and interactions during the IND development phase. The draft guidance describes the criteria, procedures, and the application process to participate in Pilot 2.

The draft guidance describes one collection of information: Applicants who would like to participate in Pilot 2 must submit an application (Pilot 2 application) containing certain information outlined in the draft guidance. The purpose of the Pilot 2 application is for the applicants to describe how their designated Fast Track product would benefit from enhanced communications between the FDA and the applicant during the product development process.

Section 312.23 (21 CFR 312.23) of the FDA regulations states that information provided to the agency as part of an IND must be submitted in triplicate and with an appropriate cover form. Form FDA 1571 must accompany submissions under INDs. FDA Form 1571 has a valid OMB control number: OMB Control No. 0910-0014, which expires January 31, 2006.

In the draft guidance document, CDER and CBER ask that a Pilot 2 application be submitted as an amendment to the application for the underlying product under the requirements of § 312.23; therefore, Pilot 2 applications should be submitted to the agency in triplicate

with Form FDA 1571. The agency recommends that a Pilot 2 application be submitted in this manner for two reasons: (1) To ensure that each Pilot 2 application is kept in the administrative file with the entire underlying application and (2) to ensure that pertinent information about the Pilot 2 application is entered into the appropriate tracking databases. Use of the information in the agency’s tracking databases enables the agency to monitor progress on activities.

Under the draft guidance, the agency asks applicants to include the following information in the Pilot 2 application:

- Cover letter prominently labeled “Pilot 2 application;”
- IND number;
- Date of Fast Track designation;
- Date of the end-of-phase 1 meeting, or equivalent meeting, and summary of the outcome;
- A timeline of milestones from the drug or biological product development program, including projected date of new drug application/biologic licensing applications submission;
- Overview of the proposed product development program for a specified disease and indication(s), providing information about each of the review disciplines (e.g., continuous marketing applications, pharmacology/toxicology, clinical, clinical pharmacology and biopharmaceutics);
- Rationale for interest in participating in Pilot 2, specifying the ways in which development of the subject drug or biological product would be improved by frequent scientific feedback and interactions with FDA and the potential for such communication to benefit public health by improving the efficiency of the product development program; and
- Draft agreement for proposed feedback and interactions with FDA.

This information will be used by the agency to determine which Fast Track

products are eligible for participation in Pilot 2.

Description of Respondents: An applicant for a drug or biological product that has been designated as Fast Track under section 112 of the FDA Modernization Act (21 U.S.C. 356).

Burden Estimate: Table 1 of this document provides an estimate of the annual reporting burden¹ for the submission of a Pilot 2 application under the guidance. Participation in this pilot program will be voluntary.

Based on the number of approvals for Fast Track designations and data collected from the review divisions and offices within CDER and CBER, FDA estimates that in fiscal year (FY) 2002, 109 drug product applications and 46 biological products had Fast Track designation. FDA anticipates that approximately 85 drug product applicants (respondents) and approximately 29 biological product applicants (respondents) will submit at least one Pilot 2 application. Based on information collected from offices within CDER and CBER, the agency further anticipates that the total responses, i.e., the total number of applications received for Pilot 2, will be 90 for drug products and 35 for biological products. The hours per response, which is the estimated number of hours that a respondent would spend preparing the information to be submitted in a Pilot 2 application in accordance with the draft guidance, is estimated to be approximately 80 hours. Based on FDA’s experience, we expect it will take respondents this amount of time to obtain and draft the information to be submitted with a Pilot 2 application. Therefore, the agency estimates that applicants will use approximately 10,000 hours to complete the Pilot 2 applications.

FDA invites comments on this analysis of information collection burdens.

TABLE 1.—ESTIMATED ANNUAL REPORTING BURDEN¹

Pilot 2 application	No. of respondents	No. of responses per respondent	Total annual responses	Hours per response	Total hours
CDER	85	1.06	90	80	7,200
CBER	29	1.20	35	80	2,800
Total					10,000

¹ There are no capital costs or operating and maintenance costs associated with this information collection.

¹ The burden estimate is for the application period because this is a pilot program and limited in duration.

IV. Electronic Access

Persons with access to the Internet can obtain the guidance at <http://www.fda.gov/cder/guidance/index.htm>, or <http://www.fda.gov/cber/guidelines.htm>.

Dated: June 9, 2003.

Jeffrey Shuren,

Assistant Commissioner for Policy.

[FR Doc. 03-15168 Filed 6-12-03; 11:36 am]

BILLING CODE 4160-01-S

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

[Docket No. 2003D-0228]

Draft Guidance for Industry on Continuous Marketing Applications: Pilot 1—Reviewable Units for Fast Track Products Under the Prescription Drug User Fee Act

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice.

SUMMARY: The Food and Drug Administration (FDA) is announcing the availability of a draft guidance for industry entitled "Continuous Marketing Applications: Pilot 1—Reviewable Units for Fast Track Products Under PDUFA." This is one in a series of guidance documents that FDA agreed to draft and implement in conjunction with the June 2002 reauthorization of the Prescription Drug User Fee Act of 1992 (PDUFA). Pilot 1 will enable certain applicants to receive early feedback on portions of their applications. Pilot 1 will also evaluate the benefits and costs of providing applicants early feedback.

DATES: Submit written or electronic comments on the draft guidance by August 1, 2003. General comments on agency guidance documents are welcome at any time.

ADDRESSES: Submit written requests for single copies of the draft guidance to the Division of Drug Information (HFD-240), Center for Drug Evaluation and Research (CDER), Food and Drug Administration, 5600 Fishers Lane, Rockville, MD 20857; or to the Office of Communications, Training, and Manufacturers Assistance (HFM-40), Center for Biologics Evaluation and Research (CBER), 1401 Rockville Pike, Rockville, MD 20852-1448. Send one self addressed adhesive label to assist either office in processing your request. Submit written comments on the draft guidance to the Division of Dockets Management (HFA-305), Food and Drug

Administration, 5630 Fishers Lane, rm. 1061, Rockville, MD 20852. Submit electronic comments to <http://www.fda.gov/dockets/ecomments>. See the **SUPPLEMENTARY INFORMATION** section for electronic access to the draft guidance document.

FOR FURTHER INFORMATION CONTACT: John Jenkins, Center for Drug Evaluation and Research (HFD-020), Food and Drug Administration, 5600 Fishers Lane, Rockville, MD 20857, 301-594-3937, or Robert A. Yetter, Center for Biologics Evaluation and Research (HFM-25), Food and Drug Administration, 1401 Rockville Pike, Rockville, MD 20852, 301-827-0373.

SUPPLEMENTARY INFORMATION:

I. Description of the Guidance

FDA is announcing the availability of a draft guidance for industry entitled "Continuous Marketing Applications: Pilot 1—Reviewable Units for Fast Track Products Under PDUFA." In conjunction with the June 2002 reauthorization of PDUFA, FDA agreed to meet specific performance goals (PDUFA Goals). The PDUFA Goals include two pilot programs to explore the continuous marketing application (CMA) concept. The CMA concept builds on the current practice of interaction between FDA and applicants during drug development and application review and proposes opportunities for improvement.

Under this CMA pilot program, Pilot 1, applicants submitting new drug applications (NDAs) or biological licensing applications (BLAs) for products that have been designated as Fast Track drug or biological products (i.e., products intended to treat a serious and/or life-threatening disease for which there is an unmet medical need) may be eligible to submit portions of their marketing applications (reviewable units) in advance of the complete marketing application. FDA has agreed to complete reviews of reviewable units within a specified time and to provide early feedback for the presubmissions in the form of discipline review letters.

This draft guidance provides information on how the agency will implement Pilot 1. The draft guidance describes Pilot 1 as an exploratory program that will allow FDA to evaluate the added value, costs, and impact of early review and feedback on parts of applications (reviewable units) in advance of submission of the complete application.

This draft guidance is being issued consistent with FDA's good guidance practices regulation (21 CFR 10.115). The draft guidance, when finalized, will

represent the agency's current thinking on the implementation of the Pilot 1 program for reviewable units of certain Fast Track drug and biological products. It does not create or confer any rights for or on any person and does not operate to bind FDA or the public. An alternative approach may be used if such approach satisfies the requirements of the applicable statutes and regulations.

II. Comments

Interested persons may submit to the Division of Dockets Management (*see ADDRESSES*) written or electronic comments on the draft guidance. Submit a single copy of electronic comments or two copies of mailed comments, except that individuals may submit one paper copy. Comments are to be identified with the docket number found in brackets in the heading of this document. The draft guidance and received comments are available for public examination in the Division of Dockets Management between 9 a.m. and 4 p.m., Monday through Friday.

III. The Paperwork Reduction Act of 1995

This notice contains no new collections of information. The information requested for a reviewable unit (a predefined portion of an NDA or BLA that may be submitted prior to submission of a complete NDA/BLA) is already covered by the collection of information for NDAs and BLAs (21 CFR 314.50 and 601.2). This notice merely provides applicants an opportunity to submit already required information in advance of the complete NDA or BLA.

In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. 3501-3520), OMB approved the information collection for an application to market a new drug and assigned it OMB control number 0910-0001 (expires March 31, 2005). OMB also approved the information collection for an application to market a biologic product and assigned it OMB control number 0910-0338 (expires March 31, 2005).

IV. Electronic Access

Persons with access to the Internet can obtain the guidance at either <http://www.fda.gov/cder/guidance/index.htm> or <http://www.fda.gov/cber/guidelines.htm>.

Dated: June 9, 2003.

Jeffrey Shuren,

Assistant Commissioner for Policy.

[FR Doc. 03-15167 Filed 6-16-03; 11:36 am]

BILLING CODE 4160-01-S

DEPARTMENT OF HEALTH AND HUMAN SERVICES**Health Resources and Services Administration****Agency Information Collection Activities: Proposed Collection: Comment Request**

In compliance with the requirement for opportunity for public comment on proposed data collection projects (section 3506(c)(2)(A) of Title 44, United States Code, as amended by the Paperwork Reduction Act of 1995, Public Law 104-13), the Health Resources and Services Administration (HRSA) publishes periodic summaries of proposed projects being developed for submission to OMB under the Paperwork Reduction Act of 1995. To request more information on the proposed project or to obtain a copy of the data collection plans and draft

instruments, call the HRSA Reports Clearance Officer on (301) 443-1129.

Comments are invited on: (a) Whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; (b) the accuracy of the agency's estimate of the burden of the proposed collection of information; (c) ways to enhance the quality, utility, and clarity of the information to be collected; and (d) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or other forms of information technology.

Proposed Project: Grants for Hospital Construction and Modernization—Federal Right of Recovery and Waiver of Recovery (42 CFR, Subpart H) (OMB No. 0915-0099)—Extension

The regulation known as "Federal Right of Recovery and Waiver of

Recovery," provides a means for the Federal Government to recover grant funds and a method of calculating interest when a grant-assisted facility under Title VI and/or XVI is sold or leased, or there is a change in use of the facility. It also allows for a waiver of the right of recovery under certain circumstances. Facilities are required to provide written notice to the Federal Government when such a change occurs; and to provide copies of sales contracts, lease agreements, estimates of current assets and liabilities, value of equipment, expected value of land on the new owner's books and remaining depreciation for all fixed assets involved in the transactions, and other information and documents pertinent to the change of status.

Regulation	Number of respondents	Responses per respondent	Hours per response	Total burden hours
124.704(b) and 707	20	1	3	60

Send comments to Susan G. Queen, Ph.D., HRSA Reports Clearance Officer, Room 14-45, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20857. Written comments should be received within 60 days of this notice.

Dated: June 10, 2003.

Jane Harrison,

Director, Division of Policy Review and Coordination.

[FR Doc. 03-15238 Filed 6-16-03; 8:45 am]

BILLING CODE 4165-15-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES**Health Resources and Services Administration**

[Announcement Number: HRSA-03-098]

Maternal and Child Health Federal Set-Aside Program; Special Projects of Regional and National Significance; Sickle Cell Disease and Newborn Screening Programs (CFDA #93.110)

AGENCY: Health Resources and Services Administration, HHS.

ACTION: Notice of availability of funds.

SUMMARY: The Health Resources and Services Administration (HRSA) announces that approximately \$3.71 million in fiscal year (FY) 2003 funds is available to fund (1) one cooperative

agreement with an established sickle cell disease (SCD) organization with a national scope to institute a project coordinating center, and (2) up to 16 grants for community-based SCD projects to enhance the Sickle Cell Disease and Newborn Screening program through provision of outreach and counseling efforts. Eligibility is open to any public or private entity, including an Indian tribe or tribal organization (as defined at 25 U.S.C. 450b). Awards will be made under the program authority of section 501(a)(2) of the Social Security Act, the Maternal and Child Health (MCH) Federal Set-Aside Program (42 U.S.C. 701(a)(2)), *i.e.*, Special Projects of Regional and National Significance (SPRANS). Funds for these awards were appropriated under Public Law 108-7, the "Consolidated Appropriation Resolution, 2003." Up to \$750,000 in FY 2003 funds is available for one cooperative agreement and up to \$2.96 million in FY 2003 funds is available for 16 or less community-based grants. Estimated amount for each community-based grant award is \$185,000. The project period for the awards will be for two years. Funding beyond the first year is dependent upon the availability of appropriated funds for the sickle cell newborn screening program in FY 2004 and grantee satisfactory performance.

DATES: Applicants for this program are requested to notify the Maternal and Child Health Bureau (MCHB) of their intent to apply by June 25, 2003. Please note that "notice of intent to submit an application" will be used as a mechanism to deliver technical assistance and to assist in the planning of the objective review; it is not a requirement of the application process. Notification can be made in one of three ways: telephone: Carrie Diener at 301-443-1080; email cdiener@hrsa.gov; mail, MCHB, HRSA; Division for Children with Special Health Care Needs, Parklawn Building, Room 18-20; 5600 Fishers Lane; Rockville, MD 20857. The deadline for receipt of applications is July 21, 2003. Applications will be considered "on time" if they are either received on or before the deadline date or postmarked on or before the deadline date. The projected award date is September 30, 2003.

ADDRESSES: To receive a complete application kit, applicants may telephone the HRSA Grants Application Center at 1-877-477-2123 (1-877-HRSA-123) beginning June 16, 2003, or register on-line at: <http://www.hrsa.gov/>, or by accessing http://www.hrsa.gov/g_order3.htm directly. This program uses the standard Form PHS 5161-1 (rev. 7/00) for applications (approved

under OMB No. 0920-0428). Applicants must use the appropriate Catalog of Federal Domestic Assistance (CFDA) number 93.110 and the title, "Sickle Cell Disease and Newborn Screening Program," when requesting application materials. The CFDA is a Government-wide compendium of enumerated Federal programs, projects, services, and activities that provide assistance. All applications should be mailed or delivered to: Grants Management Officer (MCHB), HRSA Grants Application Center, 901 Russell Avenue, Suite 450, Gaithersburg MD; Telephone: 1-877-HRSA-123 (477-2123); E-mail: hrrsagac@hrrsa.gov.

HRSA expects to begin accepting grant applications on-line on July 14, 2003. The automated application process should be faster, easier and better for applicants and for HRSA. We encourage you to take advantage of this new option. Check <http://www.hrrsa.gov/grants> to see which HRSA programs are accepting on-line applications.

FOR FURTHER INFORMATION CONTACT:

Michele A. Lloyd-Puryear, M.D., Ph.D., 301-443-1080, email:

mpuryear@hrrsa.gov (for questions specific to project activities of the program, program objectives, or the Letter of Intent described above); and Jacquelyn Whitaker, 301-443-1440; email, jwhitaker@hrrsa.gov (for grants policy, budgetary, and business questions).

SUPPLEMENTARY INFORMATION:

Program Background and Objectives

Sickle cell disease (SCD) is an inherited red blood cell condition characterized primarily by chronic anemia and periodic episodes of pain. In affected individuals, the abnormal red blood cells break easily and clog blood vessels to block blood flow to organs and tissues. This process results in anemia, periodic pain episodes, and ultimately can damage tissues and vital organs and lead to increased infections and early death. In the United States, most cases of SCD occur among people of African ancestries. People of Mediterranean, Middle Eastern, and Indian background are also affected. It is estimated that more than 2 million Americans have the sickle cell trait and over 70,000 have the disease. Annually, approximately 1,000 newborns are identified with the disease through state newborn screening programs.

Early diagnosis of SCD is critical so that children who have the condition can receive proper interventions. Newborn screening for SCD followed by parental health education, enrollment in

comprehensive care, initiation of penicillin prophylaxis and anti-pneumococcal vaccination within the first two months of life can prevent death from severe infections.

The Federal MCHB has long recognized the significance of SCD. In the mid 1960s, MCHB developed and disseminated SCD educational materials nationally. Following passage of the National Sickle Cell Anemia Control Act in 1972, MCHB, with initial funding from the National Institutes of Health (NIH), provided support for community-based sickle cell clinics to conduct testing, counseling, and education. In the mid 1980s, the Federal MCHB supported the development and implementation of State newborn screening programs for SCD. By 1990, 30 States and jurisdictions had implemented programs with direct Federal support. Although most States and jurisdictions currently have Statewide screening programs, a 1987 Consensus Development Conference on Newborn Screening for Sickle Cell and Other Hemoglobinopathies recommendation for universal screening has not been realized.

In FY 2002, MCHB funded 15 community-based grants and one cooperative agreement through its Sickle Cell Disease and Newborn Screening Program. These one-year community-based awards were established to enhance follow-up services for infants who screen positive for SCD or sickle cell trait and support community-based efforts to provide SCD-related education and counseling. For FY 2003, similar awards will be made for this purpose.

All State SCD screening programs include a follow-up component. Some, however, fall short of the guidelines recommended by the Council of Regional Networks for Genetic Services (CORN). There are infants with SCD who do not enter into appropriate programs of comprehensive care and do not receive the requisite interventions. Further, follow-up of infants with sickle cell trait or who are carriers is sub-optimal. While the benefit of carrier notification leads to increased knowledge for the affected infant's family, problems of misunderstanding (infant with the trait perceived as defective), stigmatization, and issues of paternity can also result from carrier notification. It is thus imperative that trait notification and counseling be undertaken with sensitivity and accuracy. In many State SCD programs, parents are notified of the carrier infant's abnormal test results but are left on their own to seek education, genetic counseling, and testing. Many parents

do not receive counseling and testing. The educational component of the SCD program is just as important as the follow-up. Patients and families need to remain well informed and be empowered as active participants in service delivery. State SCD programs need to enlist partners in this effort, including primary care providers, subspecialists, and community-based support organizations. In some communities, the staff of the community-based organization can make the initial contact with the affected family and maintain subsequent contact and provide support and education.

Authorization

Section 501(a)(2) of the Social Security Act (42 U.S.C. 701(a)(2)).

Purpose

The purpose of the Sickle Cell Disease and Newborn Screening Program is to support the comprehensive care for newborns diagnosed with SCD or trait and their families, relying on partnerships among the State Title V and newborn screening programs, community-based SCD organizations, comprehensive SCD treatment centers, and community-based primary care professionals. Specifically, the program will enhance the follow-up component of State SCD screening programs and support community-based efforts that provide hemoglobinopathy counseling, SCD-related education, and support services.

Project 1—Through a cooperative agreement, a national SCD organization will partner with families, community-based SCD organizations, health care professionals, State agencies including State Title V and newborn screening programs, and MCHB and its National Newborn Screening and Genetics Resource Center (NNSGRC.) It will serve as a national SCD coordinating center, to coordinate the implementation of the community-based SCD projects funded by this initiative and provide a community forum to identify and prioritize issues of importance to the SCD community.

Project 2 "The grant funded community-based SCD projects will rely on partnerships between the community-based SCD organizations, State Title V and newborn screening programs, comprehensive sickle cell treatment centers, and community-based primary care professionals to provide support including counseling and education to infants screened positive for SCD and trait and their families; as well as participate in a cooperative relationship with the

national coordinating center and fellow grantees funded by this initiative as a collaborative effort to collect and share information and to standardize SCD education and counseling activities, and implement a model program of SCD carrier follow-up to include notification, extended family testing, counseling and education of affected individuals and families.

Eligibility

Under SPRANS project grant regulations at 42 CFR 51a.3, any public or private entity, including an Indian tribe or tribal organization (as defined at 25 U.S.C. 450b), is eligible to apply for grants and the cooperative agreement covered by this announcement. Under the President's initiative, community-based and faith-based organizations that are otherwise eligible and believe they can contribute to HRSA's program objectives are urged to consider this initiative.

Project 1: National Coordinating Center Funding Level/Project Period

Up to \$750,000 in FY 2003 will be used to fund the national coordinating center through a cooperative agreement. The project period for the award will be for two years. Funding beyond the first year is dependent upon the availability of appropriated funds for the sickle cell newborn screening program in FY 2004 and grantee satisfactory performance.

The Federal Role

The funding for the national SCD coordinating center will be in the form of a cooperative agreement, in which substantial participation on the project of MCHB staff is anticipated during the performance period. Under the terms of this cooperative agreement, in addition to the required monitoring and technical assistance, Federal responsibilities will include:

- (1) Participation in meetings conducted during the period of the cooperative agreement;
- (2) Ongoing review of activities and procedures to be established and implemented for accomplishing the scope of work;
- (3) Review of project information prior to dissemination;
- (4) Review of information presented on project activities;
- (5) Assistance with the establishment of contacts with Federal and State agencies, MCHB grant projects, including the NNSGRC, and other contacts that may be relevant to the project's mission, and referral, as necessary, to these entities.
- (6) Provision of information resources.

Funding Priority and Preference

Funding priority for the cooperative agreement will be given to applicants meeting the following:

- The applicant is an established SCD organization with a national scope that clearly demonstrates expertise and national capacity for addressing issues relevant to SCD patients and their families and in which community-based programs play an integral role in its mission.

The applicant will be given a 5-point favorable adjustment to the ranking score assigned to that application if the funding priority is met (score is based on a 100 point scale with a maximum adjustment of 5 points).

Funding preference will be applied to FY 2002 funded grantees in the Sickle Cell Newborn Screening Program. Preference will only be given to those applicants who rank above the 20th percentile of applications recommended for approval by the Objective Review Group.

Review Criteria

Applications that are complete and responsive to the guidance will be evaluated by an objective review panel specifically convened for this solicitation and in accordance with HRSA grants management policies and procedures.

Cooperative agreement applications will be reviewed using the following HRSA criteria:

1. The proposed activities, if well executed, are capable of attaining project objectives.
2. The project objectives are capable of achieving the specific program objectives defined in the program announcement and the proposed results are measurable.
3. The method for evaluating proposed results includes criteria for determining the extent to which the program has achieved its stated objectives and the extent to which the accomplishment of objectives can be attributed to the program.
4. In so far as practical, the proposed activities, when accomplished, are replicable, national in scope and include plans for broad dissemination.
5. The estimated costs to the government of the project are reasonable considering the level and complexity of activity and the anticipated results.
6. The project personnel are well qualified by training and/or experience for the support sought, and the applicant organization has adequate facilities and manpower.

Additional criteria may be used to review and rank applications for this

competition. Any such criteria will be identified in the program guidance included in the application kit. Applicants should pay strict attention to addressing these criteria, in addition to those referenced above. Also, to the extent that regulatory review criteria generally applicable to all Title V programs (at 42 CFR part 51a) are relevant to this specific project, such factors will be taken into account.

Project 2: Community-based SCD Organizations

Funding Level/Project Period

Up to \$ 2.96 million in FY 2003 will be used to fund up to 16 community-based grants within the program. Estimated amount for each community-based grant award is \$185,000. The project period for the awards will be for two years. Funding beyond the first year is dependent upon the availability of appropriated funds for the sickle cell newborn screening program in FY 2004 and grantee satisfactory performance. Grantees will be expected to work cooperatively with the national coordinating center described in this announcement.

Funding Priorities and Preference

Funding priority for community-based grants will be given to applicants meeting the following:

- (1) A collaborative relationship with the State Title V and newborn screening program, a local comprehensive SCD treatment center, and a community-based SCD organization;
- (2) The applicant is a local, community-based SCD organization with no less than 10 cumulative years experience in providing outreach services to persons and families affected by SCD; and in addition, in providing education and counseling to parents of infants determined by the newborn screening program to have SCD or be carriers of sickle cell or other abnormal hemoglobins.
- (3) The applicant can document experience within the past year that:
 - a. Provides outreach services, education and counseling to parents of infants determined by the newborn screening program to have SCD or be carriers of sickle cell or other abnormal hemoglobins; and
 - b. Partners with the State Title V and newborn screening program(s), and a local comprehensive sickle cell treatment center or a local community-based SCD organization.

An applicant will be given a 5-point favorable adjustment to the ranking score assigned to that application for each funding priority that is met (score

is based on a 100 point scale with a maximum adjustment of 15 points). In order to assure equitable distribution of awards in terms of geography, there is a maximum of 2 awards per State.

Funding preference will be applied to FY 2002 funded grantees in the Sickle Cell Newborn Screening Program. Preference will only be given to those applicants who rank above the 20th percentile of applications recommended for approval by the Objective Review Group.

Review Criteria

Applications that are complete and responsive to the guidance will be evaluated by an objective review panel specifically convened for this solicitation and in accordance with HRSA grants management policies and procedures.

Applications for community-based grants will be evaluated using the following criteria:

1. The proposed activities, if well executed, are capable of attaining project objectives.
2. The project objectives are capable of achieving the specific program objectives defined in the program announcement and the proposed results are measurable.
3. The method for evaluating proposed results includes criteria for determining the extent to which the program has achieved its stated objectives and the extent to which the accomplishment of objectives can be attributed to the program.
4. The estimated costs to the government of the project are reasonable considering the level and complexity of activity and the anticipated results.
5. The project personnel are well qualified by training and/or experience for the support sought, and the

applicant organization has adequate facilities and manpower.

Additional criteria may be used to review and rank applications for this competition. Any such criteria will be identified in the program guidance included in the application kit. Applicants should pay strict attention to addressing these criteria, in addition to those referenced above. Also, to the extent that regulatory review criteria generally applicable to all Title V programs (at 42 CFR part 51a) are relevant to this specific project, such factors will be taken into account.

Paperwork Reduction Act

OMB approval for any data collection in connection with this cooperative agreement will be sought, as required under the Paperwork Reduction Act of 1995.

Public Health System Reporting Requirements

The second component (Community-based Sickle Cell Disease organizations—Project 2) of this program is subject to the Public Health System Reporting Requirements (approved under OMB No. 0937-0195). Under these requirements, the community-based nongovernmental applicant must prepare and submit a Public Health System Impact Statement (PHSIS). The PHSIS is intended to provide information to State and local health officials to keep them apprised of proposed health services grant applications submitted by community-based nongovernmental organizations within their jurisdictions.

Community-based nongovernmental applicants are required to submit the following information to the head of the appropriate State and local health agencies in the area(s) to be impacted no later than the Federal application receipt due date:

(a) A copy of the face page of the application (SF 424).

(b) A summary of the project (PHSIS), not to exceed one page, which provides:

- (1) A description of the population to be served.
- (2) A summary of the services to be provided.
- (3) A description of the coordination planned with the appropriate State and local health agencies.

Executive Order 12372

The MCH Federal Set-Aside program has been determined to be a program which is not subject to the provisions of Executive Order 12372 concerning intergovernmental review of Federal programs.

Dated: May 22, 2003.

Stephen R. Smith,

Executive Assistant to the Administrator.

[FR Doc. 03-15183 Filed 6-16-03; 8:45 am]

BILLING CODE 4165-15-P

DEPARTMENT OF HOMELAND SECURITY

Bureau of Customs and Border Protection

Notice of Cancellation of Customs Broker License

AGENCY: Bureau of Customs and Border Protection, Department of Homeland Security.

ACTION: General notice.

SUMMARY: Pursuant to section 641 of the Tariff Act of 1930, as amended, (19 U.S.C. 1641) and the Customs Regulations (19 CFR 111.51), the following Customs broker license and any and all associated local and national permits are canceled without prejudice:

Name	License No.	Issuing port
Key Custom's Brokerage, Inc	14890	Seattle.
A.W. Fenton Company, Inc	00021	Cleveland.

Dated: June 10, 2003.

Jayson P. Ahern,

Assistant Commissioner, Office of Field Operations.

[FR Doc. 03-15241 Filed 6-16-03; 8:45 am]

BILLING CODE 4820-02-P

DEPARTMENT OF HOMELAND SECURITY

Bureau of Customs and Border Protection

Cancellation of Customs Broker License Due to Death of the License Holder

AGENCY: Bureau of Customs and Border Protection, Department of Homeland Security.

ACTION: General notice.

SUMMARY: Notice is hereby given that, pursuant to 19 CFR 111.51(a), the following individual Customs broker license and any and all associated permits have been cancelled due to the death of the broker:

Name	License No.	Port name
Robert J. McCracken	03346	Detroit.
Emilio E. Ruiz	04434	Miami.
Sig M. Glukstad	03864	Miami.
Mary Kay Angel	21807	Houston.
Robert E. Mullins	04130	San Francisco.

Dated: June 10, 2003.

Jayson P. Ahern,

Assistant Commissioner, Office of Field Operations.

[FR Doc. 03-15243 Filed 6-16-03; 8:45 am]

BILLING CODE 4820-02-P

DEPARTMENT OF THE TREASURY

Bureau of Customs and Border Protection

Notice of Cancellation of Customs Broker Permit

AGENCY: Bureau of Customs and Border Protection, Department of Homeland Security.

ACTION: General notice.

SUMMARY: Pursuant to section 641 of the Tariff Act of 1930, as amended, (19 U.S.C. 1641) and the Customs Regulations (19 CFR 111.51), the following Customs broker local permits are canceled without prejudice.

Name	Permit No.	Issuing port
Anthony Noguerras	28-01-MP8	San Francisco.
Freight Solutions International	LLC28-01-MQ6	San Francisco.
Rulewave, Inc, LLC	96-2101-1	Houston.
Jeanette Larbardini CHB	98-007	Houston.
W.R. Zanes & Co., of LA, Inc.	96-2101-2	Houston.
XL Brokers International, Inc.	97-003	Houston.
USF Worldwide, Inc.	09549	San Francisco.
Mildred L. Vavao	28-02-AQF	San Francisco.

Dated: June 10, 2003.

Jayson P. Ahern,

Assistant Commissioner, Office of Field Operations.

[FR Doc. 03-15244 Filed 6-16-03; 8:45 am]

BILLING CODE 4820-02-P

DEPARTMENT OF HOMELAND SECURITY

Bureau of Customs and Border Protection

Notice of Cancellation of Customs Broker License

AGENCY: Bureau of Customs and Border Protection, Department of Homeland Security.

ACTION: General notice.

SUMMARY: Pursuant to section 641 of the Tariff Act of 1930, as amended, (19 U.S.C. 1641) and the Customs Regulations (19 CFR 111.51), the following Customs broker license are canceled without prejudice.

Name	License No.	Issuing port
Peter Vaccaro	07980	Champlain.
Peter Vaccaro	07451	Detroit.
Philip W. Hughes	05631	Seattle.

These brokers hold multiple Customs broker licenses. They continue to hold other valid Customs broker licenses.

Dated: June 10, 2003.

Jayson P. Ahern,

Assistant Commissioner, Office of Field Operations.

[FR Doc. 03-15242 Filed 6-16-03; 8:45 am]

BILLING CODE 4820-02-P

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

[FEMA-1473-DR]

American Samoa; Major Disaster and Related Determinations

AGENCY: Federal Emergency Management Agency, Emergency Preparedness and Response Directorate, Department of Homeland Security.

ACTION: Notice.

SUMMARY: This is a notice of the Presidential declaration of a major

disaster for the Territory of American Samoa (FEMA-1473-DR), dated June 6, 2003, and related determinations.

EFFECTIVE DATE: June 6, 2003.

FOR FURTHER INFORMATION CONTACT: Magda Ruiz, Recovery Division, Federal Emergency Management Agency, Washington, DC 20472, (202) 646-2705.

SUPPLEMENTARY INFORMATION: Notice is hereby given that, in a letter dated June 6, 2003, the President declared a major disaster under the authority of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. 5121-5206 (the Stafford Act), as follows:

I have determined that the damage in certain areas of the Territory of American

Samoa, resulting from heavy rainfall, flooding, landslides, and mudslides on May 19–21, 2003, is of sufficient severity and magnitude to warrant a major disaster declaration under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. 5121–5206 (the Stafford Act). I, therefore, declare that such a major disaster exists in the Territory of American Samoa.

In order to provide Federal assistance, you are hereby authorized to allocate from funds available for these purposes, such amounts as you find necessary for Federal disaster assistance and administrative expenses.

You are authorized to provide Individual Assistance and Public Assistance in the designated areas, and Hazard Mitigation throughout the Territory of American Samoa. Consistent with the requirement that Federal assistance be supplemental, any Federal funds provided under the Stafford Act for Public Assistance, Hazard Mitigation, and the Other Needs Assistance under Section 408 of the Stafford Act will be limited to 75 percent of the total eligible costs. You are authorized to make adjustments as warranted to the non-Federal cost shares as provided under the Insular Areas Act, 48 U.S.C. 1469a(d).

Further, you are authorized to make changes to this declaration to the extent allowable under the Stafford Act.

The time period prescribed for the implementation of section 310(a), Priority to Certain Applications for Public Facility and Public Housing Assistance, 42 U.S.C. 5153, shall be for a period not to exceed six months after the date of this declaration.

The Federal Emergency Management Agency (FEMA) hereby gives notice that pursuant to the authority vested in the Under Secretary for Emergency Preparedness and Response, Department of Homeland Security, under Executive Order 12148, as amended, William Lokey, of FEMA is appointed to act as the Federal Coordinating Officer for this declared disaster.

I do hereby determine the following area of the Territory of American Samoa to have been affected adversely by this declared major disaster:

The Island of Tutuila for Individual Assistance and Public Assistance.

All islands within the Territory of American Samoa are eligible to apply for assistance under the Hazard Mitigation Grant Program.

(The following Catalog of Federal Domestic Assistance Numbers (CFDA) are to be used for reporting and drawing funds: 83.537, Community Disaster Loans; 83.538, Cora Brown Fund Program; 83.539, Crisis Counseling; 83.540, Disaster Legal Services Program; 83.541, Disaster Unemployment Assistance (DUA); 83.556, Fire Management Assistance; 83.558, Individual and Household Housing; 83.559, Individual and Household Disaster Housing Operations; 83.560 Individual and Household Program-Other Needs, 83.544, Public Assistance

Grants; 83.548, Hazard Mitigation Grant Program.)

Michael D. Brown,

Under Secretary, Emergency Preparedness and Response.

[FR Doc. 03–15248 Filed 6–16–03; 8:45 am]

BILLING CODE 6718–02–P

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

[FEMA–1472–DR]

Arkansas; Major Disaster and Related Determinations

AGENCY: Federal Emergency Management Agency, Emergency Preparedness and Response Directorate, Department of Homeland Security.

ACTION: Notice.

SUMMARY: This is a notice of the Presidential declaration of a major disaster for the State of Arkansas (FEMA–1472–DR), dated June 6, 2003, and related determinations.

EFFECTIVE DATE: June 6, 2003.

FOR FURTHER INFORMATION CONTACT:

Magda Ruiz, Recovery Division, Federal Emergency Management Agency, Washington, DC 20472, (202) 646–2705.

SUPPLEMENTARY INFORMATION: Notice is hereby given that, in a letter dated June 6, 2003, the President declared a major disaster under the authority of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. 5121–5206 (the Stafford Act), as follows:

I have determined that the damage in certain areas of the State of Arkansas, resulting from severe storms, tornadoes, and flooding on May 2, 2003, and continuing, is of sufficient severity and magnitude to warrant a major disaster declaration under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. 5121–5206 (the Stafford Act). I, therefore, declare that such a major disaster exists in the State of Arkansas.

In order to provide Federal assistance, you are hereby authorized to allocate from funds available for these purposes, such amounts as you find necessary for Federal disaster assistance and administrative expenses.

You are authorized to provide Public Assistance in the designated areas, Hazard Mitigation throughout the State, and any other forms of assistance under the Stafford Act you may deem appropriate. Direct Federal assistance is authorized, when warranted. Consistent with the requirement that Federal assistance be supplemental, any Federal funds provided under the Stafford Act for Public Assistance, direct Federal assistance, and Hazard Mitigation will be limited to 75 percent of the total eligible

costs. If Other Needs Assistance under Section 408 of the Stafford Act is later warranted, Federal funds provided under that program will also be limited to 75 percent of the total eligible costs.

Further, you are authorized to make changes to this declaration to the extent allowable under the Stafford Act.

The Federal Emergency Management Agency (FEMA) hereby gives notice that pursuant to the authority vested in the Under Secretary for Emergency Preparedness and Response, Department of Homeland Security, under Executive Order 12148, as amended, Sandra Coachman, of FEMA is appointed to act as the Federal Coordinating Officer for this declared disaster.

I do hereby determine the following areas of the State of Arkansas to have been affected adversely by this declared major disaster:

Chicot, Cleburne, Conway, Craighead, Cross, Independence, Jackson, Madison, Newton, Perry, Poinsett, St. Francis, Van Buren, White, and Woodruff Counties for Public Assistance.

All counties within the State of Arkansas are eligible to apply for assistance under the Hazard Mitigation Grant Program.

(The following Catalog of Federal Domestic Assistance Numbers (CFDA) are to be used for reporting and drawing funds: 83.537, Community Disaster Loans; 83.538, Cora Brown Fund Program; 83.539, Crisis Counseling; 83.540, Disaster Legal Services Program; 83.541, Disaster Unemployment Assistance (DUA); 83.556, Fire Management Assistance; 83.558, Individual and Household Housing; 83.559, Individual and Household Disaster Housing Operations; 83.560 Individual and Household Program-Other Needs, 83.544, Public Assistance Grants; 83.548, Hazard Mitigation Grant Program.)

Michael D. Brown,

Under Secretary, Emergency Preparedness and Response.

[FR Doc. 03–15247 Filed 6–16–03; 8:45 am]

BILLING CODE 6718–02–P

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

[FEMA–1459–DR]

Mississippi; Amendment No. 4 to Notice of a Major Disaster Declaration

AGENCY: Federal Emergency Management Agency, Emergency Preparedness and Response Directorate, Department of Homeland Security.

ACTION: Notice.

SUMMARY: This notice amends the notice of a major disaster declaration for the

State of Mississippi (FEMA-1459-DR), dated April 24, 2003, and related determinations.

EFFECTIVE DATE: June 6, 2003.

FOR FURTHER INFORMATION CONTACT:

Magda Ruiz, Recovery Division, Federal Emergency Management Agency, Washington, DC 20472, (202) 646-2705.

SUPPLEMENTARY INFORMATION: The notice of a major disaster declaration for the State of Mississippi is hereby amended to include the following area among those areas determined to have been adversely affected by the catastrophe declared a major disaster by the President in his declaration of April 24, 2003:

Jefferson Davis County for Individual Assistance.

(The following Catalog of Federal Domestic Assistance Numbers (CFDA) are to be used for reporting and drawing funds: 83.537, Community Disaster Loans; 83.538, Cora Brown Fund Program; 83.539, Crisis Counseling; 83.540, Disaster Legal Services Program; 83.541, Disaster Unemployment Assistance (DUA); 83.556, Fire Management Assistance; 83.558, Individual and Household Housing; 83.559, Individual and Household Disaster Housing Operations; 83.560 Individual and Household Program-Other Needs, 83.544, Public Assistance Grants; 83.548, Hazard Mitigation Grant Program.)

Michael D. Brown,

Under Secretary, Emergency Preparedness and Response.

[FR Doc. 03-15245 Filed 6-16-03; 8:45 am]

BILLING CODE 6718-02-P

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

[FEMA-1464-DR]

Tennessee; Amendment No. 6 to Notice of a Major Disaster Declaration

AGENCY: Federal Emergency Management Agency, Emergency Preparedness and Response Directorate, Department of Homeland Security.

ACTION: Notice.

SUMMARY: This notice amends the notice of a major disaster declaration for the State of Tennessee (FEMA-1464-DR), dated May 8, 2003, and related determinations.

EFFECTIVE DATE: June 10, 2003.

FOR FURTHER INFORMATION CONTACT:

Magda Ruiz, Recovery Division, Federal Emergency Management Agency, Washington, DC 20472, (202) 646-2705.

SUPPLEMENTARY INFORMATION: The notice of a major disaster declaration for the State of Tennessee is hereby amended to include the following areas among those areas determined to have been adversely affected by the catastrophe declared a major disaster by the President in his declaration of May 8, 2003:

Blount, Jefferson, and Sevier Counties for Individual Assistance.

Cocke County for Individual Assistance (already designated for Public Assistance.) Campbell and White Counties for Public Assistance.

Macon, Morgan, and Sumner Counties for Public Assistance (already designated for Individual Assistance.)

(The following Catalog of Federal Domestic Assistance Numbers (CFDA) are to be used for reporting and drawing funds: 83.537, Community Disaster Loans; 83.538, Cora Brown Fund Program; 83.539, Crisis Counseling; 83.540, Disaster Legal Services Program; 83.541, Disaster Unemployment Assistance (DUA); 83.556, Fire Management Assistance; 83.558, Individual and Household Housing; 83.559, Individual and Household Disaster Housing Operations; 83.560 Individual and Household Program-Other Needs, 83.544, Public Assistance Grants; 83.548, Hazard Mitigation Grant Program.)

Michael D. Brown,

Under Secretary, Emergency Preparedness and Response.

[FR Doc. 03-15246 Filed 6-16-03; 8:45 am]

BILLING CODE 6718-02-P

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

Bureau of Reclamation

Revised Purpose for Trinity River Mainstem Fishery Restoration Program

AGENCY: Fish and Wildlife Service and Bureau of Reclamation, Interior.

ACTION: Supplemental notice of intent to prepare a Supplemental Environmental Impact Statement/Supplemental Draft Environmental Impact Report (SEIS/SDEIR).

SUMMARY: The Fish and Wildlife Service (FWS) and the Bureau of Reclamation (Reclamation), along with the Hoopa Valley Tribe and Trinity County, California, are preparing a Supplemental Environmental Impact Statement/Supplemental Environmental Impact Report (SEIS/SDEIR) for the Trinity River Mainstem Fishery Restoration Program (Program). The purpose of the Program has been revised to be consistent with recent court findings on the Program.

DATES: Two scoping meetings will be held to solicit public input on

alternatives, concerns, and issues to be addressed in the SEIS/SDEIR. The meeting dates are:

- Tuesday, July 8, 2003, 3:30 p.m. to 6:30 p.m., Redding, California.

- Thursday, July 10, 2003, 7 p.m. to 9 p.m., Hoopa, California.

ADDRESSES: Scoping meetings will be held at:

- Redding at the Holiday Inn, 1900 Hilltop Drive, Redding, CA 96002.

- Hoopa at Neighborhood Facilities Recreation Center, Highway 96, Hoopa, CA.

Written comments on the scope of the SEIS/SDEIR should be sent by July 18, 2003 to Mr. Russell Smith, Bureau of Reclamation, Shasta Dam Office, 16349 Shasta Dam Boulevard, Shasta Lake, CA 96019; telephone: 530-275-1554; fax 530-275-2441. Comments received after this date will be considered but may not be included in the resulting SEIS/SDEIR scoping report. Comments received in response to the March 25, 2002 Notice of Intent will remain under consideration.

FOR FURTHER INFORMATION CONTACT: Mr. Russell Smith at the above address or by telephone at 530-275-1554.

SUPPLEMENTARY INFORMATION:

Previously, a Notice of Intent (NOI) was published in the **Federal Register** (67 FR 13647, Mar. 25, 2002) for preparing the SEIS/SEIR with a stated purpose of analyzing the effects of two biological opinions associated with the Program issued on October 12, 2000, one by the FWS and the other by the National Marine Fisheries Service of the Department of Commerce (NMFS), on Central Valley Project (CVP) operations and the effects of the Program on energy generation within the context of the state of deregulation and supply uncertainty for electricity within California. This NOI replaces the previous NOI and presents a purpose consistent with recent court findings on the Program.

A final environmental impact statement/environmental impact report (EIS/EIR) on the Program was issued in November 2000, and a Record of Decision (ROD) was executed on December 19, 2000. Central Valley water and power interests filed suit seeking to enjoin implementation of the ROD. On March 22, 2001, the court issued a Memorandum Decision and Order enjoining the Federal defendants from implementing certain flow related aspects of the ROD. *Westlands Water District v. United States Department of the Interior*, CIV-F-00-7124-OWW/DLB. In its Memorandum Decision and Order, the court found that the effects of reasonable and prudent measures in the

two biological opinions as well as the effects on power in light of the California energy crisis were not adequately analyzed in the EIS/EIR. The lead agencies published a NOI on March 25, 2002, announcing plans to produce the SEIS/SEIR and soliciting public input and comment on the process. A scoping meeting was held in Redding, California on May 9, 2002. On December 10, 2002, the court released a Memorandum Decision and Order regarding Cross-motions for Summary Judgment. That memorandum provided detailed direction regarding the preparation of the SEIS/SEIR that was not available for the previous scoping effort, including direction on the purpose statement for the SEIS/SEIR, alternatives to be considered in the SEIS/SEIR, and a timeline for completion of the SEIS/SEIR, although an appeal is pending. The Federal agencies have decided that the purposes of the National Environmental Policy Act (NEPA) will be furthered by preparing to address these issues in the SEIS/SEIR and are soliciting public input and comment on this process.

The primary objective of the Program is to meet Federal trust responsibilities for tribal fishery resources and restore the fisheries in the Trinity River basin to the level that existed prior to the construction of the Trinity River Division (TRD) of the CVP. These actions are authorized by the Act of August 12, 1955, 69 Stat. 719; the Trinity River Basin Fish and Wildlife Management Act, Pub. L. 98-541 (1984), as amended, and the Central Valley Project Improvement Act, Pub. L. 102-575, Title XXXIV (1992) (CVPIA). The FWS and Reclamation are the Federal co-leads for purposes of complying with NEPA, along with the Hoopa Valley Tribe which is also acting in a co-lead capacity. Trinity County functions as the state lead agency for purposes of complying with the California Environmental Quality Act (CEQA).

The purpose for the November 2000 EIS/EIR was to restore and maintain the natural production of anadromous fish on the Trinity River mainstem downstream of Lewiston Dam. The purpose of the SEIS/SEIR has been amended, consistent with court orders on the Program.

The revised purpose for the SEIS/SEIR is to restore and maintain the natural production of anadromous fish in the Trinity River basin downstream of Lewiston Dam, including fishery restoration to pre-TRD levels, and to meet the U.S. Government's tribal trust obligations. Secondary consideration is given to: (a) Meeting the other restoration goals of the Act of October

24, 1984, Pub. L. 98-541, as amended, and (b) Achieving a reasonable balance among competing demands for use of CVP water, including the requirements of fish and wildlife, agricultural, municipal and industrial and power contractors.

The SEIS/SEIR will update information on alternatives described in the October 2000 EIS/EIR. These alternatives include: Existing Conditions, No Action, Mechanical Restoration, Percent Inflow (modified to address the court's concerns), Flow Evaluation, and Maximum Flow. It is anticipated that two additional alternatives will also be evaluated; a 70 Percent Inflow Alternative and a Lower Flow Alternative that seeks to use lesser amounts of water in conjunction with non-flow related restoration actions.

In 1980, the FWS completed an EIS which estimated fish population reductions of 60 to 80 percent since completion of the TRD and estimated the loss of fishery habitats in the Trinity River to be 80 to 90 percent. The 1980 EIS concluded that insufficient streamflows represented the most critical limiting factor for the restoration of the fishery. Based on this EIS, the Secretary issued a decision in 1981 which increased flows on an interim basis and directed the completion of a scientific study to assess the instream flows and other measures needed to restore the Trinity River fishery.

In 1983, an EIS on the Trinity River Basin Fish and Wildlife Management Program was prepared by the FWS (U.S. Fish and Wildlife Service, 1983). The environmental document analyzed habitat restoration actions, watershed rehabilitation, and improvements to the Trinity River Salmon and Steelhead Hatchery (TRSSH). The EIS clarified that the hatchery's purpose was to mitigate for the loss of the 109 miles of habitat upstream of Lewiston Dam; whereas, the restoration and rehabilitation projects were explicitly designed to increase natural fish production below the dam.

In 1984, the Trinity River Basin Fish and Wildlife Management Act (Pub. L. 98-541) was enacted. It formalized the existence of the Trinity River Basin Fish and Wildlife Task Force (Task Force), and directed the Secretary of the Interior (Secretary) to implement measures to restore fish and wildlife habitat in the Trinity River Basin. The Task Force was directed at implementation of a fish and wildlife management program "to restore natural fish and wildlife populations to levels approximating those which existed immediately prior to the construction of the Trinity Division." In 1996, Congress

reauthorized and amended the original Trinity River Basin Fish and Wildlife Management Act (Pub. L. 104-143). The 1996 amendments clarified that "restoration is to be measured not only by returning adult anadromous fish spawners, but by the ability of dependent tribal, commercial, and sport fisheries to participate fully, through enhanced in-river and ocean harvest opportunities, in the benefits of restoration * * *."

In 1992, Congress passed the CVPIA (Pub. L. 102-575, Title XXXIV) in order to protect, restore, and enhance fish, wildlife, and associated habitats in the Central Valley, including the Trinity River Basin. Specifically, the CVPIA provides at section 3406(b)(23) that "[i]n order to meet Federal trust responsibilities to protect the fishery resources of the Hoopa Valley Tribe and meet the fishery restoration goals of Public Law 98-541," the Secretary is directed to complete the Trinity River Flow Evaluation Study (TRFES) initiated pursuant to the 1981 secretarial directive to develop recommendations "based on the best available scientific data, regarding permanent instream fishery flow requirements and TRD operating criteria and procedures for the restoration and maintenance of the Trinity River fishery." The CVPIA also specifically provided for the Secretary to consult with the Hoopa Valley Tribe on the TRFES and, upon the Tribe's concurrence, to implement the restoration recommendations accordingly.

The FWS and the Hoopa Valley Tribe completed the Flow Study in June 1999. The draft EIS/EIR for the Trinity River Mainstem Fishery Restoration Program (TRMFRP) was prepared by the FWS, Reclamation, Trinity County, and the Hoopa Valley Tribe, and was completed in June 1999. The final EIS/EIR was completed in November 2000. A ROD selecting the alternative to be implemented for the TRMFRP was signed by the Secretary, with the concurrence of the Hoopa Valley Tribe, pursuant to section 3406(b)(23) of the CVPIA, and issued in December 2000. However, the EIR was not certified by Trinity County and it is not a finalized document under CEQA.

Subsequent to execution of the ROD, water and power interests in the Central Valley of California amended a previously filed lawsuit against the Federal agencies materially involved in either the decision making process for the ROD or the associated Endangered Species Act approvals for the TRMFRP (Reclamation, FWS, and NMFS), in Federal district court. Plaintiffs sought, and were granted a preliminary

injunction for implementation of certain flow-related aspects of the ROD. The terms of the injunction limit the increase in flows in the Trinity River which may be implemented in the ROD, but allow the Secretary to proceed with all other activities approved by the ROD. *Westlands Water District v. United States Department of the Interior*, CIVF-00-7124-OWW/DLB (E.D. Calif., filed May 3, 2001).

On February 20, 2003, the court entered final judgment in the case, finding that the ROD for the Program, issued on December 10, 2000, and the associated biological opinions issued by FWS and NMFS, were unlawful in part. The court found that the ROD was in violation of NEPA in that it had an improperly framed purpose statement and the range of alternatives was inadequate. The biological opinions were found to exceed the agencies' authority under the ESA in that they required major modifications to operations of the CVP. Although the issue was not before the court, nor briefed by any of the parties, the court also found the government in breach of its general and specific Federal trust obligations to the Hoopa Valley and Yurok Tribes, as set out under CVPIA section 3406(b)(23) and related statutes. The case is now on appeal.

Our practice is to make comments, including names and home addresses of respondents, available for public review. Individual respondents may request that we withhold their home address from public disclosure, which we will honor to the extent allowable by law. There also may be circumstances in which we would withhold a respondent's identity from public disclosure, as allowable by law. If you wish us to withhold your name and/or address, you must state this prominently at the beginning of your comment. We will make all submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, available for public disclosure in their entirety.

Dated: June 11, 2003.

Frank Michny,

Regional Environmental Officer, Mid-Pacific Region, Bureau of Reclamation.

Dated: June 11, 2003.

Mary Ellen Mueller,

Fisheries Supervisor, California and Nevada Operations Office, Fish and Wildlife Service.
[FR Doc. 03-15219 Filed 6-16-03; 8:45 am]

BILLING CODE 4310-MN-P

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

Natural Gas Pipeline Right-of-Way Permit Application Crossing the San Bernard National Wildlife Refuge in Brazoria County, Texas

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notice of application.

SUMMARY: The U.S. Fish and wildlife Service (Service) advises the public that Noble Energy, Inc., of Houston, Texas, has submitted an application to install a 4-inch nominal pipeline for transportation of natural gas across a portion of the San Bernard National Wildlife Refuge, Brazoria County, Texas, which would start from their well located outside of the refuge land. The proposed pipeline to convey the product from the well to tie in to an existing Texas Eastern Transmission (TET) gathering line is located 4,311 feet northwest of the surface location. Of the 4,311 feet, approximately 3,800 feet will traverse refuge lands. Noble plans to construct the pipeline by use of subsurface boring methodology 5 feet to 20 feet below the surface of the land. Noble plans to bore northwesterly a distance from the wellhead to a 70-foot by 75-foot temporary construction staging area, located at GPS coordinates X=3,116,474.60 and Y=501,502.22 (NAD 27 Datum) on refuge property; then turning more northwesterly, will bore the remaining distance to the existing TET gathering line located at GPS coordinates X=3,115,926.41 and Y=503,009.25 (NAD 27 Datum). A second 75-foot by 75-foot temporary construction staging area is proposed at the site for the pipeline tap and interconnect. At the interconnect point, approximately 25 feet from the centerline of the TET pipeline, a 30-foot by 30-foot extended use location, meter/valve facility, is proposed to be installed and fenced. An Environmental Analysis and Cultural Resources Review has been prepared and is on file.

This notice informs the public that the Service will be proceeding with the processing of the application, the compatibility determination and the approval processing which includes the preparation of the terms and conditions of the permit.

DATES: Written comments should be received on or before July 17, 2003 to receive consideration by the Service.

ADDRESSES: Comments should be addressed to: Regional Director, U.S. Fish and Wildlife Service, Division of Realty, Attention: Lena V. Marie, P.O.

Box 1306, Albuquerque, New Mexico 87103-1306, telephone number 505-248-7411 or FAX 505-248-6803

SUPPLEMENTARY INFORMATION: The Refuge Manager for the San Bernard National Wildlife Refuge has approved the route of the pipeline.

Right-of-way applications for pipelines are to be filed in accordance with Section 28 of the Mineral Leasing Act of 1920 (30 U.S.C.), as amended by the Act of November 16, 1973, (37 Stat. 576, Public Law 93-153).

Dated: May 21, 2003.

Pat A. Langley,

Regional Director.

[FR Doc. 03-15269 Filed 6-16-03; 8:45 am]

BILLING CODE 4310-55-M

INTERNATIONAL TRADE COMMISSION

[Investigation No. 337-TA-455]

In the Matter of Certain Network Interface Cards and Access Points for Use in Direct Sequence Spread Spectrum Wireless Local Area Networks and Products Containing Same: Notice of a Commission Determination Not To Review an Initial Determination Terminating the Investigation on the Basis of a Settlement Agreement

AGENCY: International Trade Commission.

ACTION: Notice.

SUMMARY: Notice is hereby given that the U.S. International Trade Commission has determined not to review the presiding administrative law judge's ("ALJ's") initial determination ("ID") granting a joint motion to terminate the above-captioned investigation on the basis of a settlement agreement.

FOR FURTHER INFORMATION CONTACT: Timothy P. Monaghan, Esq., Office of the General Counsel, U.S. International Trade Commission, 500 E Street, SW., Washington, DC 20436, telephone 202-205-3152. Copies of the public version of the ID and all nonconfidential documents filed in connection with this investigation are or will be available for inspection during official business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary, U.S. International Trade Commission, 500 E Street, SW., Washington, DC 20436, telephone 202-205-2000. Hearing-impaired persons are advised that information on this matter can be obtained by contacting the Commission's TDD terminal on 202-

205–1810. General information concerning the Commission may also be obtained by accessing its Internet server (<http://www.usitc.gov>). The public record for this investigation may be viewed on the Commission's electronic docket (EDIS) at <http://edis.usitc.gov>.

SUPPLEMENTARY INFORMATION: The Commission instituted this investigation on April 9, 2001, based on a complaint filed by Proxim, Inc. ("Proxim") against 14 respondents. Three companies subsequently intervened, including Agere Systems Inc. ("Agere"). In its complaint, Proxim contended that respondents' accused products infringed the patent claims in issue because they contained either semiconductors made by intervenor Agere ("the Agere parties") or by respondent Intersil Corp. ("the Intersil parties").

On September 25, 2002, the Commission determined not to review an ID by the then presiding ALJ terminating the investigation as to the Agere parties on the basis of a settlement agreement. Only the Intersil parties then remained in the investigation.

On March 17, 2003, Proxim and Intersil entered into a settlement agreement. On May 5, 2003, Proxim and the Intersil parties filed a joint motion to terminate the investigation on the basis of the settlement agreement. The Commission investigative attorney supported the joint motion.

On May 15, 2003, the current presiding ALJ issued the subject ID (Order No. 106) granting the joint motion of Proxim and the Intersil parties to terminate the investigation on the basis of a settlement agreement. No party filed a petition to review the ID.

The authority for the Commission's determination is contained in section 337 of the Tariff Act of 1930, as amended (19 U.S.C. 1337), and in § 210.42 of the Commission's rules of practice and procedure (19 CFR § 210.42).

Issued: June 11, 2003.

By order of the Commission.

Marilyn R. Abbott,

Secretary.

[FR Doc. 03–15250 Filed 6–16–03; 8:45 am]

BILLING CODE 7020–02–P

DEPARTMENT OF JUSTICE

Antitrust Division

Notice Pursuant to the National Cooperative Research and Production Act of 1993—IMS Global Learning Consortium, Inc.

Notice is hereby given that, on May 27, 2003, pursuant to section 6(a) of the National Cooperative Research and Production Act of 1993, 15 U.S.C. 4301 *et seq.* ("the Act"), IMS Global Learning Consortium, Inc. has filed written notifications simultaneously with the Attorney General and the Federal Trade Commission disclosing changes in its membership status. The notifications were filed for the purpose of extending the Act's provisions limiting the recovery of antitrust plaintiffs to actual damages under specified circumstances. Specifically, Artesia Technologies, Rockville, MD has been dropped as a party to this venture.

No other changes have been made in either the membership or planned activity of the group research project. Membership in this group research project remains open, and IMS Global Learning Consortium, Inc. intends to file additional written notification disclosing all changes in membership.

On April 7, 2000, IMS Global Learning Consortium, Inc. filed its original notification pursuant to section 6(a) of the Act. The Department of Justice published a notice in the **Federal Register** pursuant to section 6(b) of the Act on September 13, 2000 (65 FR 55283).

The last notification was filed with the Department on March 5, 2003. A notice was published in the **Federal Register** pursuant to section 6(b) of the Act on March 27, 2003 (68 FR 15004).

Constance K. Robinson,

Director of Operations, Antitrust Division.

[FR Doc. 03–15181 Filed 6–16–03; 8:45 am]

BILLING CODE 4410–11–M

DEPARTMENT OF JUSTICE

Antitrust Division

Notice Pursuant to the National Cooperative Research and Production Act of 1993—Semiconductor Test Consortium, Inc.

Notice is hereby given that, on May 27, 2003, pursuant to section 6(a) of the National Cooperative Research and Production Act of 1993, 15 U.S.C. 4301 *et seq.* ("the Act"), Semiconductor Test Consortium, Inc. has filed written notifications simultaneously with the

Attorney General and the Federal Trade Commission disclosing (1) the identities of the parties and (2) the nature and objectives of the venture. The notifications were filed for the purpose of invoking the Act's provisions limiting the recovery of antitrust plaintiffs to actual damages under specified circumstances. Pursuant to section 6(b) of the Act, the identities of the parties are Advantest Corporation, Tokyo, JAPAN; Intel Corporation, Chandler, AZ; and Motorola, Inc., Austin, TX. The nature and objectives of the venture are to administer the development, support and promotion of the specifications of Open Semiconductor Test Architecture ("OPENSTAR"), a testing standard which defines a flexible testing platform for complex logic devices for use in the semiconductor and automated test equipment industries. The mission of Semiconductor Test Consortium, Inc. is to support the development and long-term success of OPENSTAR, including the delivery of technical and economic performance sustainability, open architecture, and multi-vendor interoperability at both the hardware and software levels. Semiconductor Test Consortium, Inc. shall achieve this mission by developing and promoting its open architecture specifications as industry-wide standards, issuing design guidelines relating to its specifications, presenting activities that promote the use of the specifications, and providing for the licensing or publication of the specifications on reasonable and non-discriminatory terms to both members and non-members alike.

Constance K. Robinson,

Director of Operations, Antitrust Division.

[FR Doc. 03–15182 Filed 6–16–03; 8:45 am]

BILLING CODE 4410–11–M

DEPARTMENT OF JUSTICE

Drug Enforcement Administration

Manufacturer of Controlled Substances; Notice of Registration

By Notice dated January 27, 2003, and published in the **Federal Register** on February 6, 2003 (68 FR 6181), AccuStandard, Inc., 125 Market Street, New Haven, Connecticut 06513, made application by letter to the Drug Enforcement Administration (DEA) for registration as a bulk manufacturer of the basic classes of controlled substances listed below:

Drug	Schedule
Cathinone (1235)	I
Methcathinone (1237)	I
Aminorex (1585)	I
Gamma hydroxybutyric acid (2010)	I
Methaqualone (2565)	I
Ibogaine (7260)	I
Lysergic acid diethylamide (7315)	I
Tetrahydrocannabinols (7370)	I
Mescaline (7381)	I
4-Bromo-2, 5-dimethoxyamphetamine (7391)	I
4-Bromo-2, 5-dimethoxyphenethylamine (7392)	I
4-Methyl-2, 5-dimethoxyamphetamine (7395)	I
2, 5-Dimethoxyamphetamine (7396)	I
3, 4-Methylenedioxyamphetamine (7400)	I
N-Hydroxy-3, 4-methylenedioxyamphetamine (7402)	I
3, 4-Methylenedioxy-N-ethylamphetamine (7404)	I
3, 4-Methylenedioxymethamphetamine (7405)	I
4-Methoxyamphetamine (7411)	I
Bufotenine (7433)	I
1-[1-(2-Thienyl) cyclohexyl]piperidine (7470)	I
Codeine-N-oxide (9053)	I
Dihydromorphine (9145)	I
Heroin (9200)	I
Morphine-N-oxide (9307)	I
Normorphine (9313)	I
Etonitazene (9624)	I
Amphetamine (1100)	II
Methamphetamine (1105)	II
Phenmetrazine (1631)	II
Methylphenidate (1724)	II
Amobarbital (2125)	II
Pentobarbital (2270)	II
Secobarbital (2315)	II
Glutethimide (2550)	II
Phencyclidine (7471)	II
Alphaprodine (9010)	II
Anileridine (9020)	II
Cocaine (9041)	II
Codeine (9050)	II
Diprenorphine (9058)	II
Dihydrocodeine (9120)	II
Hydromorphone (9150)	II
Diphenoxylate (9170)	II
Benzoyllecgonine (9180)	II
Ecgonine (9180)	II
Hydrocodone (9193)	II
Levorphanol (9220)	II
Methadone (9250)	II
Morphine (9300)	II
Thebaine (9333)	II
Opium, raw (9600)	II
Opium tincture (9630)	II
Opium powdered (9639)	II
Levo-alphaacetylmethadol (9648)	II
Oxymorphone (9652)	II
Alfentanil (9737)	II
Sufentanil (9740)	II
Fentanyl (9801)	II

The firm plans to manufacture small quantities of the listed controlled substances to make reference standards.

No comments or objections have been received. DEA has considered the factors in title 21, United States code, section 823(a) and determined that the registration of AccuStandard, Inc. to manufacture the listed controlled substances is consistent with the public interest at this time. DEA has

investigated AccuStandard, Inc. to ensure that the company's registration is consistent with the public interest. This investigation has included inspection and testing of the company's physical security systems, verification of the company's compliance with state and local laws, and a review of the company's background and history. Therefore, pursuant to 21 U.S.C. 823 and 28 CFR 0.100 and 0.104, the Deputy

Assistant Administrator, Office of Diversion Control, hereby orders that the application submitted by the above firm for registration as a bulk manufacturer of the basic classes of controlled substances listed above is granted

Dated: June 6, 2003.

Laura M. Nagel,

Deputy Assistant Administrator, Office of Diversion Control, Drug Enforcement Administration.

[FR Doc. 03-15203 led 6ndash;16ndash;03; 8:45 am]

BILLING CODE 4410-09-M

DEPARTMENT OF JUSTICE

Drug Enforcement Administration

Manufacturer of Controlled Substances; Notice of Registration

By Notice dated January 27, 2003, and published in the **Federal Register** on February 6, 2003, (68 FR 6182), American Radiolabeled Chemicals, Inc., 11624 Bowling Green Drive, St. Louis, Missouri 63146, made application by renewal to the Drug Enforcement Administration to be registered as a bulk manufacturer of the basic classes of controlled substances listed below:

Drug	schedule
Gamma hydroxybutyric acid (2010).	I
Lysergic acid diethylamide (7315).	I
Dimethyltryptamine (7435)	I
Dihydromorphine (9145)	I
Phencyclidine (7471)	II
Cocaine (9041)	II
Codeine (9050)	II
Hydromorphone (9150)	II
Oxycodone (9143)	II
Thebaine (9333)	II
Benzoyllecgonine (9180)	II
Meperidine (9230)	II
Metazocine (9240)	II
Morphine (9300)	II
Oxymorphone (9652)	II

The firm plans to bulk manufacture small quantities of the listed controlled substances as radiolabeled compounds.

No comments or objections have been received. DEA has considered the factors in Title 21, United States Code, Section 823(a) and determined that the registration of American Radiolabeled Chemicals, Inc. to manufacture the listed controlled substances is consistent with the public interest at this time. DEA has investigated American Radiolabeled Chemicals, Inc. to ensure that the company's registration is consistent with the public interest. This investigation has included inspection and testing of the company's physical security systems, verification of the company's compliance with state and local laws, and a review of the company's background and history. Therefore, pursuant to 21 U.S.C. 823 and 28 CFR 0.100 and 0.104, the Deputy Assistant Administrator, Office of

Diversion Control, hereby orders that the application submitted by the above firm for registration as a bulk manufacturer of the basic classes of controlled substances listed above is granted.

Dated: June 4, 2003.

Laura M. Nagel,

Deputy Assistant Administrator, Office of Diversion Control, Drug Enforcement Administration.

[FR Doc. 03-15194 Filed 6-16-03; 8:45 am]

BILLING CODE 4410-09-M

DEPARTMENT OF JUSTICE

Drug Enforcement Administration

Importer of Controlled Substances; Notice of Registration

By Notice dated August 20, 2002, and published in the **Federal Register** on August 29, 2002, (67 FR 55430), Applied Science Labs, Inc., A Division of Alltech Associates, Inc., 2701 Carolean Industrial Drive, State College, Pennsylvania 16801, made application by renewal to the Drug Enforcement Administration (DEA) to be registered as an importer of the basic classes of controlled substances listed below:

Drug	Schedule
Heroin (9200)	I
Cocaine (9041)	II
Codeine (9050)	II
Meperidine (9230)	II
Methadone (9250)	II
Morphine (9300)	II

The firm plans to import these controlled substances for the manufacture of reference standards.

No comments or objections have been received. DEA has considered the factors in Title 21, United States Code, section 823(a) and determined that the registration of Applied Science Labs, Inc. to import the listed controlled substances is consistent with the public interest and with United States obligations under international treaties, conventions, or protocols in effect on May 1, 1971, at this time. DEA has investigated Applied Science Labs, Inc. on a regular basis to ensure that the company's continued registration is consistent with the public interest. This investigation included inspection and testing of the company's physical security systems, verification of the company's compliance with state and local laws, and a review of the company's background and history. Therefore, pursuant to section 1008(a) of the Controlled Substances Import and Export Act and in accordance with Title

21, Code of Federal Regulations, Section 1301.34, the above firm is granted registration as an importer of the basic classes of controlled substances listed above.

Dated: June 4, 2003.

Laura M. Nagel,

Deputy Assistant Administrator, Office of Diversion Control, Drug Enforcement Administration.

[FR Doc. 03-15196 Filed 6-16-03; 8:45 am]

BILLING CODE 4410-09-M

DEPARTMENT OF JUSTICE

Drug Enforcement Administration

Manufacturer of Controlled Substances; Notice of Registration

By Notice dated February 5, 2003, and published in the **Federal Register** on February 12, 2003, (68 FR 7147), Cedarburg Pharmaceuticals, LLS 870 Badger Circle, Grafton, Wisconsin 53024, made application by renewal to the Drug Enforcement Administration to be registered as a bulk manufacturer of the basic classes of controlled substances listed below:

Drug	Schedule
Tetrahydrocannabinols (7370) ...	I
Oxycodone (9143)	II
Hydromorphone (9150)	II
Hydrocodone (9193)	II

The firm plans to manufacture the listed controlled substances for distribution to its customers.

No comments or objections have been received. DEA has considered the factors in Title 21, United States Code, section 823(a) and determined that the registration of Cedarburg Pharmaceuticals, LLC, to manufacture the listed controlled substances is consistent with the public interest at this time. DEA has investigated Cedarburg Pharmaceuticals, LLC, to ensure that the company's registration is consistent with the public interest. This investigation has included inspection and testing of the company's physical security systems, verification of the company's compliance with state and local laws, and a review of the company's background and history. Therefore, pursuant to 21 U.S.C. 823 and 28 CFR 0.100 and 0.104, the Deputy Assistant Administrator, Office of Diversion Control hereby orders that the application submitted by the above firm for registration as a bulk manufacturer of the basic classes of controlled substances listed above is granted.

Dated: June 4, 2003.

Laura M. Nagel,*Deputy Assistant Administrator, Office of
Diversion Control, Drug Enforcement
Administration.*

[FR Doc. 03-15197 Filed 6-16-03; 8:45 am]

BILLING CODE 4410-09-M

DEPARTMENT OF JUSTICE**Drug Enforcement Administration****Manufacturer of Controlled
Substances; Notice of Registration**By notice dated January 27, 2003, and
published in the **Federal Register** onFebruary 6, 2003 (68 FR 6182),
Cerrilliant Corporation, 811 Paloma
Drive, Suite A, Round Rock, Texas
78664, made application by renewal to
the Drug Enforcement Administration to
be registered as a bulk manufacturer of
the basic classes of controlled
substances listed below:

Drug	Schedule
Cathinone (1235)	I
Methcathinone (1237)	I
N-Ethylamphetamine (1475)	I
N,N-Dimethylamphetamine (1480)	I
Aminorex (1585)	I
4-Methylaminorex (cis isomer) (1590)	I
Gamma hydroxybutyric acid (2010)	I
Methaqualone (2565)	I
Alpha-Ethyltryptamine (7249)	I
Lysergic acid diethylamide (7315)	I
Tetrahydrocannabinols (7370)	I
Mescaline (7381)	I
3,4,5-Trimethoxyamphetamine (7390)	I
4-Bromo-2,5-dimethoxyamphetamine (7391)	I
4-Bromo-2,5-dimethoxyphenethylamine (7392)	I
4-Methyl-2,5-dimethoxyamphetamine (7395)	I
2,5-Dimethoxyamphetamine (7396)	I
2,5-Dimethoxy-4-ethylamphetamine (7399)	I
3,4-Methylenedioxyamphetamine (7400)	I
5-Methoxy-e,4-methylenedioxyamphetamine (7401)	I
N-Hydroxy-3,4-methylenedioxyamphetamine (7402)	I
3,4-Methylenedioxy-N-ethylamphetamine (7404)	I
3,4-Methylenedioxymethamphetamine (7405)	I
4-Methoxyamphetamine (7411)	I
Bufotenine (7433)	I
Diethyltryptamine (7434)	I
Dimethyltryptamine (7435)	I
Psilocybin (7437)	I
Psilocyn (7438)	I
Acetyldihydrocodeine (9051)	I
Benzylmorphine (9052)	I
Codeine-N-oxide (9053)	I
Dihydromorphine (9145)	I
Heroin (9200)	I
Hydromorphenol (9301)	I
Methyldihydromorphine (9304)	I
Morphine-N-oxide (9307)	I
Normorphine (9313)	I
Pholcodine (9314)	I
Acetylmethadol (9601)	I
Allyprodine (9602)	I
Alphacetylmethadol except Levo-Alphacetylmethadol (9603)	I
Alphameprodine (9604)	I
Alphamethadol (9605)	I
Betacetylmethadol (9607)	I
Betameprodine (9608)	I
Betamethadol (9609)	I
Betaprodine (9611)	I
Hydroxypethidine (9627)	I
Noracymethadol (9633)	I
Norlevorphanol (9634)	I
Normethadone (9635)	I
Trimeperidine (9646)	I
Phenomorphan (9647)	I
Para-Fluorofentanyl (9812)	I
3-Methylfentanyl (9813)	I
Alpha-Methylfentanyl (9814)	I
Acetyl-alpha-methylfentanyl (9815)	I
Beta-hydroxyfentanyl (9830)	I
Beta-hydroxy-3-methylfentanyl (9831)	I
Alpha-Methylthiofentanyl (9832)	I
3-Methylthiofentanyl (9833)	I
Thiofentanyl (9835)	I
Amphetamine (1100)	II

Drug	Schedule
Methamphetamine (1105)	II
Phenmetrazine (1631)	II
Methylphenidate (1724)	II
Ambobarbital (2125)	II
Pentobarbital (2270)	II
Secobarbital (2315)	II
Glutethimide (2550)	II
Nabilone (7379)	II
1-Phenylcyclohexylamine (7460)	II
Phencyclidine (7471)	II
1-Piperidinocyclohexanecarbonitrile (8603)	II
Alphaprodine (9010)	II
Cocaine (9041)	II
Codeine (9050)	II
Dihydrocodeine (9120)	II
Oxycodone (9143)	II
Hydromorphone (9150)	II
Diphenoxylate (9170)	II
Benzoylcegonine (9180)	II
Ethylmorphine (9190)	II
Hydrocodone (9193)	II
Levomethorphan (9210)	II
Levorphanol (9220)	II
Isomethadone (9226)	II
Meperidine (9230)	II
Methadone (9250)	II
Methadone-intermediate (9254)	II
Dextropropoxyphene, bulk (non-dosage forms) (9273)	II
Morphine (9300)	II
Thebaine (9333)	II
Levo-alphaacetylmethadol (9648)	II
Oxymorphone (9652)	II
Noroxymorphone (9668)	II
Racemethorphan (9732)	II
Alfentanil (9737)	II
Sufentanil (9740)	II
Fentanyl (9801)	II

The firm plans to manufacture small quantities of the listed controlled substances to make reference standards which will be distributed to their customers.

No comments or objections have been received. DEA has considered the factors in title 21, United States Code, section 823(a) and determined that the registration of Cerrilliant Corporation to manufacture the listed controlled substances is consistent with the public interest at this time. DEA has investigated Cerrilliant Corporation to ensure that the company's registration is consistent with the public interest. This investigation has included inspection and testing of the company's physical security systems, verification of the

company's compliance with state and local laws, and a review of the company's background and history. Therefore, pursuant to 21 U.S.C. 823 and 28 CFR 0.100 and 0.104, the Deputy Assistant Administrator, Office of Diversion Control, hereby orders that the application submitted by the above firm for registration as a bulk manufacturer of the basic classes of controlled substances listed above is granted.

Dated: June 6, 2003.

Laura M. Nagel,

Deputy Assistant Administrator, Office of Diversion Control, Drug Enforcement Administration.

[FR Doc. 03-15202 Filed 6-16-03; 8:45 am]

BILLING CODE 4410-09-M

DEPARTMENT OF JUSTICE

Drug Enforcement Administration

Importer of Controlled Substances; Notice of Registration

By notice dated January 27, 2003, and published in the **Federal Register** on February 6, 2003 (68 FR 6183), Lipomed, Inc., One Broadway, Cambridge, Massachusetts 02142, made application by renewal to the Drug Enforcement Administration (DEA) to be registered as an importer of the basic class of controlled substances listed below:

Drug	Schedule
Cathinone (1235)	I
Methaqualone (2565)	I
Lysergic acide diethylamide (7315)	I
Marihuana (7360)	I
Tetrahydrocannabinols (7307)	I
Mescaline (7381)	I
3,4,5-Trimethoxyamphetamine (7391)	I
4-Bromo-2,5-dimethoxyamphetamine (7391)	I
4-Methyl-2,5-dimethoxyamphetamine (7395)	I

Drug	Schedule
2,5-Dimethoxyamphetamine (7396)	I
2,5-Dimethoxy-4-ethylamphetamine (7399)	I
3,4-Methylenedioxyamphetamine (7400)	I
3,4-Methylenedioxy-N-ethylamphetamine (7404)	I
3,4-Methylenedioxymethamphetamine (7405)	I
Psilocybin (7437)	I
Psilocyn (7438)	I
Acetyldihydrocodeine (9051)	I
Dihydromorphine (9145)	I
Heroin (9200)	I
Tilidine (9750)	I
Amphetamine (1100)	II
Methamphetamine (1105)	II
Amobarbital (2125)	II
Secobarbital (2315)	II
Phencyclidine (7471)	II
Cocaine (9041)	II
Codeine (9050)	II
Dihydrocodeine (9120)	II
Oxycodone (9143)	II
Hydromorphone (9150)	II
Benzoyllecgonine (9180)	II
Hydrocodone (9193)	II
Levorphanol (9220)	II
Methadone (9250)	II
Dextropropoxyphene, bulk (non-dosage forms) (9273)	II
Morphine (9300)	II
Thebaine (9333)	II
Oxymorphone (9652)	II
Alfentanil (9737)	II
Fentanyl (9801)	II

The firm plans to import small reference standard quantities of finished commercial product from its sister company in Switzerland for sale to its customers for drug testing.

No comments or objections have been received. DEA has considered the factors in title 21, United States Code, section 823(a) and determined that the registration of Lipomed, Inc. to import the listed controlled substances is consistent with the public interest and with United States obligations under international treaties, conventions, or protocols in effect on May 1, 1971, at this time. DEA has investigated Lipomed, Inc. on a regular basis to ensure that the company's continued registration is consistent with the public interest. This investigation included inspection and testing of the company's physical security systems, verification of the company's compliance with state and local laws, and a review of the company's background and history. Therefore, pursuant to section 1008(a) of the Controlled Substances Import and Export Act and in accordance with title 21, Code of Federal Regulations, section 1301.34, the above firm is granted registration as an importer of the basic classes of controlled substances listed above.

Dated: June 6, 2003.

Laura M. Nagel,

Deputy Assistant Administrator, Office of Diversion Control, Drug Enforcement Administration.

[FR Doc. 03-15200 Filed 6-16-03; 8:45 am]

BILLING CODE 4410-09-M

DEPARTMENT OF JUSTICE

Drug Enforcement Administration

Importer of Controlled Substances; Notice of Registration

By Notice dated March 11, 2003, and published in the **Federal Register** on April 2, 2003, (68 FR 16090), Mallinckrodt, Inc., Mallinckrodt & Second Street, St. Louis, Missouri 63147, made application by renewal to the Drug Enforcement Administration (DEA) to be registered as an importer of the basic classes of controlled substances listed below:

Drug	Schedule
Phenylacetone (8501)	II
Coca Leaves (9040)	II
Opium, raw (9600)	II
Opium poppy (9650)	II
Poppy Straw Concentrate (9670)	II

The firm plans to import the listed controlled substances to bulk manufacture controlled substances.

No comments or objections have been received. DEA has considered the factors in Title 21, United States Code, Section 823(a) and determined that the registration of Mallinckrodt, Inc. to import the listed controlled substances is consistent with the public interest and with United States obligations under international treaties, conventions, or protocols in effect on May 1, 1971, at this time. DEA has investigated Mallinckrodt, Inc. on a regular basis to ensure that the company's continued registration is consistent with the public interest. This investigation included inspection and testing of the company's physical security systems, verification of the company's compliance with state and local laws, and a review of the company's background and history. Therefore, pursuant to section 1008(a) of the Controlled Substances Import and Export Act and in accordance with Title 21, Code of Federal Regulations, Section 1301.34, the above firm is granted registration as an importer of the basic classes of controlled substances listed above.

Dated: June 4, 2003.

Laura M. Nagel,

*Deputy Assistant Administrator, Office of
Diversion Control, Drug Enforcement
Administration.*

[FR Doc. 03-15199 Filed 6-16-03; 8:45 am]

BILLING CODE 4410-09-M

DEPARTMENT OF JUSTICE

Drug Enforcement Administration

Manufacturer of Controlled Substances; Notice of Registration

By notice dated January 27, 2003, and published in the **Federal Register** on February 6, 2003 (68 FR 6184), National Center for Natural Products Research—NIDA MProject University of Mississippi, 135 Coy Waller Complex, University, Mississippi 38677, made application by renewal to the Drug Enforcement Administration to be registered as a bulk manufacturer of the basic classes of controlled substances listed below:

Drug	Schedule
Marijuana (7360)	I
Tetrahydrocannabinols (7370)	I

The firm will cultivate marijuana for the National Institute of Drug Abuse for research approved by the Department of Health and Human Services

No comments or objections have been received. DEA has considered the factors in title 21, United States Code, section 823(a) and determined that the registration of National Center for Natural Products Research-NIDA MProject University of Mississippi to manufacture the listed controlled substances is consistent with the public interest at this time. DEA has investigated National Center for Natural Products research-NIDA MProject University of Mississippi to ensure that the company's registration is consistent with the public interest. This investigation has included inspection and testing of the company's physical security systems, verification of the company's background and history. Therefore, pursuant to 21 U.S.C. 823 and 28 CFR 0.100 and 0.104, the Deputy Assistant Administrator, Office of Diversion Control, hereby orders that the application submitted by the above firm for registration as a bulk manufacturer of the basic classes of controlled substances listed above is granted.

Dated: June 6, 2003.

Laura M. Nagel,

*Deputy Assistant Administrator, Office of
Diversion Control, Drug Enforcement
Administration.*

[FR Doc. 03-15201 Filed 6-16-03; 8:45 am]

BILLING CODE 4410-09-M

DEPARTMENT OF JUSTICE

Drug Enforcement Administration

Manufacturer of Controlled Substances; Notice of Registration

By Notice dated January 27, 2003, and published in the **Federal Register** on February 6, 2003, (68 FR 6184), Norac Company, Inc., 405 S. Motor Avenue, Azusa, California 91702, made application by renewal to the Drug Enforcement Administration to be registered as a bulk manufacturer of Tetrahydrocannabinols (7370), a basic class of controlled substance listed in Schedule I.

The firm plans to manufacture bulk tetrahydrocannabinols for formulation into pharmaceutical products.

No comments or objections have been received. DEA has considered the factors in Title 21, United States Code, Section 823(a) and determined that the registration of Norac Company, Inc. to manufacture the listed controlled substances is consistent with the public interest at this time. DEA has investigated Norac Company, Inc. to ensure that the company's registration is consistent with the public interest. This investigation has included inspection and testing of the company's physical security systems, verification of the company's compliance with state and local laws, and a review of the company's background and history. Therefore, pursuant to 21 U.S.C. 823 and 28 CFR 0.100 and 0.104, the Deputy Assistant Administrator, Office of Diversion Control, hereby orders that the application submitted by the above firm for registration as a bulk manufacturer of the basic classes of controlled substances listed above is granted.

Dated: June 4, 2003.

Laura M. Nagel,

*Deputy Assistant Administrator, Office of
Diversion Control, Drug Enforcement
Administration.*

[FR Doc. 03-15195 Filed 6-16-03; 8:45 am]

BILLING CODE 4410-09-M

DEPARTMENT OF JUSTICE

Drug Enforcement Administration

Manufacturer of Controlled Substances; Notice of Registration

By Notice dated January 27, 2003, and published in the **Federal Register** on February 6, 2003, (68 FR 6185), OraSure Technologies, Inc., 1745 Eaton Avenue, Bethlehem, Pennsylvania 18018, made application by renewal to the Drug Enforcement Administration to be registered as a bulk manufacturer of the basic classes of controlled substances listed below:

Drug	Schedule
Alphamethadol (9605)	I
Benzoylcegonine (9180)	II
Morphine (9300)	II

The firm plans to bulk manufacture the listed controlled substances to be used in-house to manufacture other controlled substances.

No comments or objections have been received. DEA has considered the factors in Title 21, United States Code, section 823(a) and determined that the registration of OraSure Technologies, Inc. to manufacture the listed controlled substances is consistent with the public interest at this time. DEA has investigated OraSure Technologies, Inc. to ensure that the company's registration is consistent with the public interest. This investigation has included inspection and testing of the company's physical security systems, verification of the company's compliance with state and local laws, and a review of the company's background and history. Therefore, pursuant to 21 U.S.C. 823 and 28 CFR 0.100 and 0.104, the Deputy Assistant Administrator, Office of Diversion Control, hereby orders that the application submitted by the above firm for registration as a bulk manufacturer of the basic classes of controlled substances listed above is granted.

Dated: June 4, 2003.

Laura M. Nagel,

*Deputy Assistant Administrator, Office of
Diversion Control, Drug Enforcement
Administration.*

[FR Doc. 03-15198 Filed 6-16-03; 8:45 am]

BILLING CODE 4410-09-M

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

[Notice (03-069)]

NASA Space Science Advisory Committee, Astronomical Search for Origins and Planetary Systems Subcommittee; Meeting

AGENCY: National Aeronautics and Space Administration.

ACTION: Notice of meeting.

SUMMARY: The National Aeronautics and Space Administration announces a meeting of the NASA Space Science Advisory Committee (SScAC), Astronomical Search for Origins and Planetary Systems Subcommittee (OS).

DATES: Tuesday, July 1, 2003, 8:30 a.m. to 5 p.m., and Wednesday, July 2, 2003, 8 a.m. to 5 p.m.

ADDRESSES: National Aeronautics and Space Administration, Room MIC-3H46, 300 E Street, SW., Washington, DC 20546.

FOR FURTHER INFORMATION CONTACT: Dr. Hashima Hasan, Code SZ, National Aeronautics and Space Administration, Washington, DC 20546, 202/358-0692.

SUPPLEMENTARY INFORMATION: The meeting will be open to the public up to the seating capacity of the room. The agenda for the meeting is as follows:

- Theme Scientist Update
- James Webb Space Telescope Update
- Space Interferometry Mission Update
- Origins Technology Update
- Education and Public Outreach Update

Attendees will be requested to sign a register and to comply with NASA security requirements, including the presentation of a valid picture ID, before receiving an access badge. Foreign nationals attending this meeting will be required to provide the following information: full name; gender; date/place of birth; citizenship; visa/greencard information (number, type, expiration date); employer/affiliation information (name of institution, address, country, phone); title/position of attendee. To expedite admittance, attendees can provide identifying information in advance by contacting Dr. Hashima Hasan via e-mail at hhasan@nasa.gov or by telephone at 202/358-0692. Attendees will be escorted at all times.

It is imperative that the meeting be held on these dates to accommodate the scheduling priorities of the key

participants. Visitors will be requested to sign a visitor's register.

June W. Edwards,

*Advisory Committee Management Officer,
National Aeronautics and Space Administration.*

[FR Doc. 03-15185 Filed 6-16-03; 8:45 am]

BILLING CODE 7510-01-P

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

[Notice (03-070)]

NASA Space Science Advisory Committee, Structure and Evolution of the Universe Subcommittee; Meeting

AGENCY: National Aeronautics and Space Administration.

ACTION: Notice of meeting.

SUMMARY: The National Aeronautics and Space Administration announces a meeting of the NASA Space Science Advisory Committee (SScAC), Structure and Evolution of the Universe Subcommittee (SEUS).

DATES: Tuesday, July 1, 2003, 8:30 a.m. to 5:30 p.m.; and Wednesday, July 2, 2003, 8 a.m. to 4 p.m..

ADDRESSES: National Aeronautics and Space Administration, Rooms 3H46 and 9H40, 300 E Street, SW., Washington, DC 20546.

FOR FURTHER INFORMATION CONTACT: Dr. Paul Hertz, Code SZ, National Aeronautics and Space Administration, Washington, DC 20546, 202/358-0986.

SUPPLEMENTARY INFORMATION: The meeting will be open to the public up to the seating capacity of the room. The agenda for the meeting is as follows:

- Astronomy and Physics Programs
- Beyond Einstein Initiative
- Interagency Coordination
- Explorer Program
- Science Performance Metrics
- Recent Mission Reviews

Attendees will be requested to sign a register and to comply with NASA security requirements, including the presentation of a valid picture ID, before receiving an access badge. Foreign nationals attending this meeting will be required to provide the following information: full name; gender; date/place of birth; citizenship; visa/greencard information (number, type, expiration date); employer/affiliation information (name of institution, address, country, phone); title/position of attendee. To expedite admittance, attendees can provide identifying information in advance by contacting Dr. Paul Hertz via e-mail at paul.hertz@nasa.gov or by telephone at

202/358-0986. Attendees will be escorted at all times.

It is imperative that the meeting be held on these dates to accommodate the scheduling priorities of the key participants. Visitors will be requested to sign a visitor's register.

June W. Edwards,

*Advisory Committee Management Officer,
National Aeronautics and Space Administration.*

[FR Doc. 03-15186 Filed 6-16-03; 8:45 am]

BILLING CODE 7510-01-P

NATIONAL SCIENCE FOUNDATION**Notice of Permit Application Received Under the Antarctic Conservation Act of 1978**

AGENCY: National Science Foundation.

ACTION: Notice of Permit Applications Received Under the Antarctic Conservation Act.

SUMMARY: Notice is hereby given that the National Science Foundation (NSF) has received a waste management permit application for operation of remote field support camps with emergency provisions for the Expedition Vessels, Professor Molchanov, Professor Multanovskiy, and M/V Orlova for the 2003-2004 season and the two following austral summers. The application is submitted to NSF pursuant to regulations issued under the Antarctic Conservation Act of 1978.

DATES: Interested parties are invited to submit written data, comments, or views with respect to this permit application by July 17, 2003. Permit applications may be inspected by interested parties at the Permit Office, address below.

ADDRESSES: Comments should be addressed to Permit Office, Room 755, Office of Polar Programs, National Science Foundation, 4201 Wilson Boulevard, Arlington, Virginia 22230.

FOR FURTHER INFORMATION CONTACT: Nadene Kennedy at the above address or (703) 292-8030.

SUPPLEMENTARY INFORMATION: NSF's Antarctic Waste Regulation, 45 CFR Part 671, requires all U.S. citizens and entities to obtain a permit for the use or release of a designated pollutant in Antarctica, and for the release of waste in Antarctica. NSF has received a permit application under this Regulation for the operation of expeditions to Antarctica. During each trip, passengers are taken ashore at selected sites by Zodiac (rubber raft) for approximately two to four hours at a time. On each zodiac landing, emergency gear would

be taken ashore in case weather deteriorates and passengers are required to camp on shore. Anything taken ashore will be removed from Antarctica and disposed of in Ushuaia, Argentina, Port Stanley, Falkland Islands, or a substitute port of disembarkation. No hazardous domestic products or wastes (aerosol cans, paints, solvents, etc.) will be brought ashore. Cooking stoves/fuel will be used only in an emergency where passengers are forced to spend nights on shore. Conditions of the permit would include requirements to report on the removal of materials and any accidental releases, and management of all waste, including human waste, in accordance with Antarctic waste regulations.

Application for the permit is made by: Pat Shaw, Quark Expeditions, Inc., 980 Post Road, Darien, CT 06820.

Location: Antarctic Peninsula Area.

Dates: November 1, 2003 to March 31, 2006.

Nadene G. Kennedy,
Permit Officer.

[FR Doc. 03-15180 Filed 6-16-03; 8:45 am]

BILLING CODE 7555-01-M

NUCLEAR REGULATORY COMMISSION

[Docket No. 030-08681]

Notice of Finding of No Significant Impact and Availability of Environmental Assessment for Amendment of Materials License No. 29-00055-14, Teledyne Brown Engineering, Inc., Westwood, NJ

I. Introduction

The U.S. Nuclear Regulatory Commission (NRC) is considering the issuance of a license amendment to Teledyne Brown Engineering, Inc. for Materials License No. 29-00055-14, to authorize release of its facility in Westwood, New Jersey for unrestricted use and has prepared an Environmental Assessment (EA) in support of this action in accordance with the requirements of 10 CFR part 51. Based on the EA, the NRC has concluded that a Finding of No Significant Impact (FONSI) is appropriate.

II. EA Summary

The purpose of the proposed action is to allow for the release of the licensee's 103 Woodland Avenue, Westwood, New Jersey facility for unrestricted use. Teledyne has been authorized by NRC from 1968 to present to store and repackage low-level radioactive wastes at the site. In 2002, Teledyne ceased

operations with licensed materials at the 103 Woodland Avenue, Westwood, New Jersey site, and requested that NRC release the facility for unrestricted use and terminate the license. Teledyne has conducted surveys of the facility and determined that the facility meets the license termination criteria in subpart E of 10 CFR part 20.

III. Finding of No Significant Impact

The NRC staff has evaluated Teledyne's request and the results of the surveys and has concluded that the completed action complies with 10 CFR part 20. The staff has prepared the EA (summarized above) in support of the proposed license amendment to terminate the license and release the facility for unrestricted use. On the basis of the EA, the NRC has concluded that the environmental impacts from the proposed action are expected to be insignificant and has determined not to prepare an environmental impact statement for the proposed action.

IV. Further Information

The EA and the documents related to this proposed action, including the application for the license amendment and supporting documentation, are available for inspection at NRC's Public Electronic Reading Room at <http://www.nrc.gov/reading-rm/adams.html> (ADAMS Accession Nos. ML031610071 and ML030520338 (package)). These documents are also available for inspection and copying for a fee at the Region I Office, 475 Allendale Road, King of Prussia, PA 19406. Any questions with respect to this action should be referred to Betsy Ullrich, Nuclear Materials Safety Branch 2, Division of Nuclear Materials Safety, Region I, 475 Allendale Road, King of Prussia, Pennsylvania, 19406, telephone (610) 337-5040, fax (610) 337-5269.

Dated at King of Prussia, Pennsylvania this 10th day of June, 2003.

For the Nuclear Regulatory Commission:

John D. Kinneman,
*Chief, Nuclear Materials Safety Branch 2,
Division of Nuclear Materials Safety, Region I.*

[FR Doc. 03-15249 Filed 6-16-03; 8:45 am]

BILLING CODE 7590-01-P

NUCLEAR REGULATORY COMMISSION

Sunshine Act Meeting

DATE: Weeks of June 16, 23, 30, July 7, 14, 21, 2003.

PLACE: Commissioners' Conference Room, 11555 Rockville Pike, Rockville, Maryland.

STATUS: Public and closed.

MATTERS TO BE CONSIDERED:

Week of June 16, 2003.

There are no meetings scheduled for the Week of June 16, 2003.

Week of June 23, 2003—Tentative

There are no meetings scheduled for the Week of June 23, 2003.

Week of June 30, 2003—Tentative

Tuesday, July 1, 2003

10 a.m. Briefing on Status of Office of Nuclear Security and Incident Response (NSIR) Programs, Performance, and Plans (Closed—Ex. 1)

Week of July 7, 2003—Tentative

There are no meetings scheduled for the Week of July 7, 2003.

Week of July 14, 2003—Tentative

There are no meetings scheduled for the Week of July 14, 2003.

Week of July 21, 2003—Tentative

There are no meetings scheduled for the Week of July 21, 2003.

The schedule for Commission meetings is subject to change on short notice. To verify the status of meetings call (recording)—(301) 415-1292. Contact person for more information: David Louis Gamberoni (301) 415-1651.

* * * * *

ADDITIONAL INFORMATION: By a vote of 4-0 on June 11 and 12, the Commission determined pursuant to U.S.C. 552b(e) and § 9.107(a) of the Commission's rules that "Affirmation of Sequoyah Fuels Corp. (Gore, Oklahoma Site) Presiding Officer's Certified Questions" be held on June 13, and on less than one week's notice to the public.

* * * * *

The NRC Commission Meeting Schedule can be found on the Internet at: www.nrc.gov/what-we-do/policy-making/schedule.html

* * * * *

This notice is distributed by mail to several hundred subscribers; if you no longer wish to receive it, or would like to be added to the distribution, please contact the Office of the Secretary, Washington, DC 20555 (301-415-1969). In addition, distribution of this meeting notice over the Internet system is available. If you are interested in receiving this Commission meeting schedule electronically, please send an electronic message to dkw@nrc.gov.

Dated: June 12, 2003.

D.L. Gamberoni,

Technical Coordinator, Office of the Secretary.

[FR Doc. 03-15347 Filed 6-13-03; 11:53 am]

BILLING CODE 7590-01-M

POSTAL SERVICE

In-Person Proofing at Post Offices (IPP) Program

AGENCY: U.S. Postal Service.

ACTION: Notice.

SUMMARY: The USPS is announcing the availability of an In-Person Proofing at Post Offices (IPP) Program to support the activities of U.S. Certificate Authorities and government organizations.

EFFECTIVE DATE: June 9, 2003.

FOR FURTHER INFORMATION CONTACT:

Chuck Chamberlain at 703-292-4172, or Brad Reck at 703-292-3530

SUPPLEMENTARY INFORMATION: In recent years, a number of new federal statutes have sought to preserve the ability of the public and private sectors to use the efficiency of the internet to rapidly exchange time sensitive communications while assuring that people receiving and sending messages are in fact who they say they are. A number of top quality private sector businesses have mastered the technology around the use of secure digital signatures, yielding a greater demand for improved identity verification for individuals seeking to use digital signatures.

This need for improved "online identity" creates a unique service opportunity for the Postal Service to provide value to the public, leverage our retail network and enable internet communications to enjoy a new level of security and reliability. Numerous organizations have approached the U.S. Postal Service to conduct In-Person Proofing (IPP) of customers nationwide for physically authenticating an individual's identification at a post office before the organization issues a digital signature certificate to the individual.

IPP supports efficient, affordable, trusted communications through the use of identification verification at Post Offices, incorporation of process enhancements required by the Postal Service, active management of the IPP program by the USPS, and use of a First Class U.S. Mail piece to verify physical addresses of applicants. We believe that IPP conducted at local post offices will create a new broad based capability for

the Nation that promotes improved public trust and greater efficiency in the electronic delivery of a wide range of services. These efforts support achieving the goals of the Government Paperwork Elimination Act of 1998, Electronic Signature in Global and National Commerce Act of 2000, Health Insurance Portability and Accountability Act of 1996, Sarbanes-Oxley Act of 2002, and Gramm-Leach-Bliley Act of 1999 and numerous Presidential Directives on eGovernment.

The following is a brief description of how IPP would work. An organization can establish a relationship with a qualified U.S. Certificate Authority to integrate digital signing with improved identity verification into an online application. Any individual desiring to use digital certificates that include USPS IPP will complete an application online. The online system will verify the individual's identity via commercial data base checking. The system will then produce a standard Postal Service form to be printed out at the "applicant's" personal computer. The individual requesting the service will present this form to a participating post office where the "In Person Proofing" process is conducted. After successful completion of the IPP event, the CA will notify the applicant to download their digital certificate. For clarity, the steps in the IPP process are outlined below.

1.0 DESCRIPTION

1.1 Purpose

IPP is a postal program to improve the public key infrastructure of the Nation. The public key infrastructure has emerged as an accepted infrastructure component for protecting and facilitating the electronic communications of the Nation.

2.0 BASIC STANDARDS

2.1 Eligibility

For a Certificate Authority (CA) to use IPP, the CA must incorporate the U.S. Postal Service In-Person Proofing Policy into their Certificate Policy. Conformance to the Postal policy includes:

1. Use of a Patriot Act compliant database vetting process to gain initial assurance of an applicant's identity before sending the applicant to the Postal Office for IPP.
2. Perform a verification of the applicant's physical residential address via First Class U.S. Mail with an "Address Correction Requested" and "Do Not Forward" endorsement.
3. Restrict the expiration date of an IPP based Digital Certificate such that it does not surpass the expiration of the 4

year validity period of an IPP verification event. A new IPP event will be required every 4 years.

4. Facilitate IPP processing by using standard forms and barcodes as directed by the USPS and exchanging of information as necessary for the efficient operation of IPP. This includes:

- A. Using the standard ID Verification Form (IDVF),
- B. Maintaining a secure repository of IDVF forms,

- C. Providing access to IDVF forms and customer account information as necessary for investigative purposes by USPS Inspection Service and the USPS Office of Inspector General,

- D. Submitting the processes and operations of the CA to security audits and compliance reviews as required by the USPS, and

- E. Restricting the generation of unique barcodes for each IPP event to those expressly permitted by the USPS.

5. Operate the CA to enable the broadest practical use of IPP based digital certificates. This includes:

- A. Issuing, at a minimum, a daily Certificate Revocation List to better allow users to rely upon the certificates,

- B. Passing an external CA audit in accordance with industry best practices such as "AICPA/CICA WebTrust Program for Certificate Authorities",

- C. Achieving interoperability with the Federal Bridge for Certificate Authorities, and

- D. Incorporating a new common object identifier (USPS registered OID) for IPP based digital certificates.

6. Successfully enter into an agreement with the USPS that includes standard pricing, service level commitments, IPP Policy compliance, liability and service termination provisions, as well as such other terms and conditions as may be included.

2.2 Minimum Volume

IPP transactions are to be purchased in pre-paid blocks of 10,000 transactions by either the CA or a government customer on behalf of the CA.

2.3 Labeling

Each digital certificate must contain the statement "ID Verified by the U.S. Postal Service" within the certificate profile to let any user or relying party know that:

- The issuer of the digital certificate authority operates in compliance with IPP Policy, and
- The holder of the credential did physically appear before a postal employee and had their hardcopy identification successfully verified.

Applications should interrogate the digital certificate presented during an

electronic process to confirm the presence of a new common object identifier (USPS registered OID) for IPP based digital certificates.

3.0 AVAILABILITY

IPP is available at an initial level of up to 200 post offices promptly following the execution of the first activation agreement. Market demand for IPP, in conjunction with operational assessments, will determine the expansion schedule beyond initial deployment locations.

Stanley F. Mires,

Chief Counsel, Legislative.

[FR Doc. 03-15211 Filed 6-16-03; 8:45 am]

BILLING CODE 7710-12-P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-48014; File No. SR-CHX-2003-05]

Self-Regulatory Organizations; Notice of Filing and Immediate Effectiveness of Proposed Rule Change by the Chicago Stock Exchange, Incorporated Relating to the Execution of Limit Orders for OTC Securities

June 11, 2003.

Pursuant to section 19(b)(1) of the Securities Exchange Act of 1934 ("Act"),¹ and Rule 19b-4 thereunder,² notice is hereby given that on April 28, 2003, the Chicago Stock Exchange, Incorporated ("CHX" or "Exchange") filed with the Securities and Exchange Commission ("Commission") the proposed rule change as described in Items I, II and III below, which Items have been prepared by the Exchange. The Exchange filed the proposal pursuant to section 19(b)(3)(A) of the Act,³ and Rule 19b-4(f)(6)⁴ thereunder, which renders the proposal effective upon filing with the Commission.⁵ The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The Exchange proposes to amend certain provisions of CHX Article XX, Rule 37(a)(3), which governs, among other things, the execution of limit

orders in a CHX specialist's book. Specifically, the CHX seeks to add a provision that would permit a CHX specialist to enable a functionality that would automatically execute designated limit orders for Nasdaq/NM ("OTC") securities, following dissemination of a locking or crossing quotation in that security by one or more designated OTC market centers. The text of the proposed rule change is below. Proposed new language is in *italics*. Proposed deletions are in *brackets*.⁶

Chicago Stock Exchange Rules

Article XX—Regular Trading Sessions

* * * * *

Precedence of Bids at Same Price

Rule 16. *Subject to Article XX, Rule 37(b)*, [W]here bids are made at the same price, the priority and precedence shall be determined as follows:

(a) When a bid is clearly established as the first made at a particular price, the maker shall be entitled to priority and shall have precedence over [on] the next sale at that price, up to the number of shares of stock specified in the bid, irrespective of the number of shares of stock specified in such bid.

* * * * *

Guaranteed Execution System and Midwest Automated Execution System

Rule 37. (a) *Guaranteed Executions*. The Exchange's Guaranteed Execution System (the BEST System) shall be available, during the Primary Trading Session and the Post Primary Trading Session, to Exchange member firms and, where applicable, to members of a participating exchange who send orders to the Floor through a linkage pursuant to Rule 39 of this Article, in all issues in the specialist system which are traded in the Dual Trading System and NASDAQ/NM Securities. System orders shall be executed pursuant to the following requirements:

1. No change to text.
2. No change to text.
3. [Dual Trading System] *Execution of Agency Limit Orders*.

Subject to Interpretation and Policy .10 ("Exempted Trade-Throughs"), all agency limit orders in Dual Trading System issues will be filled under the following circumstances:

⁶ The CHX inadvertently neglected to underscore a word in the proposed rule text when it filed this proposed rule change. With the CHX's permission, the Commission corrected the omission, so that the proposed rule text as printed in this notice accurately reflects the CHX's intentions. May 22, 2003 telephone conversation between Kathleen M. Boege, Associate General Counsel, CHX, and Joseph P. Morra, Special Counsel, Division of Market Regulation, Commission.

(a) Exhaustion of primary market bid or offer. When the bid or offering at the limit price has been exhausted in the primary market (as defined in the CTA plan), agency limit orders will be executed in whole or in part, based on the rules of priority and precedence, on a share for share basis with trades executed at the limit price in the primary market;

(b) Price penetration in primary market. When there has been a price penetration of the limit in the primary market, agency limit orders that have resided in the specialist's book for a period of 0-15 seconds (as designated by the specialist) prior to the primary market print will be filled at the limit price; [and]

(c) Primary market trading at the limit price. When the issue is trading at the limit price on the primary market, agency limit orders will be filled at the limit price unless it can be demonstrated that such orders would not have been executed if they had been transmitted to the primary market or the broker and specialist agree to a specific volume related or other criteria for requiring a fill; and

(d) Block size trade-through in another market. In instances where a block trade on the Exchange or other market against which orders are being protected takes place outside the current Exchange quotation, all effective bids or offers limited to the block price or better will be executed at the more favorable block price rather than at the limit price of the affected orders. A specialist may elect to provide automatic execution of designated limit orders at the block price or better when a "block size" (as defined in Article XX, Rule 40, Interpretation and Policy .05) trade-through is executed on the primary market.

A specialist may elect automatic execution of such agency limit orders on an issue-by-issue basis.

In the case of Nasdaq/NM securities, a CHX specialist may elect, on an issue-by-issue basis, to engage a functionality that will automatically execute designated resting agency limit orders (or portions of such orders) at the limit price, up to the size of the Limit Order Auto Execution Threshold, when the Designated Market quotation locks or crosses the limit price. For purposes of this provision, (i) "Limit Order Auto Execution Threshold" means an aggregate number of shares designated by the CHX specialist, on an issue-by-issue basis, that may be executed automatically at the limit price; and (ii) "Designated Market" means the market

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

³ 15 U.S.C. 78s(b)(3)(A).

⁴ 17 CFR 240.19b-4(f)(6).

⁵ The CHX provided the Commission with written notice of its intent to file the proposed rule change on March 2, 2002. The proposed rule change will become operative on June 1, 2003.

center designated by the CHX specialist, and approved by the Exchange.

* * * * *

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the CHX included statements concerning the purpose of and basis for its proposal and discussed any comments it received regarding the proposal. The text of these statements may be examined at the places specified in Item IV below. The CHX has prepared summaries, set forth in sections A, B and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The CHX proposes to permit a CHX specialist to enable a functionality that would automatically execute designated limit orders for OTC securities, following dissemination of a locking or crossing quotation in that security by one or more designated OTC market centers.

Under existing CHX rules relating to listed securities, limit orders that are resident in the CHX specialist's book are entitled to a fill at the limit price if a price penetration (*i.e.*, a trade-through) or certain other conditions occur in the primary market.⁷ Although there is not an analogous trade-through rule in the OTC market, and therefore no analogous limit order protection provisions currently set forth in the CHX rules, certain CHX specialists desire to provide such protections in instances where one or more designated OTC market centers disseminate a quotation that locks or crosses the CHX specialist's quotation.⁸

Accordingly, a subcommittee of the CHX OTC Committee undertook to

evaluate the issue, and to design a functionality that, if enabled by a CHX specialist, would automatically execute certain resting limit orders for OTC securities. The proposed rule change, which was discussed extensively by the CHX OTC Committee and other member committees, would permit a CHX specialist to enable such a functionality on a voluntary basis. The functionality would automatically execute designated resting limit orders, if the designated OTC markets lock or cross the CHX quotation.⁹ The type of orders and the total number of shares to be executed automatically would be designated by the CHX specialist; orders not eligible for automatic execution would remain in the specialist's book and would be eligible for manual execution.¹⁰

The CHX believes that the proposed rule change will be welcomed by its

⁹ Because there is no primary market for over-the-counter securities, the CHX has not simply designated the "primary market" as the market that would trigger limit order protection on the CHX. Instead, this rule would allow CHX specialists to identify the designated market, with the approval of the Exchange, on an issue-by-issue basis. Initially, all CHX specialists have identified the "Designated Market" as the Nasdaq Stock Market. If all CHX specialists make a different or additional designation for all securities traded on the Exchange, the Exchange will notify its order-sending firms of those Exchange-wide changes and file those changes with the Commission as an interpretation of an existing rule pursuant to Section 19(b)(3)(A) of the Act and Rule 19b-4(f)(1) thereunder. If, however, CHX specialists respond to the fragmentation in the market by identifying different designated markets for different securities, the Exchange will file, pursuant to Rule 19b-4(f)(1), a new interpretation confirming that specialists have identified different designated markets in different securities for purposes of this voluntary designation, but will not list all of those different designations.

¹⁰ In addition to permitting the new functionality described above, the proposed rule change provides for a modification of the CHX rule governing priority of same-priced orders. This modification contemplates that, on an issue-by-issue basis, specialists could designate certain same-priced orders as eligible for automatic execution, while other orders might not be so designated, thus automatically executing some orders out of traditional time-price priority sequence.

For instance, if a specialist designates all limit orders in an issue under 10,000 shares as eligible for possible auto-execution under this rule, those orders of 10,000 shares or more would not be eligible for automatic execution and thus would remain in the specialist's book, eligible for manual execution, even though a smaller order at the same price that was received at a later time would be eligible for automatic execution (up to the size of the Limit Order Auto Execution Threshold).

Because the CHX specialist is not obligated (under CHX rules, the Act or any other governing rules) to execute OTC limit orders based on conditions in other OTC market centers, rendering engagement of this proposed functionality strictly voluntary, the Exchange believes that it is appropriate for a CHX specialist to condition automatic execution in a manner that could, based on issue-by-issue designations of certain types of orders, modify the precedence of same-priced orders.

order-sending firms, as it will provide for protection of certain limit orders on a voluntary basis in the OTC market, which currently does not require that such protections be afforded limit orders. Indeed, the CHX believes that the proposed rule change, which could dramatically increase the number of limit orders executed automatically on the CHX (which currently does not have a rule requiring automatic execution of limit orders for OTC securities based on conditions in other market centers), is to the material benefit of the investing public. The CHX believes that the proposed rule change constitutes a reasoned approach to offering execution guarantees in an evolving OTC market, and anticipates that many of its OTC specialists will elect to enable the functionality contemplated by the proposed rule change.

2. Statutory Basis

The CHX believes the proposal is consistent with the requirements of the Act and the rules and regulations thereunder that are applicable to a national securities exchange, and, in particular, with the requirements of section 6(b).¹¹ In particular, the CHX believes the proposal is consistent with section 6(b)(5) of the Act¹² in that it is designed to promote just and equitable principles of trade, to remove impediments to, and to perfect the mechanism of, a free and open market and a national market system, and, in general, to protect investors and the public interest.

B. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will impose any inappropriate burden on competition.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants or Others

No written comments were either solicited or received.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Because the foregoing proposed rule change does not:

- (i) Significantly affect the protection of investors or the public interest;
- (ii) Impose any significant burden on competition; and
- (iii) Become operative for 30 days from the date on which it was filed, or

¹¹ 15 U.S.C. 78f(b).

¹² 15 U.S.C. 78f(b)(5).

⁷ See CHX Article XX, Rule 37(a)(3). The limit order would be filled on the CHX at the limit price regardless of whether the CHX specialist was able to obtain recourse via the Intermarket Trading System ("ITS") administrative process following the trade-through.

⁸ A designated market's bid (offer) will lock the CHX specialist's quote if it equals the CHX specialist's offer (bid). A designated market's bid (offer) will cross the CHX specialist's quote if it penetrates the CHX specialist's offer (bid). The CHX will consider a designated market to have locked or crossed a CHX specialist's quote each time that it moves from an unlocked/uncrossed state to a locked or crossed state. For example, if a designated market crosses a CHX specialist's offer at 52 with a 53 bid, it will not again cross the CHX's, for purposes of this rule, if the designated market continues to cross the CHX's offer with a bid of 54.

such shorter time as the Commission may designate, it has become effective pursuant to section 19(b)(3)(A) of the Act¹³ and Rule 19b-4(f)(6) thereunder.¹⁴ At any time within 60 days of the filing of the proposed rule change, the Commission may summarily abrogate such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposal is consistent with the Act. Persons making written submissions should file six copies thereof with the Secretary, Securities and Exchange Commission, 450 Fifth Street, NW., Washington, DC 20549-0609. Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for inspection and copying in the Commission's Public Reference Room. Copies of such filing will also be available for inspection and copying at the principal office of the CHX. All submissions should refer to file number SR-CHX-2003-05 and should be submitted by July 8, 2003.

For the Commission, by the Division of Market Regulation, pursuant to delegated authority.¹⁵

Margaret H. McFarland,

Deputy Secretary.

[FR Doc. 03-15266 Filed 6-16-03; 8:45 am]

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SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-48016; File No. SR-GSCC-2002-11]

Self-Regulatory Organizations; Government Securities Clearing Corporation; Notice of Filing of Proposed Rule Change to Reduce the Permitted Use of Letters of Credit to Twenty-Five Percent of a Member's Required Clearing Fund Deposit

June 11, 2003.

Pursuant to section 19(b)(1) of the Securities Exchange Act of 1934 ("Act"),¹ notice is hereby given that on October 10, 2002, the Government Securities Clearing Corporation ("GSCC") filed with the Securities and Exchange Commission ("Commission") and on April 1, 2003, amended the proposed rule change as described in Items I, II, and III below, which items have been prepared primarily by GSCC. The Commission is publishing this notice to solicit comments on the proposed rule change from interested parties.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

GSCC is seeking to reduce the permitted use of letters of credit ("LCs") to twenty-five percent of a member's required clearing fund deposit.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, GSCC included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. GSCC has prepared summaries, set forth in sections (A), (B), and (C) below, of the most significant aspects of these statements.²

(A) Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

One of GSCC's most important risk management tools is its maintenance of clearing fund collateral. Clearing fund is comprised of cash, certain netting-eligible securities, and eligible LCs. The purposes served by the clearing fund are (1) to have on deposit from each netting

member assets sufficient to satisfy any losses that may be incurred by GSCC as the result of the default by the member and the resultant close-out of that member's settlement positions and (2) to ensure that GSCC has sufficient liquidity at all times to meet its payment and delivery obligations.

The subject of the proposed rule change is the LC component of the clearing fund. Currently, GSCC's rules permit up to 70 percent of a member's required clearing fund deposit to be in the form of LCs. Although GSCC believes that it will always receive funds from the presentment of an LC for payment, GSCC has recognized that in a period of market crisis there is the potential that GSCC might not receive the funds on a timely basis. To ensure that GSCC can always meet its liquidity needs on a timely basis in the unlikely event of a member default and in a period of market crisis, GSCC is proposing to reduce the permitted use of LCs to 25 percent of a member's required clearing fund deposit. Thus, the minimum level of cash and securities required to be maintained on deposit would increase from 30 percent to 75 percent of a member's required clearing fund deposit.³

GSCC believes that the proposed rule change is consistent with the requirements of section 17A of the Act⁴ and the rules and regulations thereunder applicable to GSCC because it will protect GSCC and its members by ensuring that GSCC has adequate liquidity resources.

(B) Self-Regulatory Organization's Statement on Burden on Competition

GSCC does not believe that the proposed rule change will have any impact or impose any burden on competition.

(C) Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received from Members, Participants or Others

Written comments relating to the proposed rule change have not yet been solicited or received. GSCC will notify the Commission of any written comments received by GSCC.

³ The proposed LC requirement will not affect the requirement that certain non-US GSCC members post additional collateral in the form of LCs to protect GSCC against legal risk presented by the insolvency laws in their home countries. These members will not be required to increase the amount of their deposit that is in the form of cash and securities from 30 percent to 75 percent of their required clearing fund deposit.

⁴ 15 U.S.C. 78q-1.

¹³ 15 U.S.C. 78s(b)(3)(A).

¹⁴ 17 CFR 240.19b-4(f)(6).

¹⁵ 17 CFR 200.30-3(a)(12).

¹ 15 U.S.C. 78s(b)(1).

² The Commission has modified the text of the summaries prepared by GSCC.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Within thirty-five days of the date of publication of this notice in the **Federal Register** or within such longer period (i) as the Commission may designate up to ninety days of such date if it finds such longer period to be appropriate and publishes its reasons for so finding or (ii) as to which the self-regulatory organization consents, the Commission will:

(A) by order approve such proposed rule change or

(B) institute proceedings to determine whether the proposed rule change should be disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Persons making written submissions should file six copies thereof with the Secretary, Securities and Exchange Commission, 450 Fifth Street, NW., Washington, DC 20549-0609. Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for inspection and copying in the Commission's Public Reference Section, 450 Fifth Street, NW., Washington, DC 20549. Copies of such filing also will be available for inspection and copying at the principal office of GSCC.

All submissions should refer to File No. SR-GSCC-2002-11 and should be submitted by July 8, 2003.

For the Commission by the Division of Market Regulation, pursuant to delegated authority.⁵

Margaret H. McFarland,

Deputy Secretary.

[FR Doc. 03-15264 Filed 6-16-03; 8:45 am]

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SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-48015; File No. SR-NASD-2003-55]

Self-Regulatory Organizations; Notice of Filing and Immediate Effectiveness of Proposed Rule Change by National Association of Securities Dealers, Inc. Relating to Proposed Amendments to Article VIII (District Committees and District Nominating Committees) of the By-Laws of NASD Regulation, Inc.

June 11, 2003.

Pursuant to section 19(b)(1) of the Securities Exchange Act of 1934 ("Act"),¹ and Rule 19b-4 thereunder,² notice is hereby given that on March 21, 2003, the National Association of Securities Dealers, Inc. ("NASD") filed with the Securities and Exchange Commission ("Commission") the proposed rule change as described in Items I, II and III below, which Items have been prepared by NASD. NASD has designated the proposed rule change as constituting a "non-controversial" rule change under paragraph (f)(6) of Rule 19b-4 under the Act,³ which renders the proposal effective upon filing with the Commission. On April 17, 2003, NASD submitted Amendment No. 1 to the proposed rule change to correct certain typographical errors in the proposed rule text.⁴ On April 28, 2003, NASD submitted Amendment No. 2 to the proposed rule change to correct certain typographical errors in the proposed rule text.⁵ On June 6, 2003, NASD submitted Amendment No. 3 to the proposed rule change to revise the proposed rule text.⁶ The Commission is publishing this notice to solicit comments on the proposed rule change, as amended, from interested persons.

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

³ 17 CFR 240.19b-4(f)(6).

⁴ See letter from Kosha K. Dalal, Assistant General Counsel, NASD, to Katherine A. England, Assistant Director, Division of Market Regulation, Commission, dated April 17, 2003.

⁵ See letter from Kosha K. Dalal, Assistant General Counsel, NASD, to Katherine A. England, Assistant Director, Division of Market Regulation, Commission, dated April 28, 2003.

⁶ See letter from Kosha K. Dalal, Assistant General Counsel, NASD, to Katherine A. England, Assistant Director, Division of Market Regulation, Commission, dated June 6, 2003. For purposes of calculating the 60-day period within which the Commission may summarily abrogate the proposed rule change under Section 19(b)(3)(C) of the Act, the Commission considers that period to commence on June 6, 2003, the date the NASD filed Amendment No. 3. See 15 U.S.C. 78s(b)(3)(C).

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

NASD is proposing to amend Article VIII (District Committees and District Nominating Committees) of the By-Laws of NASD Regulation, Inc. ("NASD Regulation") to streamline the nomination and election processes governing District Committees and District Nominating Committees, modernize communication procedures, and improve the consistency among the Committees across all districts. The text of the proposed rule change is set forth below. Proposed new language is in *italics*; proposed deletions are in [brackets].

* * * * *

ARTICLE VIII

DISTRICT COMMITTEES AND DISTRICT NOMINATING COMMITTEES

Establishment of Districts

Sec. 8.1 The Board shall establish boundaries for districts within the United States to assist NASD Regulation in administering its affairs in a manner that is consistent with applicable law, the Restated Certificate of Incorporation, these By-Laws, the Delegation Plan, and the Rules of the Association. The Board may make changes from time to time in the number or boundaries of the districts as it deems necessary or appropriate. The Board shall prescribe such policies and procedures as are necessary or appropriate to address the implementation of a new district configuration in the event of a change in the number or boundaries of the districts.

Composition of District Committees

Sec. 8.2 (a) A district created under Section 8.1 shall elect a District Committee pursuant to this Article. A District Committee shall consist of no fewer than five and no more than 20 members, unless otherwise provided by resolution of the Board. *Subject to the limitation set forth in the immediately preceding sentence, the authorized number of members of a District Committee shall be determined from time to time by the Board; provided, however, that no decrease in the authorized number of members of a District Committee shall shorten the term of office of any member thereof.* Each District Committee member shall: (1) Be employed [in the office of/by an NASD member eligible to vote in the district for *District Committee elections*, and (2) *work primarily from such NASD member's principal office or a branch*

⁵ 17 CFR 200.30-3(a)(12).

office that is located within the district where the member serves on a District Committee. [A District Committee shall determine the number of its members to be elected each year.] Members of the District Committees shall serve as panelists in disciplinary proceedings in accordance with the Rules of the Association. The District Committees shall consider and recommend policies and rule changes to the Board. The District Committees shall endeavor[, in such manner as they deem appropriate,] to educate NASD members and other brokers and dealers in their respective districts as to the objects, purposes, and work of the NASD[, and NASD Regulation[, and Nasdaq] in order to foster NASD members' interest and cooperation.

(b) A member of a District Committee may resign at any time upon giving notice to the District Director. Any such resignation shall take effect upon receipt of such Notice or at any later time specified therein, provided that Notice of resignation at a later date may be made immediately effective at the discretion of the Executive Vice President, Regulatory Policy and Programs or the Executive Vice President, Member Regulation or their respective designee(s). The acceptance of such resignation shall not be necessary to make such resignation effective.

(c) [(b)] In the event of the refusal, failure, neglect, or inability of a member of a District Committee to discharge his or her duties, or for any cause affecting the best interests of NASD Regulation, the sufficiency of which shall be decided by the District Committee, the District Committee may remove the member by the affirmative vote of two-thirds of the members of the District Committee then in office and declare the member's position vacant. The District Committee shall notify the District Committee member of his or her removal within seven days after the vote. [The member's position shall be filled pursuant to Section 8.4.] A member who is removed may submit a written appeal of the removal to the Board within 30 days after the date he or she is notified of the removal. The Board may affirm, reverse, or modify the determination of the District Committee. A vote of a majority of the Directors then in office shall be required to reverse or modify the action of the District Committee.

(d) In the event of a vacancy in a District Committee resulting from death, resignation, removal, or other cause, the Executive Vice President, Regulatory Policy and Programs or the Executive Vice President, Member Regulation or

their respective designee(s) shall determine whether such vacancy shall be filled prior to the next regularly scheduled election of District Committee members. In the event the Executive Vice President, Regulatory Policy and Programs or the Executive Vice President, Member Regulation or their respective designee(s) determines that a vacancy on a District Committee should be filled, the vacancy shall be filled pursuant to Section 8.4.

Term of Office of District Committee Members

Sec. 8.3 Each regularly elected member of a District Committee shall hold office for a "full term" [of three years] which is the later of three years or until a successor is elected and qualified. Notwithstanding the term of office for a regularly elected member, such member's term shall terminate sooner upon the member's [, or until] death, resignation, or removal. [A member of a District Committee may not serve more than two consecutive terms.] There is no limit on the number of terms that may be served by a member of a District Committee, provided, that no more than two terms may be served consecutively. The word "term" as used for the purpose of this Section shall mean either a full term for a regularly elected member or a "partial term" which is a term served by a member appointed to fill a vacancy on the District Committee created by the termination of a regularly elected member's office prior to the expiration of the full term.

Filling of Vacancies on District Committees

Sec. 8.4 In the event of a vacancy on a District Committee [caused by the departure of a Committee member] prior to the expiration of the member's term of office, and where the Executive Vice President, Regulatory Policy and Programs or the Executive Vice President, Member Regulation or their respective designee(s) determines, pursuant to Section 8.2(d), that such vacancy should be filled, or in the event of a newly created membership on a District Committee by virtue of an increase in the authorized number of members thereof, the District Committee shall appoint by majority vote a representative of an NASD member eligible pursuant to Section 8.2(a) [to vote in the district] to fill the vacancy or newly created membership. The appointment by the District Committee shall be effective until the next regularly scheduled election [occurs], and until such member's successor is elected and qualified. Following the next regularly

scheduled election, in the event of a vacancy, the newly elected Committee member shall serve only the duration of the departed Committee member's term, and in the event of a newly created membership, the newly elected Committee member shall serve only the duration of the term for such class of membership.

Meetings of District Committees

Sec. 8.5 Meetings of a District Committee shall be held at such times and places, upon such notice, and in accordance with such procedures as [each District Committee] the Executive Vice President, Regulatory Policy and Programs or the Executive Vice President, Member Regulation or their respective designee(s) in [its] his or her discretion may determine in consultation with the Chair of the District Committee. A quorum of a District Committee shall consist of a majority of its members, and any action taken by a majority present at any meeting at which a quorum is present, except as otherwise provided in these By-Laws, shall constitute the action of the Committee. Any or all members of a District Committee may participate in any such meeting by means of conference telephone or other communications equipment by means of which all participants can communicate with each other, and such participation shall constitute presence in person at the meeting. Action by a District Committee may be taken by consent in writing or by electronic transmission in lieu of a meeting [mail, telephonic, or telegraphic vote], in which case any action taken by a majority of the Committee shall constitute the action of the Committee. [Any action taken by telephonic vote shall be confirmed in writing at a regular meeting of the District Committee.]

Election of District Officers

Sec. 8.6 At or following its last regularly scheduled meeting of the calendar year, [Following the annual election of members of the District Committees pursuant to this Article] each District Committee shall elect from its members a Chair and such other officers as it deems necessary for the proper performance of its duties under these By-Laws[, and shall prescribe their powers and duties].

Advisory Council

Sec. 8.7 (a) The Chairs of the District Committees, elected pursuant to Section 8.6, together with the Chair of the Market Regulation Committee shall constitute an Advisory Council to the Board.

(b) The Advisory Council shall be advised of and entitled to attend such meetings of the Board as the Board may designate for such Advisory Council's attendance, and the Board shall designate at least one such meeting annually. The Advisory Council shall not be entitled to vote at meetings of the Board.

Expenses of District Committees

Sec. 8.8 Funds to meet the regular expenses of each District Committee shall be provided by the Board, and all such expenses shall be subject to the approval of the Board.

Composition of District Nominating Committees

Sec. 8.9 (a) Each district created under Section 8.1 shall elect a District Nominating Committee pursuant to this Article. A District Nominating Committee shall consist of five members, unless the Board by resolution increases a District Nominating Committee to a larger number. Each *District Nominating Committee* member [of a District Nominating Committee] shall: (1) be employed [in the office of/by an NASD member eligible to vote in the district for District Committee elections, and (2) work primarily from such NASD member's principal office or a branch office that is located within the district where the member serves on a District Nominating Committee, but shall not be a member of the District Committee. A majority of the members of the District Nominating Committee shall include [a majority of] persons who previously have served on a District Committee or who are current or former Directors or current or former Governors of the NASD Board[, and shall include at least one current or former Director or Governor].

(b) A member of a District Nominating Committee may resign at any time upon giving Notice to the District Director. Any such resignation shall take effect upon receipt of such Notice or at any later time specified therein, provided that notice of resignation at a later date may be made immediately effective at the discretion of the Executive Vice President, Regulatory Policy and Programs or the Executive Vice President, Member Regulation or their respective designee(s). The acceptance of such resignation shall not be necessary to make such resignation effective.

(c) [(b)] In the event of the refusal, failure, neglect, or inability of a member of a District Nominating Committee to discharge his or her duties, or for any cause affecting the best interests of

NASD Regulation, the sufficiency of which shall be decided by the District Nominating Committee, the District Nominating Committee may remove the member by the affirmative vote of two-thirds of the members of the District Nominating Committee then in office and declare the member's position vacant. [The member's position shall be filled pursuant to Section 8.11.] The District Nominating Committee shall notify the District Nominating Committee member of his or her removal within seven days after the vote. A member who is removed may submit a written appeal of the removal to the Board within 30 days after the date he or she is notified in writing of the removal. The Board may affirm, reverse, or modify the determination of the District Nominating Committee. A vote of a majority of the Directors then in office shall be required to reverse or modify the action of the District Nominating Committee.

(d) In the event of a vacancy in a District Nominating Committee resulting from death, resignation, removal, or other cause, the Executive Vice President, Regulatory Policy and Programs or the Executive Vice President, Member Regulation or their respective designee(s) shall determine whether such vacancy shall be filled prior to the next regularly scheduled election of District Nominating Committee members. In the event the Executive Vice President, Regulatory Policy and Programs or the Executive Vice President, Member Regulation or their respective designee(s) determines that a vacancy on a District Nominating Committee should be filled, the vacancy shall be filled pursuant to Section 8.11.

Term of Office of District Nominating Committee Members

Sec. 8.10 Each regularly elected member of a District Nominating Committee shall hold office for a "full term" [of one year] which is the later of one year [and] or until a successor is elected and qualified. Notwithstanding the term of office for a regularly elected member, such member's term shall terminate sooner upon the member's [, or until] death, resignation, or removal. [A member of a District Nominating Committee may not serve more than two consecutive terms.] There is no limit on the number of terms that may be served by a member of a District Nominating Committee, provided, that no more than two terms may be served consecutively. The word "term" as used for the purpose of this Section shall mean either a full term for a regularly elected member or a "partial term" which is a term served by a member appointed to

fill a vacancy on the District Nominating Committee created by the termination of a regularly elected member's office prior to the expiration of the full term.

Filling of Vacancies for District Nominating Committees

Sec. 8.11 In the event of a vacancy on a District Nominating Committee [caused by the departure of a Committee member] prior to the expiration of the member's term of office, and where the Executive Vice President, Regulatory Policy and Programs or the Executive Vice President, Member Regulation or their respective designee(s) determines, pursuant to Section 8.9(d), that such vacancy should be filled, or in the event of a newly created membership on a District Nominating Committee by virtue of an increase in the authorized number of members thereof, the District Nominating Committee shall appoint by majority vote a representative of an NASD member eligible pursuant to Section 8.9(a) [to vote in the district] to fill the vacancy or newly created membership. The appointment shall be effective until the next regularly scheduled election [occurs] pursuant to this Article, and until such member's successor is elected and qualified.

Meetings of District Nominating Committees

Sec. 8.12 Meetings of a District Nominating Committee shall be held at such times and places, upon such notice, and in accordance with such procedures as [each District Nominating Committee] the Executive Vice President, Regulatory Policy and Programs or the Executive Vice President, Member Regulation or their respective designee(s) in [its] his or her discretion may determine in consultation with the Chair of the District Nominating Committee. A quorum of a District Nominating Committee shall consist of a majority of its members, and any action taken by a majority [of the entire Committee] present at any meeting at which a quorum is present, except as otherwise provided in these By-Laws, shall constitute the action of the District Nominating Committee. Any or all members of a District Nominating Committee may participate in any such meeting by means of conference telephone or other communications equipment by means of which all participants can communicate with each other, and such participation shall constitute presence in person at the meeting. Action by a District Nominating Committee may be taken by consent in writing or by electronic transmission in lieu of a meeting [mail,

telephonic, or telegraphic vote], in which case any action taken by a majority of the *District Nominating Committee* shall constitute the action of the *District Nominating Committee*. [Action taken by telephonic vote shall be confirmed in writing at a regular meeting of the District Committee].[]

Election of District Nominating Committee Officers

Sec. 8.13 Following the annual election of members of the District Nominating Committees pursuant to this Article, each District Nominating Committee shall elect from its members a Chair and such other officers as it deems necessary for the proper performance of its duties under these By-Laws[, and shall prescribe their powers and duties].

Expenses of District Nominating Committees

Sec. 8.14 Funds to meet the regular expenses of each District Nominating Committee shall be provided by the Board, and all such expenses shall be subject to the approval of the Board.

Notice to [Chair] District Nominating Committee

Sec. 8.15 On or before [May 1]/June 1 of each year, the Secretary of NASD Regulation shall *give a Notice* [send a written notice] to [the Chair of] each District Nominating Committee *member and each District Director* [and each District Committee] identifying the members of the District Nominating Committee and the District Committee whose terms of office shall expire in the next calendar year. The *Notice* [notice] shall describe election procedures for filling the offices.

Solicitation of Candidates and Secretary's Notice to NASD Members

Sec. 8.16 *The Secretary of NASD Regulation shall give a Notice of the upcoming election to NASD members and the Executive Representatives of NASD members describing the election procedures and stating that NASD members may submit names of candidates for consideration to the District Director.* NASD Regulation staff shall provide the District Nominating Committee with a description of the NASD membership in the district. The District Nominating Committee shall identify and solicit candidates to nominate for *election to* [the vacancies on] the District Committee and the District Nominating Committee. [The District Nominating Committee Chair shall send a written notice of the upcoming election to the Executive Representative and each branch office of

the NASD members in the district and request that such NASD members submit names of candidates to the District Nominating Committee or the District Director for consideration.]

[Secretary's Notice to NASD Members]

[Sec. 8.17 The Secretary of NASD Regulation shall send a written notice to NASD members in the district describing the election procedures.]

District Nominating Committee Slate

Sec. 8.17 [Sec. 8.18] (a) The District Nominating Committee shall review the background of proposed candidates and the description of the NASD membership provided by NASD Regulation staff and shall nominate a slate of candidates for the election. The slate shall include one [or more] candidate[s] for each *position on the District Committee and the District Nominating Committee subject to election at the next annual election* [vacancy]. In nominating candidates for the office of member of the District Committee and the office of member of the District Nominating Committee, the District Nominating Committee shall endeavor to secure appropriate and fair representation on the District Committee and on the District Nominating Committee of the various sections of the district and [all] *various* classes and types of NASD members engaged in the investment banking or securities business within the district. In nominating candidates for the office of member of the District Nominating Committee, a District Nominating Committee shall assure that the composition of the District Nominating Committee meets the standards in Section 8.9(a).

(b) A District Nominating Committee shall not nominate an incumbent member of the District Committee to succeed himself or herself *on the District Committee* [unless the District Nominating Committee first takes appropriate action by a written ballot of the entire NASD membership within the district to ascertain that such nomination is acceptable to a majority of the NASD members in the district,] unless the incumbent member of the District Committee is serving pursuant to the provisions of Section 8.4 *or is serving a term pursuant to the provisions of Section 8.2 and reelection would not cause the incumbent member to violate the provisions of Section 8.3.* A District Nominating Committee may not nominate more than two incumbent members of the District Nominating Committee to succeed themselves.

[Certification] Notification of Nomination

Sec. 8.18 [Sec. 8.19] *The District Director, acting on behalf of the District Nominating Committee, shall give a Notice to the Secretary of NASD Regulation of* [certify to the District Committee] each candidate nominated by the District Nominating Committee and the office to which the candidate is nominated. [Within five calendar days after the certification, the District Committee shall send to the Executive Representatives of NASD members in the district a copy of the certification.] *On or before October 1 of each year, the Secretary of NASD Regulation shall give a Notice of the nominated candidates to the Executive Representatives of NASD members and the District Committee.*

Uncontested Election

Sec. 8.19 *If the District Nominating Committee nominates one candidate for each position on the District Committee and the District Nominating Committee subject to election at the next annual election and no additional candidate is nominated pursuant to Section 8.22, the candidates nominated by the District Nominating Committee shall be considered duly elected.*

Designation of Additional Candidates

Sec. 8.20 If an officer, director, or employee of an NASD member who meets the qualifications of Section 8.2 *or 8.9, as applicable*, is not nominated by the District Nominating Committee and wants to be considered for *election to* [a vacancy on] the District Committee or the District Nominating Committee, he or she shall *deliver* [send] a written notice to the District Director within 14 calendar days after the *Secretary of NASD Regulation gives the Notice of nominated candidates* [the mailing date of the certification to the Executive Representatives] pursuant to Section 8.18[9]. The District Director shall make a written record of the time and date of the receipt of the officer's, director's, or employee's notice. The officer, director, or employee shall be designated as an "additional candidate."

List of NASD Members Eligible to Vote

Sec. 8.21 (a) The Secretary of NASD Regulation shall provide a list of all NASD members eligible to vote in the district, *their mailing addresses*, and their Executive Representatives to the additional candidate *promptly* [immediately] following receipt of the additional candidate's *timely* notice by the District Director.

(b) An NASD member that has its principal office[,] *and/or* one or more registered branch offices[, or its

principal office and one or more registered branch offices] in the district shall be eligible to cast one vote through the NASD member's Executive Representative for each *position on the District Committee and the District Nominating Committee* [vacancy] to be filled in the election.

Requirement for Petition Supporting Additional Candidate

Sec. 8.22 An additional candidate shall be nominated if a petition signed by at least ten percent of the NASD members eligible to vote in the district is filed with the District Nominating Committee within 30 calendar days after the date of the mailing of the list to the additional candidate pursuant to Section 8.21. Only an Executive Representative may sign a petition on behalf of an NASD member.

[Uncontested Election]

[Sec. 8.23 If the District Nominating Committee nominates one candidate for each vacancy and no additional candidate is nominated pursuant to Section 8.22, the candidates nominated by the District Nominating Committee shall be considered duly elected and the District Committee shall certify the election to the Board.]

Notice of Contested Election

Sec. 8.23 [Sec. 8.24] If [the District Nominating Committee nominates more than one candidate for vacancy, or if] an additional candidate is nominated pursuant to Section 8.22, the election shall be considered a contested election. *The Secretary of NASD Regulation shall give a Notice* [District Committee shall send a notice] to the Executive Representatives of the NASD members eligible to vote in the district announcing the names of the candidates and the office to which each candidate is nominated and describing contested election procedures.

Administrative Support

Sec. 8.24 [Sec. 8.25] The District Office shall provide administrative support to all candidates by sending, *by electronic transmission*, to NASD members eligible to vote in the district up to two *distributions* [mailings] of materials prepared by the candidates. [NASD Regulation shall pay the postage for the mailings.] If a candidate wants such *distributions* [mailings] sent, the candidate shall prepare such material on the candidate's personal stationery and make the material available to *NASD Regulation in electronic format*. The material shall state that it represents the opinion of the candidate. [The candidate shall provide a copy of

the material for each member of the NASD in the district.] Candidates nominated by the District Nominating Committee may identify themselves as such in their materials. Any candidate *also* may send [additional] mailings at the candidate's own expense. Except as provided in this Article, NASD Regulation, the Board, the Regional Nominating Committee, any other committee, and NASD Regulation staff shall not provide any other administrative support to a candidate in the election.

Ballots

Sec. 8.25 [Sec. 8.26] With the assistance of the Secretary of NASD Regulation and an Independent Agent, the District Nominating Committee shall prepare a ballot with the names of the District Nominating Committee's candidates and any additional candidate nominated pursuant to Section 8.22 and the office to which each candidate is nominated. The ballot shall list *separately, in alphabetical order*, the candidates [in alphabetical order and shall identify the candidates] nominated by the District Nominating Committee *and the additional candidates nominated pursuant to Section 8.22*. *The Secretary of NASD Regulation* [District Nominating Committee] shall send a ballot to the Executive Representative of each NASD member eligible to vote in the district. Instructions on the ballot shall direct the Executive Representative to return the ballot to the Independent Agent and state that the ballot envelope must be postmarked on or before the return date specified on the ballot. The return date specified on the ballot shall be no fewer than [30]20 and no more than [45]30 days after the date of mailing of the ballot.

Vote Qualification List

Sec. 8.26 [Sec. 8.27] Eligibility to vote in a district election shall be based on the NASD's membership records as of a date selected by the Secretary of NASD Regulation that is not more than 30 days before the date of mailing of the ballot. The Secretary of NASD Regulation shall prepare a list of NASD members eligible to vote in the district, *their mailing addresses*, and their Executive Representatives, which shall be used for vote qualification purposes, and shall provide the list to the candidates.

Ballots Returned as Undelivered

Sec. 8.27 [Sec. 8.28] The Independent Agent shall open any ballot envelope returned undelivered and shall determine whether it was sent

to the NASD member's address of record. If incorrectly addressed, the Independent Agent shall send a new ballot to the address of record.

General Procedures for Qualification and Accounting of Ballots

Sec. 8.28 [Sec. 8.29] After the voting period, on a date or dates designated by the Secretary of NASD Regulation, the qualification and accounting of ballots shall take place. The date or dates designated shall be not later than 14 calendar days after the return date specified on the ballot pursuant to Section 8.25[6]. Candidates and their representatives shall be allowed to observe the qualification and accounting of ballots. Representation for each candidate shall be limited to two individuals. The Independent Agent shall bring to [the district office] *a location within the district agreed to between the Independent Agent and the Secretary of NASD Regulation* all ballots timely received. Under the direction of the Secretary of NASD Regulation or the Secretary's designee, the Independent Agent shall open and count the ballots. For ballot qualification purposes, the Independent Agent shall identify to the candidates the NASD members that timely returned ballots and inform the candidates of the Independent Agent's determination of whether or not a ballot is qualified for voting purposes. The determination shall be based on a comparison of ballots received against the list of NASD members eligible to vote in the district and their Executive Representatives as prepared by the Secretary of NASD Regulation pursuant to Section 8.26[7]. The Secretary of NASD Regulation or the Secretary's designee shall make the final determination of the qualification of a ballot. Upon the qualification of a ballot, the Independent Agent shall record the vote indicated on the ballot. The candidates and their representatives shall not be allowed to see the vote of an NASD member.

Ballots Set Aside

Sec. 8.29 [Sec. 8.30] The Independent Agent shall set aside a ballot if: (a) the ballot is received from an NASD member eligible to vote in the district and the ballot is signed by a person who is not the Executive Representative listed on the vote qualification list prepared under Section 8.26[7], and the Secretary of the NASD has not received proper notice of a change in Executive Representative pursuant to the NASD By-Laws; or (b) if two or more properly executed ballots are received from an NASD member eligible to vote in the district. If the

Independent Agent determines that the ballots set aside are material to the outcome of the election, the Secretary of NASD Regulation and the Independent Agent shall make reasonable efforts to resolve each ballot set aside. With respect to a ballot not signed by an Executive Representative of record, the Secretary of NASD Regulation shall contact the NASD member to request that the NASD member send written notice of any change in Executive Representative by facsimile so that the ballot may be counted. With respect to multiple ballots from an NASD member, the Independent Agent shall contact the Executive Representative of the NASD member to obtain the NASD member's vote. The Secretary of NASD Regulation shall keep a list of NASD members that reported their ballot was lost or not received and that were provided with a duplicate ballot. The Secretary of NASD Regulation shall provide the list to the Independent Agent and, upon request, to the candidates.

Invalid Ballots

Sec. 8.30 [Sec. 8.31] The Independent Agent shall declare a ballot invalid if one or more of the following conditions exist:

(a) The ballot is not signed by the Executive Representative (unless Section 8.29 [30] applies);

(b) a vote is not indicated on the ballot; or

(c) the ballot indicates votes for more candidates than there are *positions* on the District Committee or District Nominating Committee subject to election in the election [vacancies for an office].

[Certification of] Election Results

Sec. 8.31 [Sec. 8.32] Under the direction of the Secretary of NASD Regulation or the Secretary's designee, the Independent Agent shall count the votes received for each candidate in a district. The candidates for the office of member of the District Committee or District Nominating Committee receiving the largest number of votes cast in the district for the office shall be declared elected such that the number of candidates declared elected equals the number of *positions* [vacancies] on the District Committee or District Nominating Committee subject to election in the election. [The candidates for the office of member of the District Nominating Committee receiving the largest number of votes cast in the district for the office shall be declared elected such that the number of candidates declared elected equals the number of vacancies on the District Nominating Committee.] In the event of

a tie, there shall be a run-off election. *The Secretary of NASD Regulation shall notify the Board of the election results.* [Each District Committee shall send a written certification of the election results to the Board.] The *notification* [certification] shall state the number of votes received by each candidate and the number of ballots set aside.

Extensions of Time and Additional Procedures

Sec. 8.32 [Sec. 8.33] The Secretary of NASD Regulation may extend a time period under this Article for good cause shown. In extraordinary circumstances, the Secretary of NASD Regulation, with the approval of the Executive Committee or the Board, may adopt additional procedures for elections under this Article.

Definitions

Sec. 8.33 (a) When used in Article VIII of these By-Laws, the term "Notice" means a notice in writing or by electronic transmission and the term "electronic transmission" means any form of communication, not directly involving the physical transmission of paper, that creates a record that may be retained, retrieved and reviewed by a recipient thereof, and that may be directly reproduced in paper form by such a recipient through an automated process.

(b) For purposes of this Article VIII, any notice by NASD Regulation, the Secretary of NASD Regulation, or the District Director given by electronic transmission shall be deemed given: (1) if by facsimile telecommunication, when directed to a number at which the person entitled to notice has consented to receive notice; (2) if by electronic mail, when directed to an electronic mail address at which the person entitled to notice has consented to receive notice; (3) if by a posting on an electronic network when the person entitled to notice has consented to receive notice in this manner, together with separate notice to the person entitled to notice of such specific posting, upon the later of (A) such posting and (B) the giving of such separate notice; and (4) if by any other form of electronic transmission when the person entitled to notice has consented to receive notice in this manner, when directed to the person entitled to notice. For purposes of this Article VIII, if mailed, any such notice by NASD Regulation, the Secretary of NASD Regulation, or the District Director shall be deemed given when deposited in the United States mail, postage prepaid, directed to the person entitled to notice at such person's

address as it appears on the records of NASD Regulation.

* * * * *

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, NASD included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. NASD has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

Article VIII of NASD Regulation By-Laws ("By-Laws") sets forth provisions relating to the operation of District Committees and District Nominating Committees (collectively, "Committees"), including specifically, provisions regarding Committee meetings, vacancies and elections. Under Article VIII, the role of the District Committee members includes serving as panelists in disciplinary proceedings in accordance with NASD Rules, recommending policy and rule changes to the Board, educating members in their district, and selecting members of the regional District Committee and District Nominating Committees in a manner consistent with Article VIII of the By-Laws. The role of the District Nominating Committee includes nominating candidates to serve on the District Committee and District Nominating Committee for that region.

Currently, there are 11 District Committees, divided by geographic region. Based on the experience of NASD Regulation staff in working with the Committees since that time, and the current practices of the Committees, NASD is proposing a series of amendments to modernize and clarify the Article VIII provisions. NASD represents that the proposed changes are designed to streamline the nomination and election processes by, among other things, centralizing the communication procedures in the Corporate Secretary's Office of NASD Regulation, revising the nomination and election timeline, and modernizing the methods of communication by permitting electronic delivery of documents. In addition, NASD represents that the proposed

amendments would improve coordination and consistency among the Committees across the districts, modify the procedures to fill vacancies, and provide for more administrative flexibility. The key proposed amendments are discussed below.

Section 8.2 (Composition of District Committees) and Section 8.9 (Composition of District Nominating Committees)

Create Consistency in Size of Committee. Currently, Section 8.2(a) provides that each District Committee will determine how many members to elect each year. To create more consistency in District Committee sizes across districts, the proposed amendments would allow the Board of Directors of NASD ("Board") to determine the size of each Committee.

Establish Qualifications to Serve on Committee. Currently, Section 8.2 and Section 8.9 provide that each Committee member must be employed by an NASD member eligible to vote in such district. NASD believes that the proposed amendments would clarify additional qualifications necessary to serve as a member of a Committee. The proposed amendments provide that a member must: (1) be employed by an NASD member eligible to vote in the district for District Committee elections; and (2) work primarily from such NASD member's principal office or a branch office that is located within the district where the member serves on a Committee. NASD believes the additional qualifications will ensure that Committee members have a significant connection to the district in which they serve.

Eliminate Requirement in Section 8.9 that One District Nominating Committee Member be a Current or Former Director. The proposed amendments would eliminate the current requirement contained in Section 8.9 that at least one member of the District Nominating Committee be a current or former Director or Governor. Based on the experience of NASD Regulation staff, it has become increasingly difficult to satisfy this composition requirement.

Section 8.3 (Term of Office of District Committee Member) and Section 8.10 (Term of Office of District Nominating Committee Member)

Clarify Term of Office. Currently, Section 8.3 and Section 8.10 provide that Committee members may not serve more than two consecutive terms. The proposed amendments to these provisions would clarify that there is no limit on the number of terms that a Committee member may serve, provided

that a member may not serve more than two consecutive terms. The word "term" would be defined to include either a full term (three years for District Committees or one year for District Nominating Committees) or any partial term where a member is appointed to fill a vacancy. NASD believes that this would allow for greater member participation in the Committees over time.

Section 8.4 (Filling of Vacancies on District Committee) and Section 8.9 (Filling of Vacancies for District Nominating Committees)

Streamline Process for Filling Vacancies. Proposed new Sections 8.2(b) and (d) and Sections 8.9(b) and (d) would clarify that Committee members may formally resign from their positions by serving a notice to the Chair. In addition, the proposed new provisions provide a process for filling vacancies. Under the proposed amendments, the Executive Vice President, Regulatory Policy and Programs, the Executive Vice President, Member Regulation or their respective designee(s) would be authorized to determine whether a vacancy created on the Committee needs to be filled. In some instances there may not be a need to fill a vacancy immediately—for example, when there is no scheduled meeting between the time of the vacancy and the next regularly scheduled election. If a determination were to be made to fill a vacancy, or if a new position were to be created by an increase in Committee size, the Committee would fill such vacancy by a majority vote of a quorum present at a meeting as currently prescribed by Sections 8.4 (District Committee) and 8.11 (District Nominating Committee).

Section 8.5 (Meetings of District Committee) and Section 8.12 (Meetings of District Nominating Committees)

Coordinate Procedures for Meetings. Currently, Section 8.5 and Section 8.12 provide that each Committee will determine the time, place, and procedures for each meeting. NASD represents that the proposed amendments would simplify and better coordinate Committee meetings across districts by authorizing the Executive Vice President, Regulatory Policy and Programs or the Executive Vice President, Member Regulation or their respective designee(s), to determine the times, places and procedures for Committee meetings in consultation with the Chair of each Committee. In addition, NASD represents that the proposed amendments would clarify that an individual may attend a meeting

either in person or by telephone and that action taken by telephonic vote will not require written confirmation.

Section 8.6 (Election of District Officers) and Section 8.13 (Election of District Nominating Committees)

Eliminate Requirement to Designate Function of Committee Officers. Currently Section 8.6 and Section 8.13 require that the Committees prescribe the powers and duties of its elected officers. The Committees have not found it necessary to perform this function. The proposed amendments would eliminate this requirement.

Section 8.7 (Advisory Council)

Members of Advisory Council. The proposed amendments would clarify that the Chair of the Market Regulation Committee of NASD is a member of the Advisory Council to the Board.

General Amendments to Allow Electronic Communications

Several Sections in Article VIII require parties to provide notice or other communications to Committee members or NASD Regulation. The proposed amendments would provide that where provisions in Article VIII call for notice and other communications to be given either among Committee members, or between Committees and NASD Regulation staff, the requirement may be satisfied by electronic means, provided that the person entitled to notice consents to receive notice in this manner. Specifically, the proposed amendments would add new Section 8.33 which defines the term "Notice" as used in Article VIII to mean a notice in writing or by electronic transmission. In proposed Section 8.23, the Secretary of NASD Regulation may provide notice by electronic transmission to Executive Representatives of NASD members announcing names of candidates, the offices for which they are nominated, and the procedures for contested elections, if the need arises. Additionally, in proposed Section 8.24, NASD staff and District Offices would provide administrative support to all candidates by sending electronically up to two distributions prepared by the candidates to NASD members eligible to vote.

General Amendments to Centralize Procedures for Nominations and Elections

In general, the amendments would create a more streamlined and flexible election process, conform the By-Laws language with current practice, and allow the Secretary of NASD Regulation to play a more centralized role in the

election process. For example, the proposed amendments would provide that the Secretary of NASD Regulation would perform many of the notification and other communication functions currently performed by other parties, such as notifying NASD members of upcoming elections, requesting submission of candidates, notifying NASD members of the candidates nominated by the District Nominating Committee, notifying NASD members in the event of a contested election, and notifying the Board of election results.

2. Statutory Basis

NASD believes that the proposed rule change, as amended, is consistent with the provisions of section 15A(b)(6) of the Act,⁷ which requires, among other things, that NASD rules must be designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, and, in general, to protect investors and the public interest. NASD believes that the proposed changes to Article VIII of the By-Laws of NASD Regulation are designed to accomplish these ends by streamlining the procedures for operation of the District Committees and District Nominating Committees. NASD believes the proposed rule change, as amended, will streamline the nomination and election processes governing the Committees, modernize communication procedures, and improve the consistency among the Committees across all districts.

B. Self-Regulatory Organization's Statement on Burden on Competition

NASD does not believe that the proposed rule change, as amended, will result in any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

Written comments were neither solicited nor received with respect to the proposed rule change, as amended.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

The proposed rule change, as amended, has been filed by NASD as a "non-controversial" rule change under Rule 19b-4(f)(6) under the Act,⁸ and NASD represents that the proposed rule change, as amended, does not significantly affect the protection of

investors or the public interest, and does not impose any significant burden on competition. In accordance with Rule 19b-4(f)(6)(iii),⁹ NASD submitted written notice of its intent to file the proposed rule change, along with a brief description and text of the proposed rule change, at least five business days prior to the date of filing, and the proposed rule change will become operative 30 days after the date of the filing.

The proposed rule change, as amended, has become effective pursuant to Section 19(b)(3)(A) of the Act.¹⁰ At any time within 60 days of the filing of the proposed rule change,¹¹ the Commission may summarily abrogate this proposed rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Persons making written submissions should file six copies thereof with the Secretary, Securities and Exchange Commission, 450 Fifth Street, NW., Washington, DC 20549-0609. Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for inspection and copying in the Commission's Public Reference Room. Copies of such filing will also be available for inspection and copying at the principal office of the NASD. All submissions should refer to file number SR-NASD-2003-55 and should be submitted by July 8, 2003.

For the Commission, by the Division of Market Regulation, pursuant to delegated authority.¹²

Margaret H. McFarland,

Deputy Secretary.

[FR Doc. 03-15265 Filed 6-16-03; 8:45 am]

BILLING CODE 8010-01-P

⁹ 17 CFR 240.19b-4(f)(6)(iii).

¹⁰ 15 U.S.C. 78s(b)(3)(A).

¹¹ See note 6, *supra*.

¹² 17 CFR 200.30-3(a)(12).

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-48013; File No. SR-PHLX-2002-55]

Self-Regulatory Organizations; Notice of Filing and Order Granting Accelerated Approval of a Proposed Rule Change and Amendments No. 1, 2, and 3 by the Philadelphia Stock Exchange, Inc. to Initiate a Pilot Program that Allows the Listing of Strike Prices at One-Point Intervals for Certain Stocks Trading under \$20

June 11, 2003.

Pursuant to section 19(b)(1) of the Securities Exchange Act of 1934 ("Act"),¹ and Rule 19b-4 thereunder,² notice is hereby given that on October 2, 2002, the Philadelphia Stock Exchange, Inc. ("PHLX" or "Exchange") filed with the Securities and Exchange Commission ("SEC" or "Commission") the proposed rule change as described in Items I and II below, which Items have been prepared by the Exchange. The PHLX filed Amendments No. 1, 2, and 3 to the proposal on March 17, 2003,³ June 6, 2003,⁴ and June 10, 2003,⁵ respectively. The Commission is publishing this notice to solicit comments on the proposed rule change, as amended, from interested persons and to grant accelerated approval to the proposed rule change, as amended, through June 5, 2004.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The Exchange proposes to initiate a pilot program ("Pilot Program") that will allow the Exchange to list options on selected stocks trading below \$20 at one-point intervals. The text of the proposed rule change appears below. Additions are in *italics*; deletions are in brackets.

Series of Options Open for Trading

Rule 1012. (a)–(d) No change.

Commentary:

.01 to .04 No change.

.05 (a) The interval of strike prices of series of options on individual stocks [will] *may be:*

(i) \$1 or greater ("*\$1 strike prices*") provided the strike price is \$20 or less,

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

³ Amendment No. 1 replaces the original filing in its entirety.

⁴ Amendment No. 2 replaces Amendment No. 1 in its entirety.

⁵ See letter from Jurij Trypupenko, PHLX, to Nancy Sanow, Senior Special Counsel, Office of Market Supervision, Commission, dated June 9, 2003 ("Amendment No. 3"). Amendment No. 3 indicates that the proposal expires on June 5, 2004.

⁷ 15 U.S.C. 78o-3(b)(6).

⁸ 17 CFR 240.19b-4(f)(6).

but not less than \$3. The listing of \$1 strike prices shall be limited to options classes overlying no more than 5 individual stocks (the "\$1 Pilot") as specifically designated by the Exchange. The Exchange may list \$1 strike prices on any other option classes if those classes are specifically designated by other securities exchanges that employ a similar \$1 Pilot under their respective rules.

To be eligible for inclusion into the \$1 Pilot, an underlying stock must close below \$20 in its primary market on the previous trading day.

After a stock is added to the \$1 Pilot, the Exchange may list \$1 strike prices from \$3 to \$20 that are no more than \$5 from the closing price of the underlying on the preceding day. For example, if the underlying stock closes at \$13, the Exchange may list strike prices from \$8 to \$18.

The Exchange may not list series with \$1 intervals within \$0.50 of an existing \$2.50 strike price (e.g., \$12.50, \$17.50) in the same series. Additionally, the Exchange may not list long-term option series ("LEAPS®") at \$1 strike price intervals for any option class selected for the \$1 Pilot.

A stock shall remain in the \$1 Pilot until otherwise designated by the Exchange. The \$1 Pilot shall expire on June 5, 2004;

(ii) \$2.50 or greater where the strike price is \$25 or less[.]; provided, however, that the Exchange may not list \$2.50 intervals below \$20 (e.g., \$12.50, \$17.50) for any class included within the \$1 Pilot if the addition of \$2.50 intervals would cause the class to have strike price intervals that are \$0.50 apart;

(iii) \$5[.00] or greater where the strike price is greater than \$25 but less than \$200[.]; and

(iv) \$10 or greater where the strike price is \$200 or more, except as provided in paragraph (b) below.

The interval of strike prices of series of options on Exchange-Traded Fund Shares will be \$1 or greater where the strike price is [less than \$200 or less.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item III below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of

the most significant aspects of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The PHLX proposes to amend PHLX Rule 1012, "Series of Options Open for Trading," to implement the Pilot Program, which will operate for a pilot period ending on June 5, 2004. The Pilot Program will allow the PHLX to list a finite number of options at \$1.00 strike price intervals pursuant to the Pilot Program. Specifically, the proposal will allow the PHLX to originally list as many as five options at \$1.00 strike price intervals within certain parameters specified in the proposed rule, and to multiply list options classes at \$1.00 strike price intervals where those classes were specifically designated by other securities exchanges that employ a similar \$1.00 strikes pilot program under their rules.

PHLX Rule 1012 establishes guidelines regarding the addition of strike prices for series of options. Currently, the PHLX may list options at \$2.50 intervals where the strike price is \$25.00 or less, at \$5.00 intervals where the strike price is greater than \$25.00 but less than \$200.00, and at \$10.00 intervals when the strike price is \$200.00 or more.⁶ The PHLX notes that over the past two years, prices of stocks in general have dropped, with many listings suffering precipitous declines. As a result, there has been a proliferation of stocks trading below \$20.00, and the PHLX lists options on more than 390 such stocks, including Ford Motor Company, Cisco Systems, Inc., Sun Microsystems, Inc., Corning, Inc., Motorola, Inc., Nextel Communications, Inc., AOL Time Warner, Inc., and Walt Disney Company. According to the PHLX, these stocks trading below \$20.00 are among the most widely held and actively traded equities listed on the New York Stock Exchange, Inc., the American Stock Exchange LLC, and Nasdaq, and the options overlying these stocks also trade actively.

The PHLX notes that when a stock underlying an option trades at lower prices, it requires a larger percentage gain in the price of the stock for the option to become in-the-money. For example, when a stock trades at \$6.00

and a potential investor wants to buy out-of-the-money call options, he or she will have to buy the calls at a \$7.50 strike price. At these pricing levels, the stock would need to achieve a 25% price gain before reaching at-the-money status. Such a 25% or higher gain in the underlying stock is particularly significant in light of the substantially lessened degree of volatility in many stocks and options in the past several months. As a result, the PHLX believes that there is a disincentive for investors to use options on these lowest-tier stocks to manage risk. Additionally, with the recent increase in the number of stocks trading below \$20.00, PHLX member firms have expressed a strong desire to list additional strike prices on these stocks in order to provide their customers with greater flexibility in achieving their investment strategies. The PHLX believes that the proposed Pilot Program would give investors an opportunity to more closely and effectively tailor their options investments to the price of the underlying stock and at the same time would allow the PHLX to take advantage of competitive opportunities to list options at \$1.00 strike prices pursuant to the terms of the Pilot Program.

Moreover, the PHLX believes that implementing the Pilot Program is decidedly pro-competitive. The PHLX believes, and has consistently maintained, that its ability to list options is a significant, and indispensable, component of competition that should not be circumscribed. The PHLX believes that it, like the other options exchanges, should be able to list \$1.00 strike price intervals (pursuant to the terms of the Pilot Program) for the issues that it believes are commercially feasible or desirable. The PHLX maintains that, as history has frequently borne out, yesterday's lowest-performing options, particularly those in the lowest priced trading bracket (*i.e.*, the lowest priced stocks), could well become tomorrow's most desirable options.

For these reasons, the PHLX proposes to implement the Pilot Program, as described below.

Options Eligible for the Pilot Program

The Pilot Program would allow the Exchange to list \$1.00 strike prices on equity options overlying up to five individual stocks provided that the strike prices are \$20.00 or less, but not less than \$3.00. The appropriate Exchange committee will determine which underlying stocks will be included in the Pilot Program. A class becomes eligible for inclusion in the

⁶ See PHLX Rule 1012, Commentary .05. See also PHLX Rule 1012, Commentary .05(b), which establishes guidelines for listing \$2.50 strikes for a set number of classes trading between \$25.00 and \$50.00.

Pilot Program when the underlying stock price closes below \$20.00 in the primary market on the previous trading day. Underlying stocks trading under \$20.00 that are not a part of the Pilot Program will continue to be eligible for trading at \$2.50 and \$5.00 intervals.

Although the PHLX may select up to five securities to be included in the Pilot Program, the Exchange would not be precluded from also listing options on other stocks at \$1.00 strike price intervals if other options exchanges list those series pursuant to their respective \$1.00 strike price pilot programs.

The Exchange will not list \$1.00 strike price intervals on LEAPS pursuant to the Pilot Program.

Adding \$1.00 Strike Price Intervals

The procedures for adding \$2.50 or \$5.00 strikes are contained in Exchange Rule 1012, Commentary .05, which will be amended to allow the addition of \$1.00 strike price intervals.⁷ Under the proposed Pilot Program, the closing price of the underlying stock will serve as the reference point for determining which \$1.00 strike prices the Exchange may open for trading.

To minimize unnecessary proliferation of series, the PHLX will only list \$1.00 strike prices within a range of \$5.00 greater or \$5.00 less than the closing price of the underlying stock on the primary market on the day before selection by the Exchange. No strike prices will be added outside the \$5.00 range. For example, if the underlying trades at \$6.00, the PHLX could list \$1.00 strikes from \$3.00 to \$11.00. The Exchange believes that this proposed range-format will significantly restrict the number of series that may be added at any one time.

As noted above, PHLX Rule 1012, Commentary .05, currently allows the PHLX to list strike prices with \$2.50 intervals when an underlying stock trades below \$25.00. For this reason, several options have \$7.50, \$12.50, and \$17.50 strike price intervals. To further avoid the proliferation of series, the PHLX does not intend to list \$1.00 strike prices at levels that "bracket," that is, are on either side of, existing \$2.50

intervals (e.g., \$7.00 and \$8.00 strikes around a \$7.50 strike). Accordingly, in this situation, there must be more than \$0.50 between any two strike prices. Thus, if the underlying stock closed at \$5.00, the Pilot Program would permit the Exchange to list options with \$1.00 strike price intervals from \$3.00 to \$10.00, if nothing was trading already at \$5.00 and \$7.50 strike prices, or \$1.00 strike price intervals at \$3.00, \$4.00, \$6.00, \$9.00 and \$10.00, if options were already trading at \$5.00 and \$7.50 strike prices. When the \$2.50 intervals are "phased-out," as described below, the PHLX will introduce \$1.00 intervals that "bracket" the phased-out price. For example, when the \$7.50 series expires, the PHLX will replace it by issuing a new month with \$7.00 and \$8.00 intervals.

Phasing-Out \$2.50 Strike Price Intervals

Once an option becomes part of the Pilot Program, the Exchange will begin the process of phasing-out existing \$2.50 intervals overlying the same stock in favor of \$1.00 intervals. To phase out the \$2.50 intervals, the Exchange initially will delist those \$2.50 series for which there is no open interest. Subsequently, the Exchange will no longer add new expiration months at \$2.50 intervals below \$20.00 when the existing months expire. This process will effectively phase-out the remaining \$2.50 intervals as the farthest-out months expire.

Adding Expiration Months

PHLX Rule 1012 generally allows the Exchange to make available for trading four expiration months for each initial listing of an option. Upon expiration of the near-term month, the Exchange may list an additional expiration month. Under the Pilot Program, if the underlying closed at or above \$20.00 on Expiration Friday, the PHLX would not list an additional month for a \$1.00 strike series until the stock again closed below \$20.00 in the primary market on the day before selection for listing.

Deleting \$1.00 Strike Price Intervals

At any time, the Exchange may cease listing \$1.00 strike prices on existing series by submitting a Cessation Notice to the Options Clearing Corporation ("OCC").⁸ As discussed above, if the

underlying closed at or above \$20.00 on Expiration Friday, the Exchange would not list any additional months with \$1.00 strike prices until the stock subsequently closed below \$20.00 on the primary market on the day prior to the Exchange listing the option. If the underlying stock does not subsequently close below \$20.00, thereby precluding the listing of additional \$1.00 strike prices and months, the existing \$1.00 series would eventually expire. When the near-term month is the only series available for trading in the Pilot Program, the Exchange may submit a Cessation Notice to OCC. Upon submission of that notice, the listing would no longer count towards the five listings that are allowed the Exchange pursuant to the Pilot Program, thereby allowing the PHLX to list classes on an additional stock. Once the Exchange submits the Cessation Notice, it would not list any additional months for trading with strikes below \$20.00 within the Pilot Program unless the underlying once closed below \$20.00, as required by the Pilot Program.⁹

Options Price Reporting Authority ("OPRA") Capacity

The Exchange believes that, according to OPRA figures, there is sufficient capacity to accommodate the Exchange's proposed Pilot Program. The PHLX believes that there is significant excess system capacity at this time: on a daily basis, the options exchanges are using an average of less than 7,000 messages per second ("mps") during peak periods, which is less than 25% of the total system capacity of 32,000 mps.¹⁰ To date, the exchanges have yet to exceed 11,000 mps for any extended period of time.¹¹ Thus, the PHLX believes that implementing the Pilot Program should not have any significant negative impact on OPRA system capacity.

⁹ If the underlying stock trades below \$20.00 after submission of the Cessation Notice by the PHLX, the Exchange could list \$1.00 strike prices again provided it included the class as one of the five classes permitted under the Pilot Program.

¹⁰ Securities Industry Automation Corporation ("SIAC"), which administers and services the network for OPRA, estimates that as much as 6,000 mps of the total system capacity will be used to send best bid and offer ("BBO") messages when the BBO feed becomes operational. See Securities Exchange Act Release No. 47231 (January 22, 2003), 68 FR 4258 (January 28, 2003) (publication of notice of File No. SR-OPRA-2002-01). See also Securities Exchange Act Release No. 47231 (January 22, 2003), 68 FR 4258 (January 28, 2003) (order approving File No. SR-OPRA-2002-01).

¹¹ On November 6, 2002, the OPRA five-minute message peak was 8,203 mps. On November 13, 2002, the one-minute peak was 10,091 mps.

⁷ PHLX Rule 1012(a)(iii) permits the Exchange to add a new option series "as the market price of the underlying stock or Exchange-Traded Fund Share or the underlying foreign currency, as the case may be, moves substantially from the initial exercise price or prices." Moreover, PHLX Rule 1010 provides that where exceptional circumstances have caused an underlying security not to comply with the Exchange's maintenance requirements, "the Exchange may, in the interest of maintaining a fair and orderly market for the protection of investors, determine to open additional series of option contracts on the class covering that underlying security."

⁸ The reasons for submitting a Cessation Notice include: expiration of available \$1.00 strikes (i.e., the underlying stock price on the primary market remains above \$20.00); series proliferation concerns; and delisting because of, among other things, low price, merger, or takeover. In any event, the PHLX would continue to have the ability to cease trading series that become inactive and have no open interest, with prior notice to its members).

2. Statutory Basis

The Exchange believes the proposed rule change is consistent with section 6(b)¹² of the Act in general and furthers the objectives of section 6(b)(5),¹³ in particular, in that it is designed to perfect the mechanism of a free and open market and a national market system, protect investors and the public interest and promote just and equitable principles of trade. According to the PHLX, the proposal would achieve this by allowing the listing of \$1 strike price intervals, thereby stimulating customer interest in options overlying the lowest tier of stocks and creating greater trading opportunities and flexibility and providing customers with the ability to more closely tailor investment strategies to the precise movement of the underlying stocks.

B. Self-Regulatory Organization's Statement on Burden on Competition

The PHLX does not believe that the proposed rule change will impose any inappropriate burden on competition.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received from Members, Participants, or Others No written comments were solicited or received.

III. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change, as amended, is consistent with the Act. Persons making written submissions should file six copies thereof with the Secretary, Securities and Exchange Commission, 450 Fifth Street, NW., Washington, DC 20549-0609. Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for inspection and copying in the Commission's Public Reference Room. Copies of such filings will also be available for inspection and copying at the principal office of the Exchange. All submissions should refer to File No. SR-PHLX-2002-55 and should be submitted by June 8, 2003.

IV. Commission's Findings and Order Granting Accelerated Approval of Proposed Rule Change

After careful review, the Commission finds that the proposed rule change is consistent with the requirements of the Act and the rules and regulations thereunder applicable to a national securities exchange.¹⁴ In particular, the Commission believes that the proposed rule change is consistent with section 6(b)(5) of the Act,¹⁵ which requires, among other things, that the rules of a national securities exchange be designed to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest. Specifically, the Commission believes that the proposed listing of one point strike price intervals in selected equity options on a pilot basis should provide investors with more flexibility in the trading of equity options overlying stocks trading at more than \$3 but less than \$20, thereby furthering the public interest by allowing investors to establish equity options positions that are better tailored to meet their investment objectives. The Commission also believes that the Exchange's limited Pilot Program strikes a reasonable balance between the Exchange's desire to accommodate market participants by offering a wide array of investment opportunities and the need to avoid unnecessary proliferation of options series. The Commission expects the Exchange to monitor the applicable equity options activity closely to detect any proliferation of illiquid options series resulting from the narrower strike price intervals and to act promptly to remedy this situation should it occur. In addition, the Commission requests that the PHLX monitor the trading volume associated with the additional options series listed as a result of the Pilot Program and the effect of these additional series on market fragmentation and on the capacity of the Exchange's, OPRA's, and vendors' automated systems.

As noted above, the Commission is approving the PHLX's proposal on a pilot basis. In the event that PHLX proposes to extend the Pilot Program beyond June 5, 2004, expand the number of options eligible for inclusion in the Pilot Program, or seek permanent approval of the Pilot Program, it should submit a Pilot Program report to the

Commission along with the filing of such proposal.¹⁶ The report must cover the entire time the Pilot Program was in effect, and must include: (1) Data and written analysis on the open interest and trading volume for options (at all strike price intervals) selected for the Pilot Program; (2) delisted options series (for all strike price intervals) for all options selected for the Pilot Program; (3) an assessment of the appropriateness of \$1 strike price intervals for the options the PHLX selected for the Pilot Program; (4) an assessment of the impact of the Pilot Program on the capacity of the PHLX's, OPRA's, and vendors' automated systems; (5) any capacity problems or other problems that arose during the operation of the Pilot Program and how the PHLX addressed them; (6) any complaints that the PHLX received during the operation of the Pilot Program and how the PHLX addressed them; and (7) any additional information that would help to assess the operation of the Pilot Program.

The Commission finds good cause for approving the proposal prior to the thirtieth day after the date of publication of notice of filing thereof in the **Federal Register**. The PHLX's Pilot Program is identical to a CBOE pilot program ("CBOE Pilot") that the Commission approved.¹⁷ Notice of the CBOE Pilot was published for comment¹⁸ and the Commission received one comment letter, which supported the CBOE's proposal. Accordingly, the Commission believes that the proposal raises no issues of regulatory concern and that there is good cause, consistent with sections 6(b)(5) and 19(b) of the Act,¹⁹ to approve the PHLX's proposal on an accelerated basis.

V. Conclusion

It is therefore ordered, pursuant to section 19(b)(2) of the Act,²⁰ that the proposed rule change (SR-PHLX-2002-55) and Amendment Nos. 1, 2, and 3 thereto are hereby approved, on an accelerated basis and as a pilot program, through June 5, 2004.

¹⁶ The Commission expects the PHLX to submit a proposed rule change at least 60 days before the expiration of the Pilot Program in the event the PHLX wishes to extend, expand, or seek permanent approval of the Pilot Program.

¹⁷ See Securities Exchange Act Release No. 47991 (June 5, 2003) (order approving File No. SR-CBOE-2001-60).

¹⁸ See Securities Exchange Act Release No. 47753 (April 29, 2003), 68 FR 23784 (May 5, 2003).

¹⁹ 15 U.S.C. 78f(b)(5) and 78s(b).

²⁰ 15 U.S.C. 78s(b)(2).

¹² 15 U.S.C. 78f(b).

¹³ 15 U.S.C. 78f(b)(5).

¹⁴ In approving this proposed rule change, the Commission has considered the proposed rule's impact on efficiency, competition, and capital formation. 15 U.S.C. 78c(f).

¹⁵ 15 U.S.C. 78f(b)(5).

For the Commission, by the Division of Market Regulation, pursuant to delegated authority.²¹

Margaret H. McFarland,
Deputy Secretary.

[FR Doc. 03-15263 Filed 6-16-03; 8:45 am]

BILLING CODE 8010-01-P

SMALL BUSINESS ADMINISTRATION

[Declaration of Disaster #3509]

Territory of American Samoa

As a result of the President's major disaster declaration on June 6, 2003, I find that the Island of Tutuila located within the Territory Of American Samoa constitutes a disaster area due to damages caused by heavy rainfall, flooding, landslides, and mudslides occurring on May 19, 2003 and continuing through May 21, 2003. Applications for loans for physical damage as a result of this disaster may be filed until the close of business on August 5, 2003 and for economic injury until the close of business on March 8, 2004 at the address listed below or other locally announced locations: U.S. Small Business Administration, Disaster Area 4 Office, P.O. Box 13795, Sacramento, CA 95853-4795.

The interest rates are:

	Percent
For Physical Damage	
Homeowners with credit available elsewhere	5.625
Homeowners without credit available elsewhere	2.812
Businesses with credit available elsewhere	5.906
Businesses and non-profit organizations without credit available elsewhere	2.953
Others (including non-profit organizations) with credit available elsewhere	5.500
For Economic Injury	
Businesses and Small Agricultural Cooperatives without credit available elsewhere	2.953

The number assigned to this disaster for physical damage is 350906 and for economic injury the number is 9V8000.

(Catalog of Federal Domestic Assistance Program Nos. 59002 and 59008).

Dated: June 9, 2003.

Cheri C. Wolff,

Acting Associate Administrator for Disaster Assistance.

[FR Doc. 03-15233 Filed 6-16-03; 8:45 am]

BILLING CODE 8025-01-P

SMALL BUSINESS ADMINISTRATION

[Declaration of Disaster #3507]

State of Florida

Broward County and the contiguous counties of Collier, Hendry, Miami-Dade and Palm Beach in the State of Florida constitute a disaster area as a result of heavy rains and flooding beginning on May 27 and continuing through May 29, 2003. Applications for loans for physical damage as a result of this disaster may be filed until the close of business on August 4, 2003 and for economic injury may be filed until the close of business on March 5, 2004 at the address listed below or other locally announced locations: U.S. Small Business Administration, Disaster Area 2 Office, One Baltimore Place, Suite 300, Atlanta, GA 30308.

The interest rates are:

	Percent
For Physical Damage:	
Homeowners with credit available elsewhere	5.625
Homeowners without credit available elsewhere	2.812
Businesses with credit available elsewhere	5.906
Businesses and non-profit organizations without credit available elsewhere	2.953
Others (including non-profit organizations) with credit available elsewhere	5.500
For Economic Injury:	
Businesses and small agricultural cooperatives without credit available elsewhere ...	2.953

The number assigned to this disaster for physical damage is 350706 and for economic injury is 9V7400.

(Catalog of Federal Domestic Assistance Program Nos. 59002 and 59008).

Dated: June 5, 2003.

Hector V. Barreto,

Administrator.

[FR Doc. 03-15237 Filed 6-16-03; 8:45 am]

BILLING CODE 8025-01-P

SMALL BUSINESS ADMINISTRATION

[Declaration of Disaster #3492]

State of Mississippi; (Amendment #3)

In accordance with a notice received from the Department of Homeland Security—Federal Emergency Management Agency, effective June 6, 2003, the above numbered declaration is hereby amended to include Jefferson Davis County as a disaster area due to damages caused by severe storms, tornadoes and flooding beginning on

April 6 and continuing through April 25, 2003.

All counties contiguous to the above named primary county have been previously declared.

All other information remains the same, *i.e.*, the deadline for filing applications for physical damage is June 23, 2003, and for economic injury the deadline is January 26, 2004.

(Catalog of Federal Domestic Assistance Program Nos. 59002 and 59008).

Dated: June 10, 2003.

S. George Camp,

Acting Associate Administrator for Disaster Assistance.

[FR Doc. 03-15234 Filed 6-16-03; 8:45 am]

BILLING CODE 8025-01-P

SMALL BUSINESS ADMINISTRATION

[Declaration of Disaster #3497]

State of Missouri; (Amendment #4)

In accordance with a notice received from the Department of Homeland Security—Federal Emergency Management Agency, effective June 3, 2003, the above numbered declaration is hereby amended to include Crawford, Dent, Gasconade, Iron, Monroe and Phelps Counties in the State of Missouri as disaster areas due to damages caused by severe storms, tornadoes and flooding occurring on May 4, 2003 and continuing through May 30, 2003.

In addition, applications for economic injury loans from small businesses located in the contiguous counties of Reynolds and Shannon Counties in the State of Missouri may be filed until the specified date at the previously designated location. All other counties contiguous to the above named primary counties have been previously declared.

All other information remains the same, *i.e.*, the deadline for filing applications for physical damage is July 7, 2003, and for economic injury the deadline is February 6, 2004.

(Catalog of Federal Domestic Assistance Program Nos. 59002 and 59008).

Dated: June 5, 2003.

Herbert L. Mitchell,

Associate Administrator for Disaster Assistance.

[FR Doc. 03-15235 Filed 6-16-03; 8:45 am]

BILLING CODE 8025-01-P

SMALL BUSINESS ADMINISTRATION

[Declaration of Disaster #3499]

State of Oklahoma; Amendment #3

In accordance with a notice received from the Department of Homeland

²¹ 17 CFR 200.30-3(a)(12).

Security—Federal Emergency Management Agency, effective June 3, 2003, the above numbered declaration is hereby amended to include Cherokee, Creek, Garvin, Nowata, Okmulgee and Seminole Counties in the State of Oklahoma as disaster areas due to damages caused by severe storms and tornadoes occurring on May 8, 2003 and continuing through May 30, 2003.

In addition, applications for economic injury loans from small businesses located in the contiguous counties of Adair, Carter, Craig, Delaware, Hughes, Mayes, McIntosh, Murray, Muskogee, Pawnee, Rogers, Sequoyah, Tulsa, Wagoner and Washington in the State of Oklahoma; and Labette and Montgomery in the State of Kansas may be filed until the specified date at the previously designated location. All other counties contiguous to the above named primary counties have been previously declared.

All other information remains the same, *i.e.*, the deadline for filing applications for physical damage is July 9, 2003, and for economic injury the deadline is February 10, 2004.

(Catalog of Federal Domestic Assistance Program Nos. 59002 and 59008).

Dated: June 5, 2003.

Herbert L. Mitchell,

Associate Administrator for Disaster Assistance.

[FR Doc. 03–15236 Filed 6–16–03; 8:45 am]

BILLING CODE 8025–01–P

SOCIAL SECURITY ADMINISTRATION

Statement of Organization, Functions and Delegations of Authority

This statement amends Part S of the Statement of the Organization, Functions and Delegations of Authority which covers the Social Security Administration (SSA). Chapter S4 covers the Deputy Commissioner for Systems. Notice is given that Subchapter S4S, the Office of Earnings, Enumeration and Administrative Systems, is being amended to reflect the establishment of a new division, the retitling of a division, and the abolishment of a staff. The new material and changes are as follows:

Section S4S.10 *The Office of Earnings, Enumeration and Administrative Systems—(Organization):*

Delete:

C. 1. The Independent Verification and Validation Staff (S4S–1).

Retitle:

G. The Division of Enumeration and Exchanges (S4SE) to: “The Division

of Enumeration and Verifications (S4SE).”

Establish:

J. The Division of Technology Services and Exchanges (S4SJ).

Section S4S.20 *The Office of Earnings, Enumeration and Administrative Systems—(Functions):*

Paragraph C, Delete the words:

“technology leadership,” after the words “administrative staff assistance,” and before the words “planning and customer relations support”.

Delete:

C. 1. In its entirety.

Delete the first sentence from D, paragraph #6. Replace the first sentence of paragraph #6 with the following: “Plans and conducts unit and system-wide functional validation tests of newly developed systems and modifications to existing systems against user defined requirements and performance criteria.”

Delete the first sentence from E, paragraph #5. Replace the first sentence of paragraph #5 with the following: “Plans and conducts unit and system-wide functional validation tests of newly-developed systems and modifications to existing systems against user defined requirements and performance criteria.”

Delete the first sentence from F, paragraph #4. Replace the first sentence of paragraph #4 with the following: “Plans and conducts unit and system-wide functional validation tests of newly-developed systems and modifications to existing systems against user defined requirements and performance criteria.”

Retitle:

G. The Division of Enumeration and Exchanges (S4SE). to: “The Division of Enumeration and Verifications (S4SE).” Paragraph #1, Replace the words: “data exchanges.” at the end of the paragraph with the words “SSN verifications.” Paragraph #2. Replace the words: “data exchange.” at the end of the first sentence with the words “SSN verifications.” Paragraph #4, delete the first sentence. Replace the first sentence of paragraph #4 with the following: “Plans and conducts unit and system-wide functional validation tests of newly-developed systems and modifications to existing systems against user defined requirements and performance criteria.”

Delete the first sentence from H, paragraph #4. Replace the first

sentence of paragraph #4 with the following: “Plans and conducts unit and system-wide functional validation tests of newly-developed systems and modifications to existing systems against user defined requirements and performance criteria.”

Delete the first sentence from I, paragraph #4. Replace the first sentence of paragraph #4 with the following: “Plans and conducts unit and system-wide functional validation tests of newly-developed systems and modifications to existing systems against user defined requirements and performance criteria.”

Add:

J. The Division of Technology Services and Exchanges (S4SJ).

1. Designs, develops and implements new or redesigned software to meet SSA's automated data processing needs in the broad area of data exchanges.
2. Performs requirements analyses, defining SSA-approved user needs and requirements for automated data processing services for data exchanges. Evaluates legislative proposals, regulations and policy changes and reports on the impact on existing processes and systems. Evaluates the need to develop new software.
3. Develops design specifications and software programs to satisfy user needs as defined in requirements documentation.
4. Plans and conducts unit and system-wide functional validation tests of newly-developed systems and modifications to existing systems against user defined requirements and performance criteria. Certifies that the changes are in conformance with functional specifications.
5. Develops and maintains a comprehensive, updated and integrated set of system documentation, requirements specifications and validation tests of systems changes against user requirements and performance criteria. Certifies that changes are in conformance with specifications for assigned areas of responsibility.
6. Provides technical support of end-users and developers in the use of commercial reporting software. Directs the development of support procedures to monitor user problem resolution and the implementation of software upgrades.
7. Provides technical direction to OEEAS developers in web design and development activities, and in

the design of user interfaces. Researches and applies user-centered interface design techniques and serves as the OEEAS expert on usability and human-computer interface issues. Serves as the focal point within OEEAS for the oversight and integration of web-based information delivery and presentation mechanisms for OEEAS applications.

8. Performs and coordinates studies, and researches software and hardware solutions to overarching OEEAS technical issues. Provides high-level analytical expertise for a variety of complex assignments of OEEAS and enterprise-wide scope, such as the technical assessment of proposed IT investments for alignment with and support of SSA's strategic plan, and advance planning for implementation of major new systems integration initiatives.

Dated: May 21, 2003.

Reginald F. Wells,

Deputy Commissioner for Human Resources.

[FR Doc. 03-15184 Filed 6-16-03; 8:45 am]

BILLING CODE 4191-02-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

Notice of Passenger Facility Charge (PFC) Approval and Disapprovals

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Monthly Notice of PFC Approvals and Disapprovals. In May 2003, there were six applications approved. This notice also includes information on three applications, approved on April 2003, inadvertently left off the April 2003 notice. Additional, seven approved amendments to previously approved applications are listed.

SUMMARY: The FAA publishes a monthly notice, as appropriate, of PFC approvals and disapprovals under the provisions of the Aviation Safety and Capacity Expansion Act of 1990 (Title IX of the Omnibus Budget Reconciliation Act of 1990) (Pub. L. 101-508) and part 158 of the Federal Aviation Regulations (14 CFR part 158). This notice is published pursuant to Regulations (14 CFR part 158). This notice is published pursuant to paragraph d of § 158.29.

PFC Applications Approved

Public agency: Country of Humboldt, Arcata, California.

Application number: 03-06-C-00-ACV.

Application type: Impose and use a PFC.

PFC level: \$4.50.

Total PFC revenue approved in this decision: \$503,000.

Earliest charge effective date: July 1, 2003.

Estimated charge expiration date: August 1, 2005.

Class of air carriers not required to collect PFC'S: None.

Brief description of project approved for collection at Arcata Airport (ACV) and use at Kneeland Airport: Master plan update.

Brief description of projects approved for collection Act ACV and use at ACV:

Letz Avenue bluff repair.

Terminal and access gate lock system, video surveillance equipment, security structure.

General aviation ramp.

Equipment purchase—runway/taxiway sweeper.

Replace visual glide slope indicator with precision approach path indicator.

Brief description of project approved for collection at ACV and use at Rohnerville Airport, Murray Field, Garberville Airport, and Dinsmore Airport:

Master plan update.

Brief description of disapproved project:

Purchase pilot weather data super-unicom equipment.

Determination: this project is not eligible in accordance with paragraph 570 of FAA Order 5100.38B, Airport Improvement Program Handbook (May 31, 2003). Therefore, the project does not met the requirements of § 158.15(b).

Decision date: April 28, 2003.

FOR FURTHER INFORMATION CONTACT: Marlys Vandervelde, San Francisco Airports District Office, (650) 876-2806.

Public Agency: City of Long Beach, California.

Application number: 03-02-C-00-LGB.

Application type: Impose and use a PFC.

PFC level: \$3.00.

Total PFC revenue approved in this decision: \$30,306,984.

Earliest charge effective date: August 1, 2003.

Estimated charge expiration date: October 1, 2009.

Class of air carriers not required to collect PFC'S: Non-scheduled/on-demand air carriers.

Determination: Approved. Based on information contained in the public agency's application, the FAA has determined the proposed class accounts

for less than 1 percent of the total annual enplanements at Long Beach Municipal (Daugherty Field).

Brief description of projects approved for collection and use:

Rehabilitation of runway 12/30.

Rehabilitation of taxiways D, A, and

B.

Installation of airfield lighting.

Relocation of service road.

Rehabilitation of taxiways D, F, J, and

C.

Construction of apron.

Rehabilitation of access road.

Airport security—security system upgrade.

Installation of terminal signs and flight information display system.

Aircraft rescue and firefighting vehicles.

Decision date: April 28, 2003.

FOR FURTHER INFORMATION CONTACT:

Ruben Cabalbag, Western Pacific Region Airports Division, (310) 725-3630.

Public agency: Port of Oakland, Oakland, California.

Application number: 03-12-C-00-OAK.

Application type: Impose and use a PFC.

PFC level: \$4.50.

Total PFC revenue approved in this decision: \$7,600,000.

Earliest charge effective date: December 1, 2003.

Estimated charge expiration date: March 1, 2004.

Class of air carriers not required to collect PFC'S: Nonscheduled/on-demand air carriers filling FAA Form 1800-31.

Determination: Approved. Based on information contained in the public agency's application, the FAA has determined that the proposed class accounts for less than 1 percent of the total annual enplanements at Oakland International Airport.

Brief description of project approved for collection and use: Additional security expenditures.

Decision date: April 28, 2003.

FOR FURTHER INFORMATION CONTACT:

Marlys Vandervelde, San Francisco Airports District Office, (650) 876-2806.

Public agency: New Hanover County Airport Authority, Wilmington, North Carolina.

Application number: 03-04-C-00-ILM.

Application type: Impose and use a PFC.

PFC level: \$4.50.

Total PFC revenue approved in this decision: \$12,785,647.

Earliest charge effective date: April 1, 2007.

Estimated charge expiration date: April 1, 2018.

Class of air carriers not required to collect PFC's:

Non-scheduled/on-demand air taxi operators.

Determination: Approved. Based on information contained in the public agency's application, the FAA has determined that the proposed class accounts for less than 1 percent of the total annual enplanements at Wilmington International Airport.

Brief description of projects approved for collection and use:

Terminal renovations.
Construct new customs facility.
Master plan update.
Runway 35 clearing.
PFC administrative cost.
Paving program.
Land acquisition.
Airfield retention pond.
De-icing retention system.

Brief description of project partially approved for collection and use: instrument landing system.

Determination: The application requested the planning, design, and installation of a Category I instrument landing system on each end of runway 6/24. However, the FAA has a budgeted project to install an instrument landing system on one end of runway 6/24 funded with Federal Facilities and Equipment program funds. Therefore, this project is limited to the installation of an instrument landing system on the opposite end of the runway from the Facilities and Equipment program installation.

Decision Date: May 7, 2003.

FOR FURTHER INFORMATION CONTACT:

Tracie D. Kleine, Atlanta Airports District Office, (404) 305-7148.

Public agency: Erie Municipal Airport Authority, Erie, Pennsylvania.

Application number: 03-03-C-00-ERI.

Application type: Impose and use a PFC.

PFC level: \$4.50.

Total PFC revenue approved in this decision: \$1,001,183.

Earliest charge effective date: August 1, 2003.

Estimated charge expiration date: January 1, 2005.

Class of air carriers not required to collect PFC's: None.

Brief description of projects approved for collection and use:

Master plan phases I and II.
Site security phase II.
Command vehicle.
Environmental assessment for master plan.
Airfield access road.
Acquire Orchard Park mobile home estate.

Replace high intensity runway lighting system.

Snow removal vehicle.

Public safety vehicle.

9/11 security costs.

Environmental assessment for runway 6/24 extension.

Construct two new passenger loading bridges.

Aircraft rescue and firefighting vehicle (pumper).

Acquire runway friction tester vehicle.

PFC administrative fee.

Brief description of projects approved for collection:

Acquire land, runway 6/24 extension.
Design of runway 6/24 extension.
Snow removal equipment (Oshkosh blower).

Brief description of disapproved project: Improve/rehabilitate terminal.

Determination: The public agency did not provide sufficient description or justification for this project. Therefore, the FAA disapproved the project as not meeting the requirements of § 158.15.

Decision date: May 13, 2003.

FOR FURTHER INFORMATION CONTACT: Lori Ledeborn, Harrisburg Airports District Office, (717) 730-2835.

Public agency: Hillsborough County Aviation Authority, Tampa, Florida.

Application number: 03-06-C-00-TPA.

Application type: Impose and use a PFC.

PFC level: \$4.50.

Total PFC revenue approved in this decision: \$298,155,400.

Earliest charge effective date: August 1, 2006.

Estimated charge expiration date: September 1, 2013.

Class of air carriers not required to collect PFC's: On-demand air taxi/commercial operators.

Determination: Approved. Based on information contained in the public agency's application, the FAA has determined that the proposed class accounts for less than 1 percent of the total annual enplanements at Tampa International Airport.

Brief description of projects approved for collection and use:

Airside B demolition and apron reconstruction.

Airside C development program.

Engine run-up enclosure, taxiway and ramp.

Outbound baggage handling system and security enhancements.

Decision date: May 16, 2003.

FOR FURTHER INFORMATION CONTACT:

Vernon P. Rupinta, Orlando Airports District Office, (407) 812-6331, extension 24.

Public agency: San Diego Regional Airport Authority, San Diego, California.

Application number: 03-03-C-00-SAN.

Application type: Impose and use a PFC.

PFC level: \$4.50.

Total PFC revenue approved in this decision: \$83,075,730.

Earliest charge effective date: August 1, 2003.

Estimated charge expiration date: March 1, 2006.

Class of air carriers not required to collect PFC's: Air taxis.

Determination: Approved. Based on information contained in the public agency's application, the FAA has determined that the proposed class accounts for less than 1 percent of the total annual enplanements at San Diego International Airport.

Brief description of projects approved for collection and use at a \$4.50 PFC level:

Replace aircraft rescue and firefighting vehicle.

Taxiway improvements.

Runway safety area improvements.

Commuter terminal apron improvements.

Sound attenuation and noise monitoring equipment.

Airport security improvements.

Terminal improvements.

Brief description of projects approved for collection and use at a \$3.00 PFC level:

Environmental study.

Airport access improvements.

Infrastructure data management system.

Brief description of disapproved project: Environmental remediation.

Determination: This project is not eligible in accordance with paragraph 406s of FAA Order 5100.38B, Airport Improvement Program Handbook, (May 31, 2002). Therefore, this project does not meet the requirements of § 158.15(b).

Decision date: May 20, 2003.

FOR FURTHER INFORMATION CONTACT: John Milligan, Western Pacific Region Airports Division, (310) 725-3621.

Public agency: County of Outagamie, Appleton, Wisconsin.

Application number: 03-05-C-00-ATW.

Application type: Impose and use a PFC.

PFC level: \$3.00.

Total PFC revenue approved in this decision: \$318,170.

Earliest charge effective date: March 1, 2008.

Estimated charge expiration date: October 1, 2008.

Class of air carriers not required to collect PFC's: None.

Brief description of projects approved for collection and use: Acquire snow removal equipment.

Decision date: May 23, 2003.

FOR FURTHER INFORMATION CONTACT:
Sandra E. DePottay, Minneapolis
Airports District Office, (612) 713-4363.

Public agency: County of Montrose,
Montrose, Colorado.

Application number: 03-02-C-00-MTJ.

Application type: Impose and use a PFC.

PFC level: \$4.50.

Total PFC revenue approved in this decision: \$821,694.

Earliest charge effective date: August 1, 2003.

Estimated charge expiration date:
October 1, 2011.

Class of air carriers not required to collect PFC's: None.

Brief description of projects approved for collection and use:

Construct a portion of taxiway A.

Rehabilitate taxiway B and a portion of the general aviation apron.

Construct aircraft rescue and firefighting/snow removal equipment building.

Rehabilitate a portion of general aviation apron.

Rehabilitate a portion of general aviation apron and runway 13/31.

Extend runway 17 safety area.

Decision date: May 30, 2003.

FOR FURTHER INFORMATION CONTACT:
Christopher Schaffer, Denver Airports
District Office, (303) 342-1258.

AMENDMENTS TO PFC APPROVALS

Amendment number city, state	Amendment approved date	Original approved net PFC revenue	Amended approved net PFC revenue	Original estimated charge exp. date	Amended estimated charge exp. date
01-02-C-01-SDF, Louisville, KY.	03/18/03	\$16,398,940	\$15,678,940	06/01/18	04/01/18
98-03-C-03-DCA, Arlington, VA.	03/27/03	46,823,287	53,846,780	11/01/03	02/01/04
93-01-C-04-DCA, Arlington, VA.	04/22/03	166,739,069	166,410,356	04/01/02	04/01/02
00-04-C-01-TUL, Tulsa, OK.	04/25/03	13,500,000	17,900,000	07/01/03	07/01/04
*97-04-C-02-LAX, Los Angeles, CA.	04/28/03	440,000,000	700,000,000	01/01/04	12/01/05
*96-01-C-01-HIB, Hibbing, MN.	04/29/03	338,299	338,299	10/01/04	05/01/06
96-02-C-02-IND, Indianapolis, IN.	05/21/03	21,275,922	11,869,241	04/01/02	10/01/01

(NOTE: The amendments denoted by an asterisk (*) include a change to the PFC level charged from \$3.00 per enplaned passenger to \$4.50 per enplaned passenger. For Los Angeles, CA and Hibbing, MN, this change is effective on July 1, 2003.)

Issued in Washington, DC. on June 11, 2003.

Jaime Duran,

*Acting Manager, Financial Analysis and
Passenger Facility Charge Branch.*

[FR Doc. 03-15297 Filed 6-16-03; 8:45 am]

BILLING CODE 4910-13-M

DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

Denial of Tire Defect Petition

AGENCY: National Highway Traffic Safety Administration (NHTSA), Department of Transportation.

ACTION: Denial of petition for a defect investigation.

SUMMARY: This notice sets forth the reasons for the denial of a petition submitted to NHTSA under 49 U.S.C. 30162, by Lisoni & Lisoni, Attorneys at Law, and the Law Offices of Steven E. Weinberger, requesting that the agency commence a proceeding to determine the existence of a defect related to motor vehicle safety in Firestone Steeltex light truck radial tires. After a review of the petition and other information, NHTSA has concluded that further expenditure of the agency's investigative resources on the issues raised by the petition does not appear warranted. The agency accordingly has denied the petition. The

petition is hereinafter identified as DP02-011.

FOR FURTHER INFORMATION CONTACT: Mr. Gregory Magno, Safety Defects Engineer, Vehicle Control Division, Office of Defects Investigation (ODI), NHTSA, 400 Seventh Street, SW., Washington, DC 20590. Telephone: (202) 366-0139.

SUPPLEMENTARY INFORMATION:

Petition Analysis—DP02-011

Introduction

On September 29, 2000, the Office of Defects Investigation (ODI) initiated a Preliminary Evaluation (PE00-040) of Firestone Steeltex tires manufactured by Bridgestone/Firestone, Inc. (Firestone), based on 169 Vehicle Owners Questionnaires (VOQ), 167 of which were received in August and September of 2000.¹ Eight crashes involving twelve injuries and two deaths related to separation of the tread and top belt from the tire carcass (tread separation) were alleged at that time. Under investigation in that PE were all Firestone Steeltex Radial R4S, R4S II, and A/T tires manufactured since 1990.

ODI closed PE00-040 on April 9, 2002, based upon low failure rates, noting that Steeltex tire lines are used in very severe tire applications (e.g., motorhomes, commercial trucks, full-

sized passenger vans, sport-utility vehicles, and pickup trucks). At the time ODI closed the investigation, it was aware of 872 relevant VOQs and 39 vehicle crashes, 24 of which involved an injury or death. These resulted in eight deaths and 40 injuries.

Subsequent to the closing of PE00-040, the Petitioners requested that the National Highway Traffic Safety Administration (NHTSA) reopen its Steeltex tire investigation.² According to the Petitioners, a reopening was warranted based on an overwhelming number of complaints that had been filed on the subject tires. ODI initiated a technical review (DP02-011) of the Petition in accordance with 49 CFR part 552 on November 26, 2002. To support this review, ODI requested that the Petitioners furnish additional documentation to substantiate their allegations. Since that time, the

² Specifically, on November 15, 2002, ODI received a document entitled "A Petition to The National Highway Traffic Safety Administration . . . Subject: Investigation of Defects Present in Bridgestone/Firestone Steeltex tires (models: R4S, R4SII, A/T)" (Petition). After reviewing the document, ODI construed it as a request to reopen PE00-040. The Petition was co-submitted by Lisoni & Lisoni, Attorneys at Law and the Law Offices of Steven E. Weinberger, both in Pasadena, CA (Petitioners). The Petitioners represent plaintiffs Roger Littell, Louann Pleasant, and all others similarly situated in a class action lawsuit against Bridgestone/Firestone, filed on August 12, 2002, in the Superior Court of California for Riverside County.

¹ References to VOQs herein include all consumer complaints registered in the ODI complaint database.

Petitioners have supplied ODI with 44 separate submissions numbering over 6,000 pages, the most recent of which arrived on June 5, 2003.

The subject Steeltex tires are large light truck radials that are produced as both original equipment and replacement tires. Firestone produced approximately 39 million of these tires in three different lines (R4S, R4S II, and A/T), 12 different sizes, and 3 different load ranges. Most of the subject tires are in the highest load range for light vehicles ($\leq 10,000$ lb Gross Vehicle Weight Rating) Load Range E (LRE). The original equipment tires have been used on Ford and General Motors vehicles, as well as by a wide range of motorhome manufacturers.

In general, light truck radial tires are constructed with thicker gauges of rubber and heavier steel belts and are designed to hold significantly greater inflation pressures than passenger tires. These tires are more sensitive to impact damage and to variations in speed, load, and inflation pressure than passenger tires.

After reviewing information submitted in support of the Petition and analyzing additional complaint and claims information obtained from Firestone, ODI has decided to deny the request to reopen the Steeltex investigation. This decision is based on the fact that an enormous population of tires is at issue whose failure rate is lower than that of peer tires used in similar applications and has changed little since PE00-040 was closed. ODI has not identified a defect trend in any of the tires in question.

Petitioners' Allegations

The Petitioners have made numerous allegations in 44 separate submissions including over 6,000 pages of materials. These allegations include:

1. That there were 2,972 VOQs in ODI's database (as accessed via the NHTSA public Web site) as of November 2002, most of which existed when ODI closed PE00-040 but were not considered during the investigation;
2. That additional complaints gathered by the Petitioners strongly suggest a safety defect trend; and
3. That all Steeltex tires contain a safety-related defect that could lead to a catastrophic tread separation.

ODI Analysis of Petitioners' Allegations

First Allegation: VOQs in NHTSA's Web site Not Noted in Closing of PE00-040

The Petitioners allege that they identified 2,972 VOQs on the subject tires on NHTSA's Web site in October 2002. They further allege that most of

these VOQs existed at the time that PE00-040 was closed. More recently, they have been quoted in the media as claiming that as of May 2003, the NHTSA Web site contained 4,000 records concerning "Steeltex-related accidents."³

The Petitioners provided hard copy summaries of the 2,972 VOQs they identified. A review of these VOQs, however, demonstrates that a majority are duplicate records. In addition, a significant number do not involve the Steeltex tires at issue. For instance, the Petitioners included VOQs that pertain to tires such as Firestone 721 tires and Steeltex ASR tires last produced in 1992, as well as VOQs reporting issues unrelated to tread separation, such as wear and vibration. Also included in their submissions were VOQs that do not pertain to tires at all (e.g., complaints about vehicle stalling and brake malfunction).

ODI has conducted a thorough review of its complaint database to assess the Petitioners' claims. This review found that as of April 2002, when PE00-040 was closed, the database contained 930 VOQs related to a Steeltex tire failure. These include complaints about tires that were properly identified as Steeltex models or contained the word "Steeltex," or all reasonable misspellings of the word, in the complaint description field. About 60% of these (550) cited tread separations. The numbers of VOQs alleging crashes, injuries, and deaths from tread separation failures are consistent with those reported in PE00-040.

Furthermore, ODI's review determined that as of November 2002, when the petition was submitted, the database contained 1,118 unique VOQs relating to Steeltex tire failures, less than 40% of the total asserted by the Petitioner. Of these, 672 alleged tread separations. Finally, as of May 2003, the ODI database contained 1,163 unique VOQs relating to Steeltex tire failures, 701 of which allege tread separation. These include 24 injury crashes for all tire failure modes, resulting in a total of six (6) deaths and 46 injuries. Tread separation was alleged as the failure mode in 14 of these crashes, which were responsible for all of the deaths and 30 of the injuries.

In summary, the Petitioners overstated the number of relevant VOQs received by ODI when PE00-040 was closed, when the petition was submitted, and in May 2003. Many of these discrepancies are apparently due to the Petitioners' inclusion of duplicate

complaints, complaints that do not involve the tires at issue, and complaints that do not allege a tire failure.

Second Allegation: The Number of VOQs and the Number of Additional Complaints Establishes a Safety Defect Trend

The Petitioners characterize the VOQs in the ODI database and a purported 7,000 additional complaints that they have collected as evidence of a safety defect trend. This material has been furnished to ODI in 44 different submissions throughout the petition analysis period. Their submissions contain a mixture of consumer complaints, subrogation claims, police accident reports, and court filings.

The Petitioners have attributed most of their purported 7,000 complaints to certain unidentified insurance companies in the United States who have added their policyholders to the Petitioners' class action lawsuit. However, the Petitioners have stated that the majority of these remain anonymous, and therefore have not furnished details concerning these allegations to ODI. Instead, they furnished an Internet listing of 1,150 insurance companies. In view of the incomplete nature of this information, we have been unable to evaluate these complaints. Subsequently, the Petitioners submitted some insurance claim information from companies that have responded to their solicitations. In the cases reviewed by ODI, the events described are those in which the companies chose not to pursue a subrogation claim against Firestone. In one case, a submitted claim pertained to a non-subject Firehawk R4S tire.

Of those reports and complaints that ODI was able to examine, many were merely completed copies of the Petitioner's Class Action Initial Claim forms. Other "complaints" consist of excerpts from Internet chat room discussions and what appear to be handwritten notes of names and telephone numbers. In addition, the content of many of the "complaints" was of questionable value, and included complaints concerning dissatisfaction over the wear or ride of the subject tires and complaints pertaining to tires not at issue. Of note, many of these complaints originated from consumers whose claims for reimbursement had been denied by Firestone. After excluding VOQ summaries and duplicate records, ODI was able to identify 560 complaints. These included 161 complaints alleging a Steeltex tire failure, of which 99 alleged a tread separation.

³ Rubber & Plastics News, *Lawyer: Document Shows BFS Skipped on Steeltex*, May 12, 2003.

ODI has monitored its VOQ database since the closing of PE00–040. This review has shown that over time, the monthly rate of Steeltex VOQs received by ODI has continually declined since the initial three-month peak that led to the opening of PE00–040. We note that the Petitioners have consistently overstated the contents of the ODI database by applying over-broad search criteria and then failing to properly identify relevant VOQs.

In order to obtain more relevant data, ODI contacted Firestone for its claims data, which it provided irrespective of whether the claim was paid. Firestone also provided warranty, personal injury, and lawsuit data through the end of 2002. ODI's analysis of this data is described in the Firestone Data section of this report.

Third Allegation: All Steeltex Tires Are Defective

The Petitioners allege that all of the subject Steeltex tires contain a safety-related defect. As evidence of this they have cited expert examination of some failed tires, information from an anonymous source regarding a Firestone cost reduction program, and alleged similarities between the Steeltex tires and the Wilderness AT tires, some of which were previously recalled by Firestone.

One of the Petitioners' consultants examined failed tires from a model year 1999 Class C motorhome belonging to the lead plaintiff in the class action lawsuit. This vehicle experienced tread separations on four of its six original tires over a one-year period. All were Steeltex R4S LT225/75R16 E tires manufactured at Firestone's Decatur, Illinois plant in 1998. The consultant identified the presence of brassy cords in the steel belts of the failed tires as evidence that they were improperly manufactured. The Petitioners provided a dissected exemplar tire from the same vehicle for ODI's examination, citing evidence of brassy cords and belt edge separation.

ODI did observe some evidence of brassy cords and localized belt edge separation in the tire presented by the Petitioners. However, ODI notes that some degree of brassy cords is not necessarily evidence of a rubber-wire adhesion defect. Moreover, the presence of moderate belt edge separation is not unusual in a steel belted radial tire that has been removed from service, and must be evaluated in the context of the tire use conditions and remaining tread. It is noteworthy that ODI's extensive investigation of the Firestone ATX and Wilderness AT tires did not find any evidence of a rubber-wire adhesion

defect in those tires. The failure mechanism in the ATX and Wilderness AT tires was a cohesive failure (fatigue crack growth) through the rubber between the steel belts.⁴

In a letter dated April 26, 2003, the Petitioners submitted a copy of an anonymous letter to ODI with documents attached relating to a Firestone cost reduction initiative known as C95 that was launched in 1994 or 1995. The letter states that the intent of C95 was to obtain cost reductions without sacrificing performance and quality but that over time a negative effect on quality became evident in the warranty data. According to the letter, warranty rates of 0.5% or higher in individual tires (by factory and product code) should be cause for serious concern.

ODI has reviewed the anonymous letter and attached C95 documents submitted by the Petitioners. The second attachment is a 17-page document listing a number of changes to consider for corporate-wide implementation. The document does not relate specifically to the Steeltex tires. Firestone has stated that most of the items on the list were never implemented. While the changes that were considered include some items that could affect tire durability, the document is not in and of itself proof of a tire defect. The effect of the changes that were implemented in the Steeltex tires can ultimately be measured only by failure-related data. To that extent, ODI agrees with the author of the anonymous letter that such an analysis must be done separately on specific products and assembly plants. The only data that allow that type of analysis are the Firestone adjustments and claims.

ODI's analysis of Firestone's tread separation warranty adjustment data found that collectively the Steeltex tire tread separation adjustment rate is 0.04%. ODI also analyzed over 250 different combinations of individual tire product codes, plants, and production years and identified only one population of tires with a tread separation adjustment rate greater than 0.5%—the level of concern advanced in the anonymous letter.⁵ The adjustment rate for this tire was 0.56% for tires produced in 1993, fell to 0.09% in 1994, and remained below 0.1% through 2002 production. The majority of subject

Steeltex tires analyzed by ODI have tread separation adjustment rates that are less than 0.1%. Only a few tires have rates that are above 0.25%—half of the 0.5% figure mentioned above.

The Petitioners have alleged to ODI that the subject Steeltex tires are similar in construction and failure mechanism to the Wilderness AT tires investigated by ODI in EA00–023. The Petitioners have not identified any specific aspects of the designs that are similar. Moreover, the Wilderness AT tires are passenger tires designed for light-duty passenger car/truck operation, whereas the subject Steeltex light truck radial tires are designed for the greater rigors of use on heavier pickup trucks, SUVs, and vans. As noted above, there was no evidence of rubber-wire adhesion failures in the Wilderness AT tires that were recalled. Furthermore, ODI notes that belt-leaving belt tread separations may occur in any steel-belted radial tire and that the available data indicate that the risk of such failures is greater in light truck radial tires than in passenger tires.

Firestone Data

ODI reviewed thousands of Firestone property damage claims and found that between the closing of PE00–040 and the present, the subject tire tread separation claim rate grew from 28 to 31 claims per million tires produced (ppm).⁶ Steeltex LRE claim rates for tread separation grew from 38 to 40 ppm. The four largest LRE tire sizes are associated with the majority of the property damage claims and 85% (28/33) of crashes involving injuries or deaths where the tire size could be identified.

With one exception, all crashes involving an injury fall within the 1997–1999 production years of this group of LRE tires.⁷ Three tire populations within this group are associated with all fatal crashes occurring in the last five years: The R4S II LT245/75R16 E manufactured in Cuernavaca, Mexico and the A/T LT265/75R16 E and A/T LT265/75R16 D, both manufactured in Joliette, Quebec. However, a close examination of the frequencies and trends of the adjustment and claims data for these populations do not show evidence of

⁶ This figure is based on paid claims. Firestone furnished records of both paid and unpaid claims to ODI. Claims are not paid if the tire cannot be identified, was repaired improperly, shows obvious signs of abuse (e.g. run underinflated, impact breaks), or were found to be misapplied.

⁷ A Decatur Steeltex Radial R4S LT235/85R16 E tire manufactured in 1993 was involved in a March 1996 fatal rollover of a large passenger van. Closer examination of this tire population showed no sign of a defect trend.

⁴ More specifics concerning the tread separations examined in that investigation may be found in the EA00–023 Initial Determination Report.

⁵ Tires with annual production volumes less than 10,000 tires were not included in this analysis because of the lack of statistical significance in the data and the absence of any injury crashes involving such tires.

defect trends. The adjustment and claims rates are low in comparison to peer tires, and the incidence of injury crashes does not reflect a trend for any specific tire.

ODI analyzed all available data relating to the Decatur Steeltex R4S LT225/75R16 E tire installed on the lead plaintiff's motorhome. These tires were manufactured from 1995–1999 and were used as original equipment on some Ford full-size pick-up trucks and vans and sold as replacement tires. The tires were also frequently installed on Class C motorhomes on which overloading of an axle or specific wheel position is not unusual, which can contribute to tire failures. The warranty rates for these tires have been less than 0.1% from 1997 through 1999, and were never greater than 0.3%. There have been only two injury crashes associated with tread separations in these tires, both involving full-sized vans, and no fatalities.

As noted in PE00–040, the adjustment and claims tread separation rates for the subject tires are lower than those observed in peer LRE tires. This is true of the total population of subject tires, as well as individual tires analyzed by product code and assembly plant.

Discussion

The subject Steeltex tires, as defined in the Petition, represent an immense population of 39 million tires, manufactured over twelve years, and a wide variety of different tire line, size, load range, and plant combinations. The numbers of tread separation failures in those tires are functions of the large volume produced and the more severe service conditions associated with light truck radial tires, especially in the LRE category. Within this universe of experience, ODI identified a total of 54 crashes involving injury, resulting in 106 injuries and 13 deaths. Tread separation was alleged as the failure mode in 41 of these crashes, which were responsible for all of the deaths and 90 of the injuries.

These failures are distributed among a variety of different tires and assembly plants. About half of these incidents involve tires manufactured at the Joliette assembly plant, which is consistent with the number of subject tires produced there. Firestone's examination of some of the tires involved in these events has identified evidence of under-inflation, impact break, shoulder damage, un-repaired punctures, and improper repair. In addition, some of the tires that were sold as replacement tires were misapplied. While ODI has not been able to independently examine these tires, we note that the facts related to the

causes of many of these events are in dispute.

ODI has monitored its VOQ database since it closed PE00–040, to identify Steeltex complaints and any related injury reports. In general, ODI has seen a continued decline in the rate of complaints received since October 2000, despite the publicity related to the Petition and associated class action lawsuit.

To better analyze specific tire lines of interest, ODI examined property damage claim and warranty adjustment data furnished by Firestone. These data are both the largest bodies of failure data and the only data available that contain the specific tire identification information necessary to conduct detailed analyses by tire line and assembly plant. The overall Steeltex claims rate rose from 28 to 31 ppm between the closing of PE00–040 and the present, while the overall adjustment rate remained constant at 0.04%. Some individual tire populations had higher rates of adjustments and claims; however, none were as high as those of the competitor LRE tires examined by ODI.

ODI examined the material submitted by the Petitioners in an effort to identify tire failures and crashes involving injury that could indicate the presence of a safety-related defect trend. Within this material, there were reports of 115 additional tire failures beyond those considered in PE00–040. These included three injury crashes, which led to four (4) injuries. Therefore, the fundamental statistics concerning the performance of the subject tires have changed little since PE00–040 was closed.

Conclusion

Based on ODI's analysis of information submitted in support of the Petition and additional complaint and claims information received since the closing of PE00–040, it is unlikely that NHTSA would issue an order for the notification and remedy of a safety-related defect in the subject Steeltex tires at the conclusion of the investigation requested in the Petition. The statistics concerning the performance of these tires have changed little since the closing of PE00–040 and no specific defect trend has been identified. Therefore, in view of the need to allocate and prioritize NHTSA's limited resources to best accomplish the agency's safety mission, ODI has decided to deny the petition to reopen the Steeltex investigation. ODI will continue to monitor the performance of these tires for any signs that a defect trend may be developing.

Authority: 49 U.S.C. 30162(d); delegations of authority at CFR 1.50 and 501.8.

Issued on: June 11, 2003.

Kenneth N. Weinstein,
Associate Administrator for Enforcement.
[FR Doc. 03–15191 Filed 6–16–03; 8:45 am]
BILLING CODE 4910–59–P

DEPARTMENT OF TRANSPORTATION

Research and Special Programs Administration

[Docket No. RSPA–2003–14307 (Notice No. 03–8)]

Notice of Information Collection Approval

AGENCY: Research and Special Programs Administration (RSPA), DOT.

ACTION: Notice of information collection approval.

SUMMARY: This notice announces Office of Management and Budget approval of information collection requests (ICRs), for OMB No. 2137–0559, “Rail Carriers and Tank Car Tank Requirements”; and OMB No. 2137–0051, “Rulemaking, Exemption, and Preemption Requirements.” These information collections have been extended until May 31, 2006.

DATES: The expiration date for these ICRs is May 31, 2006.

ADDRESSES: Requests for a copy of an information collection should be directed to Deborah Boothe or T. Glenn Foster, Office of Hazardous Materials Standards (DHM–10), Research and Special Programs Administration, Room 8102, 400 Seventh Street, SW., Washington, DC 20590–0001.

FOR FURTHER INFORMATION CONTACT: Deborah Boothe or T. Glenn Foster, Office of Hazardous Materials Standards (DHM–10), Research and Special Programs Administration, Room 8102, 400 Seventh Street, SW., Washington, DC 20590–0001, Telephone (202) 366–8553.

SUPPLEMENTARY INFORMATION: Office of Management and Budget (OMB) regulations (5 CFR 1320) implementing provisions of the Paperwork Reduction Act of 1995 (P.L. 104–13) require that interested members of the public and affected agencies have an opportunity to comment on information collection and recordkeeping activities (see 5 CFR 1320.8(s)) and specify that no person is required to respond to an information collection unless it displays a valid OMB control number. In accordance with the Paperwork Reduction Act of 1995, RSPA has received OMB approval of the following ICRs:

OMB Control Number: 2137-0559.
Title: Rail Carriers and Tank Car Tank Requirements.

OMB Control Number: 2137-0051.
Title: Rulemaking, Exemption, and Preemption Requirements.

These information collection approvals expire on May 31, 2006.

Issued in Washington, DC on June 12, 2003.

Edward T. Mazzullo,

Director, Office of Hazardous Materials Standards.

[FR Doc. 03-15279 Filed 6-16-03; 8:45 am]

BILLING CODE 4910-60-M

DEPARTMENT OF TRANSPORTATION

Surface Transportation Board

[STB Finance Docket No. 34323]

Alabama Gulf Coast Railway LLC— Acquisition and Operation Exemption—The Burlington Northern and Santa Fe Railway Company

Alabama Gulf Coast Railway LLC (AGR), a Class III rail carrier, has filed a verified notice of exemption under 49 CFR 1150.41 to acquire from The Burlington Northern and Santa Fe Railway Company (BNSF) approximately 288.43 miles of rail line in Alabama and Mississippi. AGR proposes to: (1) Purchase BNSF's rail line between milepost 654.005 near Whitbury, MS, and milepost 776.1 near Gulf, AL, a distance of 122.095 miles; (2) lease BNSF's rail line between milepost 649.3 near Columbus, MS, and milepost 654.005 near Whitbury, MS, a distance of 4.705 miles; (3) acquire overhead trackage rights over BNSF's rail line between Amory, MS Yard, milepost 612.32, and Columbus, MS, milepost 649.3, a distance of 36.98 miles; (4) acquire by assignment BNSF's trackage rights over Norfolk Southern Railway Company (NS) line between Kimbrough, AL, and Mobile, AL (TASAD Switch), a distance of about 102.55 miles;¹ (5) lease BNSF's rail line between milepost 851.4 near M&T Chemical, AL, and milepost 873.5 at Mobile, AL; and (6) sublease certain facilities of the Terminal Railway Alabama State Docks. BNSF will retain overhead trackage rights on the rail lines

that are purchased by AGR and trackage rights on the rail lines that are leased and subleased to AGR.

Because AGR's projected annual revenues will exceed \$5 million, AGR certified to the Board on March 11, 2003, that, on that date, it had posted the required notice of intent to undertake the proposed transaction at the workplace of the employees on the affected line and had served a copy of the notice of intent on the national offices of all labor unions with employees on the rail line. See 49 CFR 1150.42(e).

AGR states that it intends to consummate the transaction on or after June 1, 2003, which is more than 60 days after it certified to the Board that it had complied with the Board's rule at 49 CFR 1150.42(e).

If the notice contains false or misleading information, the exemption is void *ab initio*. Petitions to revoke the exemption under 49 U.S.C. 10502(d) may be filed at any time. The filing of a petition to revoke will not automatically stay the transaction.

An original and 10 copies of all pleadings, referring to STB Finance Docket No. 34323, must be filed with the Surface Transportation Board, 1925 K Street NW., Washington, DC 20423-0001. In addition, one copy of each pleading must be served on Louis E. Gitomer, Ball Janik LLP, 1445 F Street, NW., Suite 225, Washington, DC 20005.

Board decisions and notices are available on our Web site at "<http://www.stb.dot.gov>."

Decided: June 9, 2003.

By the Board, David M. Konschnik,
Director, Office of Proceedings.

Vernon A. Williams,

Secretary.

[FR Doc. 03-14976 Filed 6-16-03; 8:45 am]

BILLING CODE 4915-00-P

DEPARTMENT OF THE TREASURY

Internal Revenue Service

Open Meeting of the Taxpayer Advocacy Panel Earned Income Tax Credit Issue Committee

AGENCY: Internal Revenue Service (IRS), Treasury.

ACTION: Notice.

SUMMARY: An open meeting of the Taxpayer Advocacy Panel Earned Income Tax Credit Issue Committee will be conducted (via teleconference).

DATES: The meeting will be held Wednesday, July 16, 2003.

FOR FURTHER INFORMATION CONTACT: Marisa Knispel at 1-888-912-1227, or 718-488-3557.

SUPPLEMENTARY INFORMATION: Notice is hereby given pursuant to section 10(a)(2) of the Federal Advisory Committee Act, 5 U.S.C. App. (1988) that an open meeting of the Taxpayer Advocacy Panel Earned Income Tax Credit Issue Committee will be held Wednesday, July 16, 2003 from 2 p.m. EDT to 3 p.m. EDT via a telephone conference call. The public is invited to make oral comments. Individual comments will be limited to 5 minutes. If you would like to have the TAP consider a written statement, please call 1-888-912-1227 or 718-488-3557, or write Marisa Knispel, TAP Office, 10 Metrotech Center, 625 Fulton Street, Brooklyn, NY 11021, or post comments to the Web site: <http://www.improveirs.org>. Due to limited conference lines, notification of intent to participate in the telephone conference call meeting must be made in advance with Marisa Knispel. Ms. Knispel can be reached at 1-888-912-1227 or 718-488-3557.

The agenda will include the following: Various IRS issues.

Note: Last minute changes to the agenda are possible and could prevent effective advance notice.

Dated: June 11, 2003.

Deryle Temple,

Director, Taxpayer Advocacy Panel.

[FR Doc. 03-15285 Filed 6-16-03; 8:45 am]

BILLING CODE 4830-01-P

DEPARTMENT OF THE TREASURY

Internal Revenue Service

Open Meeting of the Area 1 Taxpayer Advocacy Panel (Including the States of New York, Connecticut, Massachusetts, Rhode Island, New Hampshire, Vermont and Maine)

AGENCY: Internal Revenue Service (IRS), Treasury.

ACTION: Notice.

SUMMARY: An open meeting of the Area 1 Taxpayer Advocacy Panel will be conducted (via teleconference).

DATES: The meeting will be held Tuesday, July 22, 2003.

FOR FURTHER INFORMATION CONTACT: Marisa Knispel at 1-888-912-1227, or 718-488-3557.

SUPPLEMENTARY INFORMATION: Notice is hereby given pursuant to section 10(a)(2) of the Federal Advisory Committee Act, 5 U.S.C. App. (1988) that an open meeting of the Area 1

¹ NS's predecessor Southern Railway Company granted BNSF's predecessor, the Burlington Northern Railroad Company, the above-described trackage rights. See *Burlington Northern Railroad Company-Trackage Rights Exemption—Southern Railway Company*, ICC Finance Docket No. 30739 (ICC served Nov. 5, 1985); and *Burlington Northern Railroad Company—Trackage Rights Exemption—Southern Railway Company*, ICC Finance Docket No. 30739 (Sub-No. 1) (ICC served May 5, 1994).

Taxpayer Advocacy Panel will be held Tuesday, July 22, 2003 from 1 p.m. EDT to 2 p.m. EDT via a telephone conference call. The public is invited to make oral comments. Individual comments will be limited to 5 minutes. If you would like to have the TAP consider a written statement, please call 1-888-912-1227 or 718-488-3557, or write Marisa Knispel, TAP Office, 10 Metrotech Center, 625 Fulton Street,

Brooklyn, NY 11021, or post comments to the Web site: <http://www.improveirs.org>. Due to limited conference lines, notification of intent to participate in the telephone conference call meeting must be made in advance with Marisa Knispel. Ms. Knispel can be reached at 1-888-912-1227 or 718-488-3557.

The agenda will include the following: Various IRS issues.

Note: Last minute changes to the agenda are possible and could prevent effective advance notice.

Dated: June 11, 2003.

Deryle Temple,

Director, Taxpayer Advocacy Panel.

[FR Doc. 03-15286 Filed 6-16-03; 8:45 am]

BILLING CODE 4830-01-P

Corrections

Federal Register

Vol. 68, No. 116

Tuesday, June 17, 2003

This section of the FEDERAL REGISTER contains editorial corrections of previously published Presidential, Rule, Proposed Rule, and Notice documents. These corrections are prepared by the Office of the Federal Register. Agency prepared corrections are issued as signed documents and appear in the appropriate document categories elsewhere in the issue.

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 71

**[Docket No. FAA-2003-14268; Airspace
Docket No. 03-ASO-1]**

Establishment of Class E5 Airspace; Tunica, MS

Correction

In rule document 03-12817 beginning on page 28128 in the issue of Friday,

May 23, 2003, make the following correction:

On page 28128, in the third column, the subject heading is corrected as set forth above.

[FR Doc. C3-12817 Filed 6-16-03; 8:45 am]

BILLING CODE 1505-01-D



Federal Register

**Tuesday,
June 17, 2003**

Part II

Department of the Interior

Fish and Wildlife Service

50 CFR Part 17

**Endangered and Threatened Wildlife and
Plants; Final Designations or
Nondesignations of Critical Habitat for
101 Plant Species From the Island of
Oahu, HI; Final Rule**

DEPARTMENT OF THE INTERIOR**Fish and Wildlife Service****50 CFR Part 17****RIN 1018-AI24****Endangered and Threatened Wildlife and Plants; Final Designations or Nondesignations of Critical Habitat for 101 Plant Species From the Island of Oahu, HI****AGENCY:** Fish and Wildlife Service, Interior.**ACTION:** Final rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), designate critical habitat pursuant to the Endangered Species Act of 1973, as amended (Act), for 99 of the 101 species known historically from the Hawaiian island of Oahu. A total of approximately 22,274 hectares (ha) (55,040 acres (ac)) of land on Oahu fall within the boundaries of the 303 critical habitat units designated for the 99 species. This critical habitat designation requires the Service to consult under section 7 of the Act with regard to actions carried out, funded, or authorized by a Federal agency. Section 4 of the Act requires us to consider economic and other relevant impacts when specifying any particular area as critical habitat. This rule also determines that designating critical habitat would not be prudent for two species (*Cyrtandra crenata* and *Pritchardia kaalae*). We solicited data and comments from the public on all aspects of the proposed rule, including data on economic and other impacts of the designation.

DATES: This rule becomes effective on July 17, 2003.

ADDRESSES: Comments and materials received, as well as supporting documentation, used in the preparation of this final rule will be available for public inspection, by appointment, during normal business hours at U.S. Fish and Wildlife Service, Pacific Islands Office, 300 Ala Moana Blvd., Room 3-122, PO Box 50088, Honolulu, HI 96850-0001.

FOR FURTHER INFORMATION CONTACT: Paul Henson, Field Supervisor, Pacific Islands Office at the above address (telephone 808/541-3441; facsimile 808/541-3470).

SUPPLEMENTARY INFORMATION:**Disclaimer**

Designation of critical habitat provides little additional protection to species. In 30 years of implementing the ESA, the Service has found that the

designation of statutory critical habitat provides little additional protection to most listed species, while consuming significant amounts of scarce conservation resources. The present system for designating critical habitat has evolved since its original statutory prescription into a process that provides little real conservation benefit, is driven by litigation rather than biology, forces decisions to be made before complete scientific information is available, consumes enormous agency resources that would otherwise be applied to actions of much greater conservation benefit, and imposes huge social and economic costs. The Service believes that rational public policy demands serious attention to this issue in order to allow our limited resources to be applied to those actions that provide the greatest benefit to the species most in need of protection.

Role of Critical Habitat in Actual Practice of Administering and Implementing the Act

While attention to and protection of habitat is paramount to successful conservation actions, we have consistently found that, in most circumstances, the designation of critical habitat is of little additional value for most listed species, yet it consumes large amounts of conservation resources. [Sidle (1987. Env. Manage. 11(4):429-437) stated, "Because the ESA can protect species with and without critical habitat designation, critical habitat designation may be redundant to the other consultation requirements of section 7."] Currently, only 306 species or 25% of the 1,211 listed species in the U.S. under the jurisdiction of the Service have designated critical habitat. We address the habitat needs of all 1,211 listed species through conservation mechanisms such as listing, section 7 consultations, the Section 4 recovery planning process, the Section 9 protective prohibitions of unauthorized take, Section 6 funding to the States, and the Section 10 incidental take permit process. The Service believes that it is these measures that may make the difference between extinction and survival for many species.

Procedural and Resource Difficulties in Designating Critical Habitat

With a budget consistently inadequate to fund all of the petition review, listing, and critical habitat designation duties required of us by statute, we have in the past prioritized our efforts and focused our limited resources on adding species in need of protection to the lists of threatened or endangered species. We

have been inundated with lawsuits for our failure to designate critical habitat, and we face a growing number of lawsuits challenging critical habitat determinations once they are made. These lawsuits have subjected the Service to an ever-increasing series of court orders and court-approved settlement agreements, compliance with which now consumes nearly the entire listing program budget. This leaves the Service with little ability to prioritize its activities to direct scarce listing resources to the listing program actions with the most biologically urgent species conservation needs.

The consequence of the critical habitat litigation activity is that limited listing funds are used to defend active lawsuits, to respond to Notices of Intent (NOIs) to sue relative to critical habitat, and to comply with the growing number of adverse court orders. As a result, listing petition responses, the Service's own proposals to list critically imperiled species, and final listing determinations on existing proposals are significantly delayed. Litigation over critical habitat issues for species already listed and receiving the Act's full protection has precluded or delayed many listing actions nationwide.

The accelerated schedules of court ordered designations have left the Service with almost no ability to provide for adequate public participation or ensure a defect-free rulemaking process before making decisions on listing and critical habitat proposals due to the risks associated with noncompliance with judicially-imposed deadlines. This in turn fosters a second round of litigation in which those who fear adverse impacts from critical habitat designations challenge those designations. The cycle of litigation appears endless, is very expensive, and in the final analysis provides relatively little additional protection to listed species.

The costs resulting from the designation include legal costs, the cost of preparation and publication of the designation, the analysis of the economic effects and the cost of requesting and responding to public comment, and in some cases the costs of compliance with NEPA, all are part of the cost of critical habitat designation. None of these costs result in any benefit to the species that is not already afforded by the protections of the Act enumerated earlier, and they directly reduce the funds available for direct and tangible conservation actions.

Background

In the List of Endangered and Threatened Plants (50 CFR 17.12(h)),

there are 101 plant species that, at the time of listing, were reported from the island of Oahu and are at issue in this final rule. These species and their distribution by island are identified in Table 1 in the **Federal Register** notice proposing this critical habitat designation (67 FR 37107–37272; chart page 37108).

Fifty-seven of these species are endemic to the island of Oahu, while 44 species are reported from one or more other islands, as well as Oahu. Each of these species is described in more detail below in the section “Discussion of Plant Taxa.” Although we considered designating critical habitat on Oahu for each of the 101 plant species, for the reasons described below, the final designation includes critical habitat for 99 of 101 plant species. We have designated critical habitat on other islands (Kauai, Niihau, Maui, and Molokai) for species that are also reported from Oahu. Critical habitat may be designated for the species that are also reported from the island of Hawaii in a subsequent rulemaking.

The Island of Oahu

The island of Oahu was formed from the remnants of two large shield volcanoes, the younger Koolau volcano to the east and the older Waianae volcano to the west (60 FR 51398; Service 1995a, 1996b). Their original shield volcano shape has been lost as a result of extensive erosion, and today these volcanoes are called mountains or ranges and consist of long, narrow ridges. The Koolau Mountains were built by eruptions that took place primarily along a northwest-trending rift zone and formed a range now approximately 60 kilometers (km) (37 miles (mi)) long (Service 1996b). Median annual rainfall for the Koolau Mountains varies from 100 to 710 centimeters (cm) (40 to 280 inches (in)), most of which is received at higher elevations along the entire length of the windward (northeastern) side (Service 1996b).

The Waianae Mountains were built by eruptions that took place primarily along three rift zones. The two principal rift zones run in a northwestward and south-southeastward direction from the summit, and a lesser one runs to the northeast. The range is approximately 32 km (20 mi) long. The caldera lies between the north side of Makaha Valley and the head of Nanakuli Valley (MacDonald *et al.* 1983). The Waianae Mountains are in the rain shadow of the parallel Koolau Mountains and receive much less rainfall, except for Mt. Kaala, the highest point on Oahu at an elevation of 1,225 meters (m) (4,020 feet

(ft)) (Wagner *et al.* 1999). The median annual rainfall for the Waianae Mountains varies from 51 to 190 cm (20 to 75 in), with only the small summit area of Mt. Kaala receiving the highest amount (Service 1995a).

Discussion of the Plant Taxa

Species Endemic to Oahu

Abutilon sandwicense (No common name (NCN))

Abutilon sandwicense, a member of the mallow family (Malvaceae) and a short-lived perennial, is a shrub that grows to 3 m (5 ft) tall and is covered with short glandular hairs. This species is distinguished from others in the genus by the green or reddish-brown tipped petals that extend beyond the sepals (Bates 1999).

Abutilon sandwicense has been observed flowering in winter and spring. By summer, most plants have flowered, and the fruits have usually dried up by fall. Fruit capsules develop within six weeks. Although seedlings are often initially abundant, few plants appear to survive to maturity for unknown reasons (56 FR 55770). Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors.

Historically, *Abutilon sandwicense* was known from nearly the entire length of the Waianae Mountains, from Makaleha Valley to Nanakuli Valley. This species is now known from Huliwai Gulch, Kaawa Gulch, Kaimuhole Gulch, Palikea Gulch, Makaha Valley, Makaha-Waianae Kai Ridge, Makaleha Valley, Manuwai Gulch, Halona subdistrict, Mikilua subdistrict, Alaihehe Gulch, and Nanakuli Valley on Federal, State, private, city, and county lands. The 30 known occurrences contain an estimated 253 to 263 individuals (Bates 1999; Hawaii Heritage Program (HINHP) Database 2001).

Abutilon sandwicense typically grows on steep slopes or gulches in dry to mesic lowland forest between 149 and 875 m (489 and 2,870 ft) elevation. Associated native species include *Antidesma pulvinatum* (hame), *Diospyros sandwicensis* (lama), *Elaeocarpus bifidus* (kalia), *Eugenia reinwardtiana* (nioi), *Hibiscus arnottianus* (kokio keokeo), *Metrosideros polymorpha* (ohia), *Myrsine lanaiensis* (kolea), *Nestegis sandwicensis* (olopua), *Pipturus albidus* (mamaki), *Pisonia* sp. (papala kepau), *Pittosporum* sp. (hoawa), *Pleomele* sp. (hala pepe), *Psydrax odorata* (alahee), *Rauvolfia sandwicensis* (hao),

Reynoldsia sandwicensis (ohe), and *Sapindus oahuensis* (lonomea) (Bates 1999; HINHP Database 2001; Environmental Division of the U.S. Army (EDA), *in litt.* 2001).

The major threats to *Abutilon sandwicense* are competition from the nonnative plant species *Ageratina riparia* (hamakua pamakani), *Aleurites moluccana* (kukui), *Clidemia hirta* (Koster's curse), *Ficus microcarpa* (Chinese banyan), *Grevillea robusta* (silk oak), *Hyptis pectinata* (Comb hyptis), *Ipomoea* sp. (morning glory), *Kalanchoe pinnata* (air plant), *Leucaena leucocephala* (koa haole), *Melia azedarach* (chinaberry), *Melinis minutiflora* (molasses grass), *Montanoa hibiscifolia* (tree daisy), *Oplismenus hirtellus* (basketgrass), *Panicum maximum* (Guinea grass), *Passiflora suberosa* (huehue haole), *Pimenta dioica* (allspice), *Psidium cattleianum* (strawberry guava), *Psidium guajava* (guava), *Rivina humilis* (coral berry), *Schinus terebinthifolius* (Christmasberry), *Syzygium cumini* (Java plum), and/or *Toona ciliata* (Australian red cedar); fire; damage from the black twig borer (*Xylosandrus compactus*) and Chinese rose beetle (*Adoretus sinicus*); habitat degradation and/or destruction by feral pigs (*Sus scrofa*) and goats (*Capra hircus*); and trampling by feral cattle (*Bos taurus*) (Service 1998b; 56 FR 55770).

Alsinidendron obovatum (NCN)

Alsinidendron obovatum, a member of the pink family (Caryophyllaceae) and a short-lived perennial, is a branching subshrub growing to 3 ft (1 m) tall with thick, somewhat fleshy leaves. This species and *Alsinidendron trinerve* can be distinguished from other members of the genus by their shrubby habit and fleshy purple sepals surrounding the capsule. This species differs from *A. trinerve* in having a more crowded inflorescence (flowering part of plant) with shorter peduncles (flower stalks) and sepals with a rounded tip (Wagner *et al.* 1999).

Alsinidendron obovatum generally flowers after about two years of growth. Plants flower and fruit year round, but flowering is usually heavier in winter and spring depending on the level of precipitation. Plants survive three to six years, unless there are drought conditions. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (56 FR 55770).

Historically, *Alsinidendron obovatum* was known from the northern and southern ends of the Waianae Range. This species remains in Keawapilau

Gulch, Kahanakaiki Gulch, Makaleha, Kapuna Gulch, and Pahole Gulch on Federal and State lands. The 6 known occurrences contain about 8 to 10 individuals (EDA Database 2001; HINHP Database 2001; Wagner *et al.* 1999).

Alsinidendron obovatum typically grows on ridges and slopes in lowland diverse mesic forest dominated by *Acacia koa* (koa) and *Metrosideros polymorpha* between 476 and 943 m (1,561 and 3,093 ft) elevation. Associated native species include *Alyxia oliviformis* (maile), *Antidesma platyphyllum* (hame), *Bidens torta* (kookoolau), *Cibotium chamissoi* (hapuu), *Coprosma* sp. (pilo), *Hedyotis terminalis* (manono), *Ilex anomala* (kawau), *Machaerina* sp. (uki), *Peperomia* sp. (ala ala wai nui), *Perrottetia sandwicensis* (olomea), *Pipturus* sp. (mamaki), *Psydrax odorata*, or the endangered *Cyanea longiflora* (haha) (HINHP Database 2001; EDA, in litt. 2001).

The major threats to *Alsinidendron obovatum* are competition from the aggressive nonnative plant species *Blechnum appendiculatum* (NCN), *Clidemia hirta*, *Grevillea robusta*, *Melinis minutiflora*, *Paspalum conjugatum* (Hilo grass), *Psidium cattleianum*, *Rubus argutus* (prickly Florida blackberry), *Schinus terebinthifolius*, and/or *Stachytarpheta dichotoma* (owi); habitat degradation by feral pigs; trampling by humans; rockslides; and the small number of occurrences and individuals, which make the species highly vulnerable to extinction from random environmental events (Service 1998b; 56 FR 55770).

Alsinidendron trinerve (NCN)

Alsinidendron trinerve, a member of the pink family (Caryophyllaceae) and a short-lived perennial, is very similar in appearance to *A. obovatum* but differs in that it has a more open inflorescence with peduncles more than 2 cm (0.8 in) long and sepals with an acute tip (Wagner *et al.* 1999).

Alsinidendron trinerve flowers and fruits throughout the year with the possible exception of fall (56 FR 55770). Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors.

Historically, *Alsinidendron trinerve* was known from the north-central and southern Waianae Mountains. This species is known to be in Makaleha Gulch, on Mt. Kaala and Puu Kalena on Federal and State lands. The 13 known occurrences total between 18 and 34 individuals (EDA Database 2001; HINHP Database 2001).

Alsinidendron trinerve typically grows on slopes in wet forest or the wetter portions of diverse mesic forest dominated by *Metrosideros polymorpha* and *Ilex anomala* or *Metrosideros polymorpha* montane wet forest between 833 and 1,233 m (2,732 and 4,044 ft) elevation. Associated native species include *Broussaisia arguta* (kanawao), *Coprosma ochracea* (pilo), *Diplazium sandwichianum* (hoio), *Gunnera* sp. (apeape), *Hedyotis* sp. (NCN), *Machaerina* sp., *Nothoperanema rubiginosa*, *Peperomia* sp., *Perrottetia sandwicensis*, *Phyllostegia* sp. (NCN), *Pipturus albidus*, or *Vaccinium* sp. (ohelo) (HINHP Database 2001; Wagner *et al.* 1999; EDA, in litt. 2001).

The major threats to *Alsinidendron trinerve* are competition from the aggressive nonnative plant species *Buddleia asiatica* (butterfly bush), *Clidemia hirta*, *Kalanchoe pinnata*, and *Rubus argutus*; habitat degradation by feral pigs; trampling by humans along trails; and the small number of extant individuals, which makes the species highly vulnerable to extinction from random environmental events (Service 1998b; 56 FR 55770).

Chamaesyce celastroides var. *kaenana* (Akoko)

Chamaesyce celastroides var. *kaenana*, a member of the spurge family (Euphorbiaceae) and a short-lived perennial, is a low-growing or upright shrub to 5 ft (1.5 m) tall with milky sap. Its leaves fall off during the dry season, are mostly hairless, and are arranged in two opposite rows along the stem. This species is distinguished from other members of the genus in the area in which it grows in that it is a woody shrub rather than an herb or small subshrub (Koutnik and Huft 1999).

Chamaesyce celastroides var. *kaenana* has been observed flowering and fruiting throughout the year, probably in response to precipitation. Fruits mature in three to four weeks and plants live from five to 10 years. No additional information is available on flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, or limiting factors (56 FR 55770).

Historically, *Chamaesyce celastroides* var. *kaenana* was known from the northwestern end of the Waianae Mountains as well as from one collection from the southeastern end of the Koolau Mountains. This taxon remains at Kaena Point, Keawaula, Alau Gulch, Waianae Kai, and Kahanakaiki on State land and land under Federal jurisdiction. The 15 known occurrences contain 569 individuals (HINHP Database 2001; Koutnik and Huft 1999).

Chamaesyce celastroides var. *kaenana* typically grows in coastal dry shrubland on windward talus slopes, leeward rocky cliffs, open grassy slopes, or on vegetated cliff faces between sea level and 862 m (0 and 2,827 ft) elevation. Associated native species include *Artemisia australis* (ahinahina), *Boerhavia* sp. (alena), *Chamaesyce celastroides* var. *amplectans* (akoko), *Dodonaea viscosa* (aalii), *Gossypium tomentosum* (mao), *Heteropogon contortus* (pili grass), *Jacquemontia ovalifolia* ssp. *sandwicensis* (pauohiika), *Lipochaeta lobata* (nehe), *Myoporum sandwicense* (naio), *Plumbago zeylanica* (ililee), *Psilotum nudum* (moa), *Psydrax odorata*, *Santalum* sp. (iliahi), *Sida fallax* (ilima), or *Waltheria indica* (uhaloa) (HINHP Database 2001; EDA, in litt. 2001).

The major threats to *Chamaesyce celastroides* var. *kaenana* are competition from the nonnative plant species *Acacia confusa* (Formosan koa), *Grevillea robusta*, *Hyptis pectinata*, *Leucaena leucocephala*, *Melinis repens* (natal redtop), *Panicum maximum*, *Pluchea carolinensis* (sourbush), and/or *Schinus terebinthifolius*; fire; and effects of recreational activities (Service 1998b; 56 FR 5577).

Chamaesyce deppeana (Akoko)

Chamaesyce deppeana, a member of the spurge family (Euphorbiaceae) and a short-lived perennial, is an erect subshrub up to 1.2 m (4 ft) tall with fuzzy branches. This species is distinguished from others in the genus by the following combination of characters: Leaves arranged in two rows on opposite sides of the branches, leaves glabrous, leaf apex notched, leaf margin toothed, and cyathia (flower cluster) width (Koutnik and Huft 1999).

Chamaesyce deppeana has been observed in flower in May and September. No further information is available on flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b).

Historically, *Chamaesyce deppeana* was known only from southern Oahu. Because the few collections that were made were collected prior to the 20th century, it was thought to be extinct. In 1986, Joel Lau and Sam Gon of The Nature Conservancy of Hawaii (TNCH) rediscovered *C. deppeana* on State land in the southern Koolau Mountains of Oahu in Nuuanu Pali Wayside State Park near the Pali Lookout, a popular tourist attraction. About 50 individuals grow near there (HINHP Database 2001; Koutnik and Huft 1999).

The habitat of the only known occurrence of *Chamaesyce deppeana* is windward-facing ridge crests, cliff faces, and mixed native cliffs with such plant species as *Bidens sandwicensis* (kookoolau) or *Metrosideros polymorpha* between 274 and 661 m (899 and 2,168 ft) elevation (HINHP Database 2001).

The major threats to the single known occurrence of *Chamaesyce deppeana* are competition for water, space, light, and nutrients with the nonnative plant species *Casuarina equisetifolia* (common ironwood), *Paspalum conjugatum*, and *Schinus terebinthifolius*; and extinction due to naturally caused events because of the limited number of individuals and restricted range. Fire and impact by humans threaten the species as well (HINHP Database 2001; Service 1998b; 59 FR 14482).

Chamaesyce herbstii (Akoko)

Chamaesyce herbstii, a member of the spurge family (Euphorbiaceae) and a short-lived perennial, is a small tree ranging from 3 to 8 m (10 to 26 ft) tall with thin, leathery leaves arranged in pairs on the same plane. This species is distinguished from others in the genus by the length of the flowering stalk and the color of the angular fruits (Koutnik and Huft 1999).

Chamaesyce herbstii has been observed in flower year-round in January, May, July, September, and October. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b).

Historically, *Chamaesyce herbstii* was known from scattered occurrences in the northern and central Waianae Mountains on the island of Oahu. Currently, this species is known from 4 occurrences with between 162 and 164 individuals in the central and northern Waianae Mountains, South Ekahanui Gulch, Pahole (Kukuiula) Gulch, Kapuna Gulch, and West Makaleha-Central Makaleha. These occurrences are found on private and State lands (Geographic Decision Systems International (GDSI) 2001; HINHP Database 2001).

Chamaesyce herbstii typically grows in shaded gulch bottoms and slopes in mesic *Acacia koa*-*Metrosideros polymorpha* lowland forests or diverse mesic forests at elevations between 435 and 886 m (1,427 and 2,906 ft). Associated plant species include *Antidesma platyphyllum*, *Coprosma* sp., *Diplazium sandwichianum*, *Hedyotis* sp., *Hibiscus arnottianus* var. *arnottianus* (kokio keokeo), *Melicope* sp.

(alani), *Morinda trimera* (noni), *Pipturus albidus*, *Pouteria sandwicensis* (alaa), *Pteralyxia* sp. (kaulu), *Urera glabra* (opuhe), or *Xylosma* sp. (maua) (HINHP Database 2001; EDA, in litt. 2001).

The primary threats to *Chamaesyce herbstii* are habitat degradation and/or destruction by feral pigs; competition with nonnative plant species such as *Clidemia hirta*, *Grevillea robusta*, *Passiflora suberosa*, *Psidium cattleianum*, and *Schinus terebinthifolius*; potential fire; a risk of extinction from naturally occurring events (such as hurricanes) and/or reduced reproductive vigor due to the small number of remaining occurrences (HINHP Database 2001; Service 1998b; 61 FR 53089).

Chamaesyce kuwaleana (Akoko)

Chamaesyce kuwaleana, a member of the spurge family (Euphorbiaceae) and a short-lived perennial, is an erect shrub 20 to 90 cm (8 to 36 in) tall with leaves arranged in two rows along the stem. This species is distinguished from other species of the genus in its habitat by its stalked, oval to rounded leaves with untoothed margins and by the bent stalk supporting the small fruit capsule (Koutnik and Huft 1999).

Chamaesyce kuwaleana bears fruit in spring and early summer and has usually finished fruiting by fall. No further information is available on flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (56 FR 55770).

Historically, *Chamaesyce kuwaleana* was known from the central Waianae Mountains and Moku Manu Island off the eastern coast of Oahu. This species is currently known only from Kauaopuu Peak, Mauna Kuwale, Waianae Kai-Lualualei Ridge, Puu Kailio, and Kauaopuu in the Waianae Mountains, on Federal and State lands. The 5 occurrences contain around 2,000 individuals (GDSI 2001; HINHP Database 2001; Koutnik and Huft 1999).

Chamaesyce kuwaleana typically grows in thin guano soil on basaltic rock, on arid, exposed volcanic cliffs, on dry or mesic rocky ridges, or on sparsely vegetated slopes between sea level and 596 m (0 to 1,955 ft) elevation. Associated native species include *Artemisia* sp. (hinahina), *Bidens* sp. (kookoolau), *Carex* sp. (NCN), *Chamaesyce* sp. (akoko), *Dodonaea viscosa*, *Heteropogon contortus*, *Plectranthus parviflorus* (ala ala wai nui), *Schiedea* sp. (NCN), or *Sida fallax* (HINHP Database 2001; Koutnik and Huft 1999; Service 1998b).

The major threats to *Chamaesyce kuwaleana* are competition from the

nonnative plant species *Cenchrus ciliaris* (buffelgrass), *Kalanchoe pinnata*, *Leucaena leucocephala*, *Melinis repens*, *Opuntia* sp. (prickly pear), and *Schinus terebinthifolius*; fire; two-spotted leafhoppers (*Saphonia rufofascia*); and the small number of occurrences, which makes the species highly vulnerable to extinction from random environmental events (HINHP Database 2001; Service 1998b; 56 FR 55770).

Chamaesyce rockii (Akoko)

Chamaesyce rockii, a member of the spurge family (Euphorbiaceae) and a short-lived perennial, is usually a compact shrub or sometimes a small tree typically ranging from 0.5 to 2 m (1.6 to 6.6 ft) tall, but in protected sites it has been known to reach 4 m (13 ft) in height. This species differs from others in the genus in that it has large, red, capsular fruit (Koutnik and Huft 1999).

Chamaesyce rockii has been observed fruiting in February. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b).

Chamaesyce rockii was known historically from scattered occurrences along the Koolau Mountains on the island of Oahu. Today, 20 occurrences are located in Waikakalua Gulch, Kaukonahua-Kahana summit area, Punaluu-Kaluanui, Peahinaia Trail Laie-Kaipapau-Kawai Nui junction area, Puu Keahiakahoe, Halawa Trail, summit ridge between Aiea Ridge Trail and Waimano Trail, Ewa Forest Reserve, Halemano Gulch, Kawaiiki-Opaaula Ridge, Puu Kainapuaa, Kawai Iki Stream, Maakua Gulch, and Kaipapau-Loloa Ridge, on State, Federal, and private lands. Currently the total number of plants is estimated to be between 641 and 773 (EDA Database 2001; GDSI 2001; HINHP Database 2001).

Chamaesyce rockii typically grows on gulch slopes, gulch bottoms, and ridge crests in wet *Metrosideros polymorpha*-*Dicranopteris linearis* (uluhe) forest and shrubland between 208 and 871 m (682 and 2,857 ft) in elevation. Associated plant species include *Bidens* sp., *Antidesma platyphyllum*, *Broussaisia arguta*, *Cibotium* sp. (hapuu), *Coprosma longifolia* (pilo), *Diplopterygium pinnatum* (uluhe lau nui), *Dubautia laxa* (naenae pua melemele), *Hedyotis terminalis*, *Machaerina* sp., *Melicope* spp., *Myrsine juddii* (kolea), *Psychotria* spp. (kopiko), and *Wikstroemia* sp. (akia) (HINHP Database 2001).

The primary threats to *Chamaesyce rockii* are habitat degradation and/or destruction by feral pigs; trail clearing;

potential impacts from military activities; and competition with nonnative plant species such as *Clidemia hirta*, *Leptospermum scoparium* (tea tree), *Paspalum conjugatum*, *Psidium cattleianum*, and *Pterolepis glomerata* (NCN) (HINHP Database 2001; Service 1998b; 61 FR 53089).

Cyanea acuminata (Haha)

Cyanea acuminata, a member of the bellflower family (Campanulaceae) and a short-lived perennial, is an unbranched shrub 0.3 to 2 m (1 to 6.6 ft) tall with inversely lance-shaped to narrowly egg-shaped or elliptic leaves. This species is distinguished from others in this endemic Hawaiian genus by the color of the petals and fruit and the length of the calyx (the outer of two series of floral leaves) lobes, flowering stalk, and leaf stalks (Lammers 1999).

Cyanea acuminata has been observed fruiting in February and November. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b).

Historically, *Cyanea acuminata* was known from 31 scattered occurrences in the Koolau Mountains of Oahu. Currently, fewer than 200 plants are known from 20 occurrences on private, city, county, State, and Federal lands on Puu o Kona, near South Kaukonahua Stream, in Halemano Gulch, Kawai Iki Gulch, near Poamoho Stream, on Schofield-Waikane Trail, Helemano-Punaluu summit ridge, Konahuanui, in Kamana Nui Valley, Pukele, in Makaua Gulch, on Niu-Waimanalo summit ridge, Waahila Ridge, Kaipapau, Puu Keahia Kahoe, Kaala, Kaluanui, Pia Gulch, Makaleha, and Maakua Gulch (EDA Database 2001; GDSI 2001; HINHP Database 2001).

Cyanea acuminata typically grows on slopes, ridges, or stream banks between 216 and 1,208 m (708 and 3,962 ft) elevation. The plants are found in *Metrosideros polymorpha*-*Dicranopteris linearis*, *Acacia koa*-*M. polymorpha* wet or mesic forest or shrubland, or *Diospyros sandwicensis*-*M. polymorpha* lowland mesic forest with one or more of the following associated native species: *Antidesma* sp. (hame), *Broussaisia arguta*, *Chamaesyce* sp., *Charpentiera* sp. (papala), *Cyrtandra* spp. (hai wale), *Diplazium sandwichianum*, *Dryopteris sandwicensis* (palapalaia), *Dubautia laxa*, *Freycinetia arborea* (ieie), *Hibiscus* sp. (aloalo), *Hedyotis* sp., *Ilex anomala*, *Labordia* sp. (kamakahala), *Machaerina* sp., *Melicope* spp., *Perrottetia sandwicensis*, *Phyllostegia* sp., *Pipturus*

albidus, *Pisonia* sp., *Psychotria* sp., *Sadleria* sp. (amau), *Syzygium sandwicensis*, *Touchardia latifolia* (olona), or *Wikstroemia* sp. (ohia ha) (HINHP Database 2001; Lammers 1999).

The major threats to *Cyanea acuminata* are habitat degradation and/or destruction by feral pigs; potential impacts from military activities; potential predation by rats (*Rattus rattus*); competition with the nonnative plant species *Ageratina adenophora* (Maui pamakani), *Aleurites moluccana*, *Clidemia hirta*, *Cordyline fruticosa* (ti), *Dioscorea* sp. (yam), *Erigeron karvinskianus* (daisy fleabane), *Musa* sp. (banana), *Passiflora suberosa*, *Rubus argutus*, and *Schinus terebinthifolius*; a risk of extinction from naturally occurring events and/or reduced reproductive vigor due to the small number of remaining individuals (HINHP Database 2001; Service 1998b; 61 FR 53089).

Cyanea crispa (NCN)

Cyanea crispa, a member of the bellflower family (Campanulaceae) and a short-lived perennial, is an unbranched shrub with leaves clustered at the ends of succulent stems. It is distinguished from other species in this endemic Hawaiian genus by its leaf shape, distinct calyx lobes, and the length of the flowers and stalks of flower clusters (Lammers 1999).

Cyanea crispa was observed in flower in April 1930. It was more recently observed fruiting in June and September. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b; 59 FR 14482).

Historically, *Cyanea crispa* was known from scattered locations throughout the upper elevations of the Koolau Mountains of Oahu from Kaipapau Valley to Waialae Iki Ridge. This species is now known from Federal, State, city, county, and private lands in Hidden Valley, Palolo Valley, Kapakahi Gulch, Moanalua Valley, Wailupe, Koolau Summit Trail, Kawaipapa Gulch, Maakua Gulch, Kaipapa Gulch, Maunawili, and Pia Valley. There are a total of 11 occurrences containing a total of 56 individual plants (EDA Database 2001; HINHP Database 2001).

Cyanea crispa is found in habitats ranging from steep, open mesic forests to gentle slopes or moist gullies of closed wet forests and stream banks, at elevations between 56 and 959 m (184 and 3,146 ft). Associated native plant species include *Antidesma platyphylla*, *Boehmeria grandis* (akolea), *Broussaisia*

argutus, *Christella cyatheoides* (kikawaio), *Cibotium chamissoi*, *Cyrtandra* spp., *Diospyros* sp. (lama), *Dubautia* sp. (naenae), *Metrosideros polymorpha*, *Perrottetia sandwicensis*, *Pipturus albidus*, *Pisonia umbellifera* (papala kepau), *Psychotria* sp., or *Touchardia latifolia* (HINHP Database 2001; Service 1998b).

The major threats to *Cyanea crispa* are habitat alteration and predation by feral pigs; competition with the nonnative plant species *Arthrostemma ciliatum* (NCN), *Clidemia hirta*, *Psidium cattleianum*, *Psidium guajava*, *Pterolepis glomerata*, *Rubus rosifolius* (thimbleberry), *Schinus terebinthifolius*, *Setaria palmifolia* (palm grass), and *Zingiber zerumbet* (awapuhi); and extinction due to naturally occurring events and/or reduced reproductive vigor due to the small number of remaining individuals, their limited gene pool, and restricted distribution (Service 1998b; 59 FR 14482).

Cyanea grimesiana ssp. *obatae* (Haha)

Cyanea grimesiana ssp. *obatae*, a member of the bellflower family (Campanulaceae) and a short-lived perennial, is a shrub, usually unbranched, growing from 1 to 3.2 m (3.3 to 10.5 ft) tall with wide, deeply lobed leaves. This subspecies can be distinguished from the other two by its short, narrow calyx lobes that are not fused or overlapping (Lammers 1999).

Cyanea grimesiana ssp. *obatae* flowers and fruits year round, depending on rainfall. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (59 FR 32932).

Historically, *Cyanea grimesiana* ssp. *obatae* was known from the southern Waianae Mountains from Puu Hapapa to Kaaikukai. This taxon is known to be extant in Kaluaa Gulch, Ekahanui Gulch, North Palawai Gulch, and Pahole Gulch. The occurrences are on State and private lands. A total of 8 occurrences are known that contain 16 individuals (GDSI 2000; HINHP Database 2001; Lammers 1999).

Cyanea grimesiana ssp. *obatae* typically grows on steep, moist, shaded slopes in diverse mesic to wet lowland forests between 404 and 1,075 m (1,325 and 3,528 ft) elevation. Associated native species include *Acacia koa*, *Antidesma platyphyllum*, *Chamaesyce* sp., *Charpentiera obovata* (papala), *Cibotium chamissoi*, *Claoxylon sandwicense* (poola), *Coprosma* sp., *Cyanea membranacea* (haha), *Cyrtandra waianaeensis* (hahala), *Diplazium sandwichianum*, *Dryopteris unidentata*

(akole), *Dubautia* sp., *Freycinetia arborea*, *Hedyotis acuminata* (au), *Hedyotis terminalis*, *Metrosideros polymorpha*, *Myrsine lessertiana* (kolea lau nui), *Nothocestrum* sp. (aiea), *Perrottetia sandwicensis*, *Pipturus albidus*, *Pisonia umbellifera*, *Pouteria sandwicensis*, *Psychotria hathewayi* (kopiko), *Rumex* sp. (sorrel), *Selaginella arguscula* (lepelepe a moa), and *Streblus pendulinus* (aiai) (HINHP Database 2001; Lammers 1999; EDA, in litt. 2001).

The major threats to *Cyanea grimesiana* ssp. *obatae* are habitat degradation by feral pigs; competition from nonnative plant species such as *Ageratina riparia*, *Aleurites moluccana*, *Blechnum appendiculatum*, *Buddleia asiatica*, *Clidemia hirta*, *Christella parasitica* (NCN), *Lantana camara* (lantana), *Morella faya* (firetree), *Paspalum conjugatum*, *Passiflora suberosa*, *Psidium cattleianum*, *Rubus rosifolius*, *Schinus terebinthifolius*, *Setaria palmifolia*, and *Toona ciliata*; predation of seeds or fruits by introduced slugs; and extinction caused by naturally occurring events and/or reduced reproductive vigor due to the small number of extant individuals (HINHP Database 2001; Service 1998b; 59 FR 32932).

Cyanea humboltiana (Haha)

Cyanea humboltiana, a member of the bellflower family (Campanulaceae) and a short-lived perennial, is an unbranched shrub 1 to 2 m (3.2 to 6.6 ft) tall with woody stems and inversely egg-shaped to broadly elliptic leaves. The leaf edges are hardened and have shallow, ascending, rounded teeth. This species differs from others in this endemic Hawaiian genus by the downward bending flowering stalk and the length of the flowering stalk (Lammers 1999).

Cyanea humboltiana has been observed in flower from September through January. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b).

Cyanea humboltiana was known historically from 17 occurrences from the central portion to the southern end of the Koolau Mountains of Oahu. Currently, between 133 and 239 plants are known from 9 occurrences at Konahuanui summit, Moanalua-Kaneohe summit, Wailupe summit, Poamoho Trail, Opaeha Gulch, Maakua Gulch, Kaluanui, and Lulumahu Gulch. These occurrences are on Federal, private, State, city, and county lands (EDA Database 2001; GDSI 2001; HINHP Database 2001).

Cyanea humboltiana is usually found in wet *Metrosideros polymorpha*-*Dicranopteris linearis* lowland shrubland between 261 and 959 m (856 and 3,146 ft) elevation. Associated native plant species include *Acacia koa*, *Bobea elatior* (ahakea), *Broussaisia arguta*, *Cibotium chamissoi*, *Dubautia laxa*, *Hedyotis terminalis*, *Ilex anomala*, *Machaerina angustifolia* (uki), *Melicope* sp., *Phyllostegia* sp., *Psychotria mariniana* (kopiko), *Sadleria* sp., *Scaevola mollis* (naupaka kuahiwi), *Syzygium sandwicensis*, *Wikstroemia* sp., and ferns (HINHP Database 2001).

The major threats to *Cyanea humboltiana* are habitat degradation and/or destruction by feral pigs; potential predation by rats; competition with the nonnative plant species *Axonopus fissifolius* (narrow-leaved carpet grass), *Clidemia hirta*, *Erigeron karvinskianus*, *Psidium cattleianum*, and *Pterolepis glomerata*, and a risk of extinction from naturally occurring events and/or reduced reproductive vigor due to the small number of remaining occurrences. The Konahuanui summit occurrence is also threatened by trampling by hikers (HINHP Database 2001; Service 1998b; 61 FR 53089).

Cyanea koolauensis (Haha)

Cyanea koolauensis, a member of the bellflower family (Campanulaceae) and a short-lived perennial, is an unbranched shrub 1 to 1.5 m (3.5 to 5 ft) tall with woody stems and linear to narrowly elliptic leaves with a whitish underside. The leaf edges are hardened with shallow, ascending, rounded teeth. *Cyanea koolauensis* is distinguished from other species in this endemic Hawaiian genus by the leaf shape and width; the whitish green lower leaf surface; and the lengths of the leaf stalks, calyx lobes, and hypanthium (base of flower) (Lammers 1999).

Cyanea koolauensis has been observed in flower and fruit during the months of May through August. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b).

Cyanea koolauensis was known historically from 27 scattered occurrences throughout the Koolau Mountains on Oahu. Currently, 42 occurrences totaling fewer than 80 plants are known from the Waimea-Malaekahana Ridge to Hawaii Loa Ridge in the Koolau Mountains. These occurrences are on private, city, county, State, and Federal lands (EDA Database 2001; GDSI 2001; HINHP Database 2001).

Cyanea koolauensis is usually found on slopes, stream banks, and ridge crests in wet *Metrosideros polymorpha*-*Dicranopteris linearis* forest or shrubland at elevations between 163 and 959 m (535 and 3,146 ft). Associated native plant species include *Acacia koa*, *Antidesma platyphyllum*, *Bidens* sp., *Bobea elatior*, *Broussaisia arguta*, *Cibotium* sp., *Diplopterygium pinnatum*, *Dubautia* sp., *Hedyotis* sp., *Machaerina* sp., *Melicope* sp., *Pittosporum* sp., *Pritchardia martii* (loulou hiwa), *Psychotria mariniana*, *Sadleria* sp., *Scaevola* sp. (naupaka), *Syzygium sandwicensis*, or *Wikstroemia* sp. (HINHP Database 2001; Lammers 1999).

The major threats to *Cyanea koolauensis* are habitat destruction by feral pigs; potential impacts from military activities; trail clearing; potential predation by rats; competition with the aggressive nonnative plant species *Clidemia hirta*, *Heliocarpus popayanensis* (moho), *Psidium cattleianum*, and *Pterolepis glomerata*; trampling by hikers; and a risk of extinction from naturally occurring events and/or reduced reproductive vigor due to the small number of remaining individuals (HINHP Database 2001; Service 1998b; 61 FR 53089).

Cyanea longiflora (Haha)

Cyanea longiflora, a member of the bellflower family (Campanulaceae) and a short-lived perennial, is an unbranched shrub 1 to 3 m (3.5 to 10 ft) long with woody stems and elliptic or inversely lance-shaped leaves. Mature leaves have smooth or hardened leaf edges with shallow, ascending, rounded teeth. *Cyanea longiflora* differs from others in this endemic Hawaiian genus by the fused calyx lobes (Lammers 1999).

Cyanea longiflora has been observed in flower in February, April, and May and in fruit in August. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b).

Cyanea longiflora was known historically from five occurrences in the Waianae Mountains and six occurrences in the Koolau Mountains of Oahu. Currently, 4 occurrences with less than 217 individuals of this species are known on State, Federal, city, county, and private lands on Makaha-Waianae Kai Ridge, Makaha Valley, Kapuna Gulch, and Pahole Gulch in the Waianae Mountains (GDSI 2001; HINHP Database 2001; Service 1998b).

Cyanea longiflora is usually found on steep slopes, bases of cliffs, or ridge

crests in mesic *Acacia koa*-*Metrosideros polymorpha* lowland forest usually between 221 and 1,191 m (725 and 3,906 ft) elevation. Associated native plant species include *Antidesma* sp., *Cibotium* sp., *Coprosma* sp., *Dicranopteris linearis*, *Psychotria* sp., *Schiedea* sp., or *Syzygium sandwicensis* (HINHP Database 2001; Lammers 1999).

The major threats to *Cyanea longiflora* are habitat degradation and/or destruction by feral pigs; potential impacts from military activities; potential predation by rats; competition with the nonnative plant species *Psidium cattleianum* and *Rubus arguta*; potential fire; and a risk of extinction from naturally occurring events and/or reduced reproductive vigor due to the small number of remaining, widely dispersed occurrences (HINHP Database 2001; Service 1998b; 61 FR 53089).

Cyanea pinnatifida (Haha)

Cyanea pinnatifida, a member of the bellflower family (Campanulaceae) and a short-lived perennial, is a shrub, usually unbranched, growing from 0.8 to 3.0 m (2.6 to 10 ft) tall, with deeply lobed leaves. This species differs from other members of the genus on Oahu by its leaves, which are deeply cut into two to six lobes per side. The only other member of the genus on Oahu with lobed leaves has 9 to 12 lobes per side (Lammers 1999).

Cyanea pinnatifida has been observed flowering in August. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b).

Historically, *Cyanea pinnatifida* was known from the central Waianae Mountains. The last known wild individual died in August 2001 (HINHP Database 2001; Lammers 1999; Trae Menard, TNCH, pers. comm., 2001). Currently, this species is known only from individuals under propagation at the University of Hawaii's Lyon Arboretum and the National Tropical Botanical Garden (G. Koob, pers. comm., 2002).

Cyanea pinnatifida typically grows on steep, wet, rocky slopes in diverse mesic forest between 450 and 881 m (1,476 and 2,890 ft) elevation. Associated native plant species include *Canavalia* sp. (awikiwiki), *Diplazium sandwichianum*, *Pipturus albidus*, *Pisonia sandwicensis* (aulu), *Pisonia umbellifera*, *Psychotria* sp., *Strongylodon ruber* (nunuiwi), and native ferns (HINHP Database 2001; Lammers 1999).

The major threats to *Cyanea pinnatifida* are competition from the

nonnative plant species *Aleurites moluccana*, *Blechnum appendiculatum*, *Clidemia hirta*, *Passiflora suberosa*, *Psidium cattleianum*, *Psidium guajava*, and *Toona ciliata*; habitat degradation by feral pigs; predation by slugs; and trampling by humans on or near trails (Service 1998b; 56 FR 55770).

Cyanea st-johnii (Haha)

Cyanea st-johnii, a member of the bellflower family (Campanulaceae) and a short-lived perennial, is an unbranched shrub with a woody stem 30 to 60 cm (12 to 24 in) long and lance-shaped to inversely lance-shaped leaves. The leaf edges are thickened, are smoothly toothed, and curl under. This species is distinguished from others in this endemic Hawaiian genus by the length of the leaves, the distinctly curled leaf margins, and the petal color (Lammers 1999).

Cyanea st-johnii has been observed in flower in July through September. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b).

Cyanea st-johnii was known historically from 11 occurrences in the central and southern Koolau Mountains of Oahu. Currently, 57 plants are known from 7 occurrences at Waimano Trail summit to Aiea Trail summit, the summit ridge crest between Manana and Kipapa Trails, between the summit of Aiea and Halawa trails, Summit Trail south of Poamoho Cabin, and Wailupe-Waimanalo summit ridge. These occurrences are found on city, county, private, and State lands, as well as lands under Federal jurisdiction (GDSI Database 2000; HINHP Database 2001).

Cyanea st-johnii typically grows on wet, windswept slopes and ridges between 415 and 959 m (1,361 and 3,146 ft) elevation in *Metrosideros polymorpha* mixed lowland shrubland or *Metrosideros polymorpha*-*Dicranopteris linearis* lowland shrubland. Associated native plant species include *Alyxia oliviformis*, *Antidesma* sp., *Bidens macrocarpa* (kookoolau), *Broussaisia arguta*, *Chamaesyce clusiifolia* (akoko), *Cibotium* sp., *Dubautia laxa*, *Freycinetia arborea*, *Hedyotis* sp., *Labordia* sp., *Machaerina angustifolia*, *Melicope* sp., *Psychotria* sp., *Sadleria pallida* (amau), *Scaevola mollis*, or *Syzygium sandwicensis* (HINHP Database 2001).

The major threats to *Cyanea st-johnii* are habitat degradation and/or destruction by feral pigs; potential predation by rats; predation by slugs and snails; competition with the nonnative plant species *Andropogon*

virginicus (broomsedge), *Axonopus fissifolius*, *Clidemia hirta*, and *Sacciolepis indica* (Glenwood grass); and a risk of extinction from naturally occurring events and/or reduced reproductive vigor due to the small number of remaining occurrences and individuals. The plants between the summit of Aiea and Halawa Trail are also threatened by trampling by hikers (HINHP Database 2001; Service 1998b; 61 FR 53089).

Cyanea superba (NCN)

Cyanea superba, of member the bellflower family (Campanulaceae) and a short-lived perennial, is morphologically very different from its closest relatives. It grows to 6 m (20 ft) tall and has a terminal rosette of large leaves; each rosette is 50 to 100 cm long (20 to 40 in) and 10 to 20 cm (4 to 8 in) wide atop a single, unbranched trunk (Lammers 1999).

The flowering season of *Cyanea superba* varies from year to year depending on precipitation. It ranges from late August to early October. Generally, flowering is at its peak in early to mid-September. Fruits have been known to mature in two to five months, depending on climatic conditions (Service 1998b). Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors.

Historically, *Cyanea superba* was collected from the gulches of Makaleha on Mt. Kaala in the Waianae Mountains of Oahu. Currently, there are no natural occurrences and an outplanted population of 140 individuals on State and Federal lands in the Waianae Mountains (EDA Database 2001; GDSI 2001; HINHP Database 2001; Service 1998b; K. Kawela, pers. comm., 2003, M. Keir, pers. comm., 2001).

Cyanea superba grows in the understory on sloping terrain on well drained rocky substrate within mesic forest between 232 and 872 m (761 and 2,860 ft) in elevation with one or more of the following associated native species: *Diospyros* sp., *Hedyotis terminalis*, *Metrosideros polymorpha*, *Nestegis sandwicensis*, *Pisonia brunoniana* (papala kepau), *Psychotria* sp., and *Xylosma* sp. (HINHP Database 2001).

The major threats to *Cyanea superba* are degradation of its habitat due to competition with the nonnative plant species *Aleurites moluccana*, *Melinis minutiflora*, *Psidium cattleianum*, and *Schinus terebinthifolius*; wildfires generated in the nearby military firing range; habitat degradation by feral pigs;

a restricted range that makes it vulnerable to any local environmental disturbance or single incident that could destroy a significant percentage of the known individuals; and the limited gene pool that may depress reproductive vigor (HINHP Database 2001; Service 1998b; 56 FR 46235).

Cyanea truncata (Haha)

Cyanea truncata, a member of the bellflower family (Campanulaceae) and a short-lived perennial, is an unbranched or sparsely branched shrub covered with small sharp prickles. Its oval leaves are wider above the middle and lined with hardened teeth along the margins. *Cyanea truncata* is distinguished from other members of this genus by the length of the flower cluster stalk and the size of the flowers and flower lobes (Lammers 1999).

Cyanea truncata was observed in flower in December 1919 and November 1980, the last time the species was observed at that population before feral pigs extirpated it. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b; 59 FR 14482).

Historically, *Cyanea truncata* was known from Punaluu, Waikane, and Waiahole in the northern Koolau Mountains of Oahu. Two occurrences are currently known to exist in Hanaimoa Gulch on State and private lands (GDSI 2001; HINHP Database 2001).

Cyanea truncata typically grows on windward slopes and stream banks in mesic to wet forests at elevations between 54 and 705 m (177 and 2,312 ft). Associated native plant species include *Cibotium chamissoi*, *Cyrtandra calpidicarpa* (haiwale), *Cyrtandra laxiflora* (haiwale), *Cyrtandra propinqua* (haiwale), *Diospyros sandwicensis*, *Hibiscus arnottianus*, *Metrosideros polymorpha*, *Neraudia melastomifolia* (maaloa), *Pipturus albidus*, or *Pisonia umbellifera* (HINHP Database 2001; Lammers 1999; Service 1998b).

The major threats to *Cyanea truncata* are habitat degradation and predation by feral pigs; competition with the invasive nonnative plant species *Christella parasitica*, *Clidemia hirta*, *Cordyline fruticosa*, *Oplismenus hirtellus*, and *Psidium cattleianum*; predation by rats and slugs; and extinction due to naturally caused events and/or reduced reproductive vigor due to the small number of remaining individuals (Service 1998b; 59 FR 14482).

Cyrtandra crenata (Haiwale)

Cyrtandra crenata, a member of the African violet family (Gesneriaceae) and a short-lived perennial, is a shrub 1 to 2 m (3 to 7 ft) tall with few branches and leaves arranged in whorls of three, which are tufted at the end of branches. *Cyrtandra crenata* is distinguished from other species in the genus by the combination of its three-leaf arrangement, bilaterally symmetrical calyx, and brownish, hemispherical glands (Wagner *et al.* 1999).

Cyrtandra crenata has been observed in flower in June. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b; 59 FR 14482).

Historically, *Cyrtandra crenata* was known from Waikane Valley along the Waikane-Schofield Trail in the Koolau Mountains and was last observed in 1947 (HINHP Database 2001).

Cyrtandra crenata typically grows on steep slopes, in ravines, or gulches in mesic to wet forests between elevations of 328 and 779 m (1,076 and 2,555 ft) with associated native plant species such as *Dicranopteris linearis*, *Machaerina angustifolia*, and *Metrosideros polymorpha* (HINHP Database 2001; Service 1998b; Wagner *et al.* 1999).

The primary threat to *Cyrtandra crenata* is extinction due to naturally caused events and/or reduced reproductive vigor due to the species' restricted range. No individuals are known to be extant at this time (Service 1998b; 59 FR 14482).

Cyrtandra dentata (Haiwale)

Cyrtandra dentata, a member of the African violet family (Gesneriaceae) and a short-lived perennial, is a sparingly branched shrub ranging from 1.5 to 5 m (5 to 16 ft) tall with papery textured leaves. This species is distinguished from others in the genus by the number and arrangement of the flowers, the length of the bracts and flower stalks, and the shape of the leaves (Wagner *et al.* 1999).

Cyrtandra dentata has been observed in flower and fruit in May and November. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b).

Cyrtandra dentata was historically known from six occurrences in the Waianae Mountains and three occurrences in the Koolau Mountains of Oahu. Currently, this species is found only in Pahole Gulch, Kapuna Valley,

Ekahanui Gulch, Keawapilau Gulch, Kahanahaiki, Kawai Iki Gulch, Opauea Stream, and Makaleha Valley on Federal, State, city, and county lands (within TNCH's Honouliuli Preserve). The 11 known occurrences total 136 individuals (EDA Database 2001; GDSI 2001; HINHP Database 2001).

Cyrtandra dentata typically grows in gulches, slopes, stream banks, or ravines in mesic or wet forest with associated native plant species such as *Acacia koa*, *Metrosideros polymorpha*, *Pipturus albidus*, *Pisonia sandwicensis*, *Pisonia umbellifera*, *Pouteria sandwicensis*, *Syzygium sandwicensis*, or *Urera glabra*, at elevations between 255 and 953 m (836 and 3,126 ft) (HINHP Database 2001; Wagner *et al.* 1999; EDA, *in litt.* 2001).

The major threats to *Cyrtandra dentata* are competition with the nonnative plant species *Aleurites moluccana*, *Belchnum appendiculatum*, *Christella parasitica*, *Clidemia hirta*, *Psidium cattleianum*, *Psidium guajava*, and *Schinus terebinthifolius*; potential predation by rats; potential fire; and a risk of extinction from naturally occurring events (such as landslides/hurricanes/flooding) and/or reduced reproductive vigor due to the small number of extant occurrences and individuals (HINHP Database 2001; Service 1998b; 61 FR 53089).

Cyrtandra polyantha (Haiwale)

Cyrtandra polyantha, a member of the African violet family (Gesneriaceae) and a short-lived perennial, is an unbranched or few-branched shrub 1 to 3 m (3 to 10 ft) in height with leathery, elliptic, unequal leaves. *Cyrtandra polyantha* is distinguished from other species in the genus by the texture and hairiness of the leaf surfaces and the length, shape, and degree of cleft of the calyx. This species differs from *C. crenata* by the lack of short-stalked glands and by its leathery leaves, opposite leaf arrangement, and radially symmetrical calyx (Wagner *et al.* 1999).

Nothing is known about the flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors for *Cyrtandra polyantha* (Service 1998b).

Historically, *Cyrtandra polyantha* was known from the Kalihi region and from Kulepeamo Ridge above Niu Valley on the leeward (southwest) side of the southern Koolau Mountains. Currently, one occurrence with three individuals is extant on the summit ridge between Kuliouou and Waimanalo on State and private lands (HINHP Database 2001).

Cyrtandra polyantha grows on ridges in *Metrosideros polymorpha* mesic or

wet forests at elevations between 331 and 762 m (1,086 and 2,499 ft).

Cyrtandra polyantha probably grows in association with *Broussaisia arguta*, *Coprosma foliosa* (pilo), *Dicranopteris linearis*, *Machaerina angustifolia*, and *Psychotria* sp. (HINHP Database 2001; Service 1998b).

The primary threats to *Cyrtandra polyantha* are habitat degradation by feral pigs; competition with the invasive plant species *Ageratina adenophora*, *Clidemia hirta*, *Erigeron karvinskianus*, and *Melinis minutiflora*; extinction due to naturally caused events and/or reduced reproductive vigor due to the small number of remaining individuals and their restricted distribution (HINHP Database 2001; Service 1998b; 59 FR 14482).

Cyrtandra subumbellata (Haiwale)

Cyrtandra subumbellata, a member of the African violet family (Gesneriaceae) and a short-lived perennial, is a shrub 2 to 3 m (6.6 to 10 ft) tall. Papery in texture, the leaves are almost circular to egg-shaped. It is distinguished from other species in the genus by its leaf shape and texture, the number of flowers per cluster, and the length of bracts, flower stem, calyx lobes, floral tube, and styles (Wagner *et al.* 1999).

Cyrtandra subumbellata has been observed in fruit in September. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b).

Historically, *Cyrtandra subumbellata* was known from the Koolau Mountains of Oahu. Currently, there are 5 occurrences containing 12 individuals in the central Koolau Mountains at Schofield-Waikane Trail, Puu Ohulehule, and in Kaukonahua drainage on Federal, private, and State lands (EDA Database 2001; HINHP Database 2001).

Cyrtandra subumbellata typically grows on moist, forested slopes or gulch bottoms dominated by *Metrosideros polymorpha* or in mixed *Metrosideros polymorpha*-*Dicranopteris linearis*-*Acacia koa* wet forests between 345 and 790 m (1,132 and 2,591 ft) elevation. Associated native plant species include *Boehmeria grandis*, *Broussaisia arguta*, *Dryopteris* sp. (palapalai), and *Machaerina* sp. (HINHP Database 2001; Service 1998b; Wagner *et al.* 1999).

The primary threats to *Cyrtandra subumbellata* are competition with the nonnative plant species *Clidemia hirta*, impacts from military activities, predation by rats, fire, and risk of extinction from naturally occurring

events and/or reduced reproductive vigor due to the small number of extant occurrences and individuals (HINHP Database 2001; Service 1998b; 61 FR 53089).

Cyrtandra viridiflora (Haiwale)

Cyrtandra viridiflora, a member of the African violet family (Gesneriaceae) and a short-lived perennial, is a small shrub 0.5 to 2 m (1.6 to 6.6 ft) tall. This species is distinguished from others in the genus by the leaves, which are thick, fleshy, heart-shaped, and densely hairy on both surfaces (Wagner *et al.* 1999).

Cyrtandra viridiflora has been observed in flower and fruit from May through September. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b).

Historically, *Cyrtandra viridiflora* was known from scattered occurrences in the Koolau Mountains on the island of Oahu. Fifty-two plants are known from 23 occurrences at Puu Kainapuaa, Maakua-Kaipapau Ridge, Kawai Nui Drainage, Opauala Gulch, and Kawai Nui-Laie Divide (GDSI 2001; HINHP Database 2001).

Cyrtandra viridiflora is usually found on wind-blown ridge tops in cloud-covered wet forest or shrubland at elevations between 443 and 867 m (1,453 and 2,844 ft). Associated native plant species include *Broussaisia arguta*, *Cheirodendron platyphyllum* (olapa), *Dicranopteris linearis*, *Diplopterygium pinnatum*, *Dubautia* sp., *Freycinetia arborea*, *Hedyotis* sp., *Ilex anomala*, *Machaerina* sp., *Melicope* sp., *Metrosideros polymorpha*, *Metrosideros rugosa* (lehua papa), *Psychotria* sp., or *Syzygium sandwicensis* (HINHP Database 2001; Wagner *et al.* 1999; EDA, *in litt.* 2001).

The major threats to *Cyrtandra viridiflora* are habitat degradation or destruction by feral pigs, impacts from military activities, predation by rats, competition with the nonnative plant species *Clidemia hirta* and *Psidium cattleianum*, and risk of extinction from naturally occurring events and/or reduced reproductive vigor due to the small number of remaining occurrences and individuals (HINHP Database 2001; Service 1998b; 61 FR 53089).

Delissea subcordata (Oha)

Delissea subcordata, a member of the bellflower family (Campanulaceae) and a short-lived perennial, is a branched or unbranched shrub 1 to 3 m (3.5 to 10 ft) tall. This species is distinguished from others in this endemic Hawaiian genus by the shape and size of the leaves, the length of the calyx lobes and

corolla, and the hairless condition of the anthers (Lammers 1999).

Fertile plants of *Delissea subcordata* have been observed in July. An examination of herbarium specimens shows that this plant flowers throughout the year. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b).

Historically, *Delissea subcordata* was known from scattered occurrences in the Waianae and Koolau Mountains of Oahu. A specimen collected by Mann and Brigham in the 1860s and labeled from the island of Kauai is believed to have been mislabeled. *Delissea subcordata* is now known from 21 occurrences at South Huliwai Gulch, Palikea Gulch, Kaluaa Gulch, South Mohiaka Gulch, Kahanahaiki Valley, Kapuhi Gulch, South Ekahanui Gulch, Waikoekoe Gulch, Pahole Gulch, Kaawa Gulch, North Palawai Gulch, Kealia land section, Kapuna Gulch, Keawapilau Gulch, North Huliwai Gulch, Kuaokala, and Kolekole. This species is found on private, Federal, and State lands. The total number of plants is estimated to be fewer than 70 (EDA Database 2001; GDSI 2001; HINHP Database 2001).

Delissea subcordata typically grows on moderate to steep gulch slopes in mixed mesic forests between 162 and 1,025 m (531 and 3,362 ft) elevation. Associated native plant species include *Acacia koa*, *Alyxia oliviformis*, *Antidesma* sp., *Bobea* sp. (ahakea), *Chamaesyce multiformis* (akoko), *Charpentiera obovata*, *Claoxylon sandwicense*, *Diospyros hillebrandii* (lama), *Diospyros sandwicensis*, *Hedyotis acuminata*, *Metrosideros polymorpha*, *Myrsine lanaiensis*, *Nestegis sandwicensis*, *Pisonia* sp., *Pouteria sandwicensis*, *Psychotria hathewayi*, *Psydrax odorata*, or *Streblus pendulinus* (HINHP Database 2001; Service 1998b).

The major threats to *Delissea subcordata* are habitat degradation and/or destruction by pigs and goats; impacts from military activities, including road construction and housing development; predation by rats and slugs; competition with the nonnative plant species *Blechnum appendiculatum*, *Clidemia hirta*, *Grevillea robusta*, *Lantana camara*, *Melinis minutiflora*, *Oplismenus hirtellus*, *Passiflora suberosa*, *Pimenta dioica*, *Psidium cattleianum*, *Schinus terebinthifolius*, *Syzygium cumini*, and *Toona ciliata*; fire; and a risk of extinction from naturally occurring events and/or reduced reproductive vigor due to the small number of

remaining individuals (HINHP Database 2001; Service 1998b; 61 FR 53089).

Diellia falcata (NCN)

Diellia falcata, in the polypody family (Polypodiaceae) and a short-lived perennial fern, grows from a rhizome (underground stem) 1 to 5 cm (0.4 to 2 in) long and 0.5 to 2 cm (0.2 to 0.8 in) in diameter. The rhizome is covered with small black or maroon scales. This species is distinguished from others in the genus by the color and texture of its leaf stalk, the venation pattern of its fronds, the color of its scales, its rounded and reduced lower pinnae (leaflets), and its separate sori (spore clusters) arranged on marginal projections (Service 1998b; Wagner 1952).

Diellia falcata hybridizes with *Diellia unisora*. It has been observed with fronds bearing sori (spores) year-round. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b).

Historically, *Diellia falcata* was known from almost the entire length of the Waianae Mountains, from Manini Gulch to Palehua Iki, as well as from the Koolau Mountains of Oahu, from Kaipapau Valley to Aiea Gulch. This species remains in Waieli Gulch, Ekahanui Gulch, Makaleha Valley, Makaha Valley, Palikea Gulch, Makua Valley, Kaimuhole Gulch, Kuaokala-Manini Gulch, Pahole Gulch, Puu Ku Makalii, Kapuna Gulch, Mohiakea Gulch, Waianae Kai, Pualii Gulch, Napepeiauolelo Gulch, Kahanahaiki Valley, Nanakuli-Lualualei Ridge, Makua, Kamaileunu Ridge, Kaluaa Gulch, and Huliwai Gulch on Federal, State, city, county, and private lands. The 30 known occurrences contain fewer than 6,000 individuals (EDA Database 2001; GDSI 2001; HINHP Database 2001).

Diellia falcata is a terrestrial fern that typically grows in deep shade or open understory on moderate to moderately steep slopes and gulch bottoms in diverse mesic forest between 224 and 953 m (735 and 3,126 ft) elevation. Associated native species include *Acacia koa*, *Alyxia oliviformis*, *Antidesma* sp., *Asplenium kaulfussii* (kuau), *Carex meyenii* (NCN), *Charpentiera* sp., *Claoxylon sandwicense*, *Coprosma foliosa*, *Diospyros hillebrandii*, *Diplazium sandwichianum*, *Doodia kunthiana* (okupukupu), *Dryopteris unidentata*, *Elaeocarpus bifidus*, *Freycinetia arborea*, *Hedyotis terminalis*, *Hibiscus* sp., *Melicope* sp., *Metrosideros polymorpha*, *Myrsine lanaiensis*,

Nephrolepis exaltata (kupukupu), *Nestegis sandwicensis*, *Nothocestrum* sp., *Pipturus* sp., *Pisonia sandwicensis*, *Pouteria sandwicensis*, *Psychotria* sp., *Psydrax odorata*, *Sapindus oahuensis*, *Selaginella arbuscula*, *Sophora chrysophylla* (mamane), or *Xylosma* sp. (HINHP Database 2001).

The major threats to *Diellia falcata* are habitat degradation by feral goats and pigs; competition from the nonnative plant species *Aleurites moluccana*, *Ageratina riparia*, *Blechnum appendiculatum*, *Christella parasitica*, *Clidemia hirta*, *Grevillea robusta*, *Heliocarpus popayanensis*, *Kalanchoe pinnata*, *Lantana camara*, *Melinis minutiflora*, *Paspalum conjugatum*, *Passiflora ligularis* (sweet granadilla), *Passiflora suberosa*, *Pimenta dioica*, *Psidium cattleianum*, *Psidium guajava*, *Rubus argutus*, *Schefflera actinophylla* (octopus tree), *Schinus terebinthifolius*, *Syzygium cumini*, and *Toona ciliata*; and fire (HINHP Database 2001; Service 1998b; 56 FR 55770).

Diellia unisora (NCN)

Diellia unisora, a short-lived perennial in the polypody fern family (Polypodiaceae), grows from a slender, erect rhizome to reach 0.5 to 3 cm (0.2 to 1.2 in) in height and 0.5 to 1 cm (0.2 to 0.4 in) in diameter. The rhizome is covered with the bases of the leaf stalks and a few small black scales. This species is distinguished from others in the genus by a rhizome completely covered by the persisting bases of the leaf stalks and few, very small scales; by sori mostly confined to the upper pinnae margins; and by delicate fronds gradually and symmetrically narrowing toward the apex (Wagner 1952).

Diellia unisora hybridizes with *Diellia falcata*. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b).

Historically, *Diellia unisora* was known from steep, grassy, rocky slopes on the western side of the Waianae Mountains of Oahu. This species is known to be extant in the southern Waianae Mountains at South Ekahanui Gulch, Palawai Gulch, and the Pualii-Napepeiauolelo Ridge. The 4 known occurrences, which are on State and private lands, contain fewer than 800 individuals (GDSI 2001; HINHP Database 2001).

Diellia unisora is a terrestrial fern that typically grows on moderate to steep slopes or gulch bottoms in deep shade or open understory, mesic forest between 382 and 953 m (1,253 and 3,126 ft) elevation. Associated native species include *Acacia koa*, *Alyxia*

oliviformis, *Antidesma* sp., *Bidens torta*, *Carex meyenii*, *Chamaesyce multififormis*, *Coprosma* sp., *Dodonaea viscosa*, *Doryopteris unidentata*, *Eragrostis grandis* (lovegrass), *Hedyotis schlechtendahlana* (kopa), *Hedyotis terminalis*, *Metrosideros polymorpha*, *Myrsine lessertiana*, *Rumex* sp., *Psychotria* sp., or *Selaginella arbuscula* (HINHP Database 2001; 59 FR 32932).

The major threats to *Diellia unisora* are habitat degradation by feral pigs and competition from the nonnative plant species *Ageratina riparia*, *Blechnum appendiculatum*, *Clidemia hirta*, *Melinis minutiflora*, *Passiflora suberosa*, *Psidium cattleianum*, *Schefflera actinophylla*, and *Schinus terebinthifolius* (HINHP Database 2001; 59 FR 32932).

Dubautia herbstobatae (Naenae)

Dubautia herbstobatae, a member of the aster family (Asteraceae) and a short-lived perennial, is a small, spreading shrub to 50 cm (20 in) tall. *Dubautia herbstobatae* is distinguished from other species on Oahu in this endemic genus by the outer bracts of the flower heads being fused, forming a cup surrounding the florets, and by one large vein showing in each leaf (Carr 1999).

Dubautia herbstobatae is likely outcrossing and possibly self-incompatible (i.e., pollen from the same plant will not produce seed). Flowering usually occurs in May and June. Pollination is almost certainly achieved by insect activity, and fruit dispersal is probably quite localized (Service 1998b). Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors.

Dubautia herbstobatae is known to be extant in 12 occurrences in the northern Waianae Mountains, on Ohikilolo and Kamaileunu Ridges, Keaau, and Waianae Kai on State lands and land under Federal jurisdiction. Fewer than 100 individuals are known from these locations (EDA Database 2001; GDSI 2001; HINHP Database 2001).

Dubautia herbstobatae typically grows on rock outcrops, ridges, moderate slopes, or vertical cliffs in dry or mesic shrubland at elevations between 266 and 978 m (872 and 3,208 ft). Associated native species include *Artemisia australis*, *Bidens torta*, *Carex meyenii*, *Chamaesyce celastroides* (akoko), *Dodonaea viscosa*, *Eragrostis variabilis* (kawelu), *Metrosideros polymorpha*, and *Schiedea mannii* (NCN) (HINHP Database 2001; 56 FR 55770; EDA, *in litt.* 2001).

The major threats to *Dubautia herbstobatae* are habitat degradation by

feral goats and pigs; competition from the nonnative plant species *Ageratina riparia*, *Bromus mollis* (soft chess), *Grevillea robusta*, *Leucaena leucocephala*, *Melinis minutiflora*, *Melinis repens*, and *Schinus terebinthifolius*; fire; visitation and possible trampling by humans; and a risk of extinction from naturally occurring events due to the small number of remaining individuals (56 FR 55770).

Eragrostis fosbergii (Fosberg's love grass)

Eragrostis fosbergii, a member of the grass family (Poaceae), is a short-lived perennial species with stout, tufted culms (stems), which are 61 to 102 cm (24 to 40 in) long and usually arise from an abruptly bent woody base. This species is distinguished from others in the genus by its stiffly ascending flowering stalk and the long hairs on the margins of the glumes (floral bracts) and occasionally on the margins of the lemmas (floral bracts) (O'Connor 1999).

No information is available on flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b).

Historically, *Eragrostis fosbergii* was known only from the Waianae Mountains of Oahu, from the slopes of Mount Kaala, and in Waianae Kai and its associated ridges. Only four individuals are known to remain in Waianae Kai and on Kumaipo Trail in four occurrences on Federal and State lands (GDSI 2001; HINHP Database 2001).

Eragrostis fosbergii typically grows on ridge crests or moderate slopes in dry and mesic forests between 578 and 941 m (1,896 and 3,086 ft) elevation.

Associated native plant species include *Acacia koa*, *Alyxia oliviformis*, *Bidens* sp., *Chamaesyce* sp., *Dodonaea viscosa*, *Doodia* sp. (oku pukupulauui), *Eragrostis grandis*, *Melicope* sp., *Metrosideros polymorpha*, *Nephrolepis exaltata*, *Psydrax odorata*, or *Sphenomeris* sp. (pala) (HINHP Database 2001; 61 FR 53089).

The major threats to *Eragrostis fosbergii* are degradation of habitat by feral pigs and goats; competition with nonnative plant species such as *Grevillea robusta*, *Psidium cattleianum*, and *Schinus terebinthifolius*; trampling by hikers; hybridization with *Eragrostis grandis*; and a threat of extinction from random environmental events and/or reduced reproductive vigor due to the small number of remaining occurrences and individuals (HINHP Database 2001; Service 1998b; G. Koob, pers. comm., 2001).

Gardenia mannii (Nanu)

Gardenia mannii, a short-lived perennial member of the coffee family (Rubiaceae), is a tree 5 to 15 m (16 to 50 ft) tall. This species is distinguished from others in the genus by the shape and number of the calyx spurs (Wagner *et al.* 1999).

Gardenia mannii has been observed in flower and fruit in June and September. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b).

Historically, *Gardenia mannii* was known from 7 widely scattered occurrences in the Waianae Mountains and 39 occurrences distributed along almost the entire length of the Koolau Mountains of Oahu. Currently, there are 49 occurrences of *Gardenia mannii* at Haleauau Gulch, Peahinaia Ridge, Kaunala Gulch and Kaunala-Waimea Ridge, Castle Trail, Halawa Valley and Halawa-Kalauao Ridge, Moanalua Valley, Makaua-Kahana Ridge, Poamoho and Halemano Gulches, Kaluaa and Maunauna Gulches, Waimano Trail, Kawailoa Trail, Puu Hapapa and Waieli Gulch, Wiliwilinui Ridge, Koloa Stream, Waialae Nui-Kapakahi Ridge, Manaiki Valley, Laie Trail, Malaekahana-Waimea Summit Ridge, Haleauau Gulch, Schofield-Waikane Trail, Kaukonahua Gulch, Kapakahi Gulch, Manana Trail, Peahinaia Trail and Opaepa Stream, Kamana Nui Stream, Pukele, Hanaimoa Gulch, Papali Gulch, Kawai Nui, and Kaipapau Gulch. The 49 extant occurrences are on private, State, and Federal lands. The existing occurrences total between 69 and 80 plants (EDA Database 2001; GDSI 2001; HINHP Database 2001).

Gardenia mannii is usually found on moderate to moderately steep gulch slopes, ridge crests, in gulch bottoms, and on stream banks in mesic or wet forests between 82 and 1,050 m (269 and 3,444 ft) in elevation. Associated native plant species include *Acacia koa*, *Alyxia oliviformis*, *Antidesma platyphyllum*, *Bohea* sp., *Boehmeria grandis*, *Broussaisia arguta*, *Cheirodendron* sp. (NCN), *Cibotium* sp., *Coprosma foliosa*, *Dicranopteris linearis*, *Elaeocarpus* sp., *Freyinetia arborea*, *Hedyotis acuminata*, *Ilex anomala*, *Melicope* sp., *Metrosideros polymorpha*, *Perottetia sandwicensis*, *Pipturus* sp., *Pisonia* sp., *Pouteria sandwicensis*, *Psychotria mariniana*, *Syzygium sandwicensis*, and *Thelypteris* sp. (HINHP Database 2001).

The major threats to *Gardenia mannii* are habitat degradation and/or destruction by feral pigs; potential

impacts from military activities; competition with nonnative plant species such as *Clidemia hirta*, *Leptospermum scoparium*, *Passiflora suberosa*, *Psidium cattleianum*, *Psidium guajava*, *Rubus argutus*, and *Toona ciliata*; fire; and risk of extinction from random environmental events and/or reduced reproductive vigor due to the widely dispersed, small number of remaining individuals. The Kapakahi Gulch occurrence is also threatened by the black twig borer (HINHP Database 2001; Service 1998b; 61 FR 53089).

Hedyotis degeneri (NCN)

Hedyotis degeneri, a short-lived perennial member of the coffee family (Rubiaceae), is a prostrate shrub with four-sided stems and peeling, corky bark. This species can be distinguished from others in the genus on Oahu by its low-growing habit, the peeling corky layers on older stems, and the short, crowded, leafy shoots growing in the leaf axils; two varieties within the species are recognized: *Hedyotis degeneri* var. *coprosmifolia* and *Hedyotis degeneri* var. *degeneri* (Wagner *et al.* 1999).

This species has been observed in flower in June, July, and November, and in fruit in July. No further information is available on flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, or limiting factors (Service 1998b).

Historically, *Hedyotis degeneri* is known from Mt. Kaala in the northern Waianae Mountains. Variety *coprosmifolia* has not been collected since the 1980s, and no current occurrences are known. Four occurrences, totaling 60 individuals, of variety *degeneri* are known from Makaleha, Pahole Gulch, Kahanahaiki, and Alaihehe Gulch on Federal, State, city, and county lands (GDSI 2001; HINHP Database 2001; Wagner *et al.* 1999).

Hedyotis degeneri typically grows on ridge crests in diverse mesic forest between 349 and 1,083 m (1,145 and 3,552 ft) elevation. Associated native species include *Alyxia oliviformis*, *Carex meyenii*, *Chamaesyce multiflora*, *Cocculus* sp. (huehue), *Dicranopteris linearis*, *Diospyros sandwicensis*, *Dodonaea viscosa*, *Gahnia* sp. (NCN), *Hedyotis terminalis*, *Leptecophylla tameiameia* (pukiaue), *Lobelia yuccoides* (panaunau), *Lysimachia hillebrandii* (kolokolo kuahiwi), *Metrosideros polymorpha*, *Pleomele* sp., *Psychotria hathewayi*, *Psydrax odorata*, or *Wikstroemia oahuensis* (akia) (HINHP Database 2001).

The major threats to *Hedyotis degeneri* are habitat destruction by feral pigs; competition from the nonnative plant species *Ageratina adenophora*, *Blechnum appendiculatum*, *Clidemia hirta*, *Grevillea robusta*, *Melinis minutiflora*, *Psidium cattleianum*, *Psidium guajava*, *Rubus argutus*, *Schinus terebinthifolius*, and *Toona ciliata*; and a threat of extinction from random environmental events and/or decreased reproductive vigor due to the small number of extant individuals and occurrences (HINHP Database 2001).

Hedyotis parvula (NCN)

Hedyotis parvula, a short-lived perennial member of the coffee family (Rubiaceae), is a small, many-branched shrub, either upright or sprawling, with stems usually no more than 30 cm (1 ft) in length. Closely spaced, overlapping leaves that are uniform in size along the stem distinguish this species from other members of the genus on Oahu (Wagner *et al.* 1999).

Hedyotis parvula has been observed flowering in both winter and summer. The plant is found in dry areas and flowering may be induced by rain. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b).

Historically, *Hedyotis parvula* was known from the central and southern Waianae Mountains, from Makaleha Valley to Nanakuli Valley. Currently, this species is known from five locations on Federal, State, city, and county lands at Makaleha Ridge, Makua-Keaau Ridge, Lualualei-Nanakuli Ridge, Ohikilolo Ridge, and Halona. Seven occurrences totaling between 116 and 131 individuals are known (EDA Database 2001; GDSI 2001; HINHP Database 2001; Wagner *et al.* 1999).

Hedyotis parvula typically grows on and at the base of cliff faces, rock outcrops, and ledges in mesic habitat at elevations between 331 and 1,160 m (1,086 and 3,805 ft). Associated native species include *Bidens* sp., *Carex* sp., *Chamaesyce* sp., *Dodonaea viscosa*, *Eragrostis* sp. (kawelu), *Metrosideros polymorpha*, *Metrosideros tremuloides* (lehua ahihi), *Plectranthus parviflorus*, *Psydrax odorata*, or *Rumex* sp. (HINHP Database 2001; Wagner *et al.* 1999; 56 FR 55770).

The major threats to *Hedyotis parvula* are habitat degradation by feral goats and pigs; competition from the nonnative plant species *Ageratina riparia*, *Melinis minutiflora*, *Morella faya*, and *Schinus terebinthifolius*; and a threat of extinction from random environmental events and/or decreased

reproductive vigor due to the small number of individuals and occurrences (HINHP Database 2001; 56 FR 55770).

Labordia cyrtandrae (Kamakahala)

Labordia cyrtandrae, a short-lived perennial member of the logania family (Loganiaceae), is a shrub 0.7 to 2 m (2.3 to 6.6 ft) tall. This species is distinguished from others in the genus by its fleshy, hairy, cylindrical stem that flattens upon drying, the shape and length of the floral bracts, and the length of the corolla tube and lobes (Wagner *et al.* 1999).

Labordia cyrtandrae has been observed flowering from May through June, fruiting from July through August, and is sporadically fertile year-round. The flowers are functionally unisexual, and male and female flowers are on separate plants. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b).

Historically, *Labordia cyrtandrae* was known from both the Waianae and Koolau Mountains of Oahu. In the Koolau Mountains, this species extended from Kawailoa Trail to Waialae Iki, almost the entire length of the mountain range. This species currently is known only from 20 individuals in 10 occurrences in Haleauau Gulch, Mohiakea Gulch, Kaala, and Makaleha. These occurrences are on State, city, county, and private lands (EDA Database 2001; GDSI 2001; HINHP Database 2001).

Labordia cyrtandrae typically grows in shady gulches, slopes, and glens in mesic to wet forests and shrublands dominated by *Metrosideros polymorpha*, *Diplopterygium pinnatum*, and/or *Acacia koa* between the elevations of 212 and 1,233 m (695 and 4,044 ft). Associated native plant species include *Antidesma* sp., *Artemisia australis*, *Bidens* sp., *Boehmeria grandis*, *Broussaisia arguta*, *Chamaesyce* sp., *Coprosma* sp., *Cyrtandra* sp., *Dicranopteris linearis*, *Diplazium sandwicheanum*, *Dubautia plantaginea* (naenae), *Lysimachia hillebrandii*, *Peperomia membranacea* (ala ala wai nui), *Perrottetia sandwicensis*, *Phyllostegia* sp., *Pipturus albidus*, *Pouteria sandwicensis*, *Psychotria* sp., or *Rumex* sp. (HINHP Database 2001; Service 1998b).

The major threats to *Labordia cyrtandrae* are habitat degradation and/or destruction by feral pigs; potential impacts from military activities; competition with the nonnative plant species *Axonopus fissifolius*, *Clidemia hirta*, *Juncus planifolius* (NCN), *Psidium cattleianum*, *Rubus argutus*, *Setaria*

parviflora (yellow foxtail), and *Schinus terebinthifolius*; fire; and risk of extinction from random environmental events and/or reduced reproductive vigor due to the small number of remaining individuals and occurrences (HINHP Database 2001; Service 1998b).

Lepidium arbuscula (Anaunau)

Lepidium arbuscula, a short-lived perennial member of the mustard family (Brassicaceae), is a gnarled shrub 0.6 to 1.2 m (2 to 4 ft) tall. The species is distinguished from others in the genus by its height (Wagner *et al.* 1999).

Lepidium arbuscula has been observed in flower in February. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b).

Historically, *Lepidium arbuscula* was known from 10 occurrences in the Waianae Mountains on Oahu. Currently, there are a total of approximately 1,000 individuals known from 12 occurrences on Federal, State, city, and county lands at Kamaileunu Ridge, Lualualei-Nanakuli Ridge, Kapuhi Gulch, northwest of Puu Kaua, Manini Gulch, Mohiakea Gulch, Ohikilolo Ridge, Makua-Keaau Ridge, the ridge between the Paahoa and Halona subdistricts, northwest of Puu Ku Makalii, and Halona subdistrict (EDA Database 2001; GDSI 2001; HINHP Database 2001).

Lepidium arbuscula generally grows on exposed ridge tops and cliff faces in mesic and dry vegetation communities between 131 and 978 m (430 and 3,208 ft) elevation. This species is typically associated with native plant species such as *Artemisia australis*, *Bidens* sp., *Carex meyenii*, *Carex wahuensis* (NCN), *Chamaesyce multifloris*, *Dodonaea viscosa*, *Dryopteris unidentata*, *Dubautia* sp., *Eragrostis* sp., *Leptecophylla tameiameia*, *Lysimachia hillebrandii*, *Metrosideros polymorpha*, *Peperomia* sp., *Psydrax odorata*, *Rumex albescens* (huahuako), *Schiedea ligustrina* (NCN), *Sida fallax*, or *Sophora chrysophylla* (HINHP Database 2001; Service 1998b).

The primary threats to *Lepidium arbuscula* are habitat degradation and/or destruction by feral goats, potential impacts from military activities, competition with nonnative plants, and fire. The occurrence at the head of Kapuhi Gulch is also threatened by its proximity to a road (HINHP Database 2001; 61 FR 53089).

Lipochaeta lobata var. *leptophylla* (Nehe)

Lipochaeta lobata var. *leptophylla*, a member of the aster family (Asteraceae),

is a low, somewhat woody, short-lived perennial herb with arched or nearly prostrate stems that may be up to 150 cm (59 in) long. Aside from being a coastal species, this species is the only member of its genus on Oahu with four-parted disk florets. This variety has narrower leaves, spaced more closely along the stem, than those of *Lipochaeta lobata* var. *lobata*, the only other variety of the species (Wagner *et al.* 1999).

Flowering of *Lipochaeta lobata* var. *leptophylla* is probably rain-induced. Occurrences may consist of fewer distinct individuals than it appears because many plants are connected underground by the roots and are probably clones. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b).

Historically, *Lipochaeta lobata* var. *leptophylla* was known from the southern Waianae Mountains of Oahu, from Kolekole Pass to Lualualei. Currently, there are a total of 147 individuals found in 4 occurrences on State, Federal, city, and county lands at Lualualei-Nanakuli Ridge, Kauhiuhi, Puu Hapapa, Mikilua, and Kamaileunu Ridge. (EDA Database 2001; GDSI 2001; HINHP Database 2001; Wagner *et al.* 1999).

Lipochaeta lobata var. *leptophylla* typically grows on cliffs, ridges, and slopes in dry or mesic shrubland at elevations between 256 and 978 m (840 and 3,208 ft). Associated native species include *Artemisia australis*, *Bidens* sp., *Carex meyenii*, *Diospyros* sp., *Dodonaea viscosa*, *Eragrostis* sp., *Melanthera tenuis* (nehe), *Peperomia* sp., *Psydrax odorata*, and *Stenogyne* sp. (NCN) (HINHP Database 2001; EDA, *in litt.* 2001).

The major threats to *Lipochaeta lobata* var. *leptophylla* include competition from nonnative plant species such as *Ageratina adenophora*, *Ageratina riparia*, *Erigeron karvinskianus*, *Grevillea robusta*, *Kalanchoe pinnata*, *Lantana camara*, *Leucaena leucocephala*, *Melinis minutiflora*, *Passiflora suberosa*, and *Schinus terebinthifolius*; habitat degradation by feral pigs and goats; fire; and a threat of extinction from random environmental events and/or decreased reproductive vigor due to the small number of individuals and occurrences (HINHP Database 2001).

Lipochaeta tenuifolia (Nehe)

Lipochaeta tenuifolia, a member of the aster family (Asteraceae), is a low growing, somewhat woody, short-lived perennial herb with short, more or less erect branches. Its five-parted disk

florets and its deeply cut, stalkless leaves separate this species from other members of the genus (Wagner *et al.* 1999).

Lipochaeta tenuifolia has been observed flowering in April. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b).

Lipochaeta tenuifolia occurs in the northern half of the Waianae Mountains of Oahu, from Kaluakaula Gulch to Kamaileunu Ridge and east to Mt. Kaala, and northwest, southwest, southeast, and north of Puu Ku Makalii on State, Federal, city, and county lands. The 41 known occurrences contain between 759 and 1,174 individuals (EDA Database 2001; GDSI 2001; HINHP Database 2001).

Lipochaeta tenuifolia typically grows on ridgetops and bluffs in open areas, protected pockets of dry to mesic forests and shrublands, and forests dominated by *Diospyros sandwicensis* at elevations between 67 and 978 m (220 and 3,208 ft). Associated native species include *Artemisia australis*, *Bidens* sp., *Carex meyenii*, *Diospyros* sp., *Dodonaea viscosa*, *Doryopteris* sp. (kumu niu), *Dubautia* sp., *Eragrostis* sp., *Myoporum sandwicense*, *Osteomeles anthyllidifolia* (ulei), *Psydrax odorata*, *Reynoldsia sandwicensis*, *Rumex* sp., *Santalum* sp., *Sapindus oahuensis*, or *Schiedea* sp. (HINHP Database 2001; Wagner *et al.* 1999).

The major threats to *Lipochaeta tenuifolia* are habitat degradation by feral goats and pigs; competition for light and space from nonnative plant species including *Ageratina riparia*, *Aleurites moluccana*, *Blechnum appendiculatum*, *Coffea arabica* (coffee), *Grevillea robusta*, *Hyptis pectinata*, *Lantana camara*, *Leucaena leucocephala*, *Melinis minutiflora*, *Panicum maximum*, *Psidium cattleianum*, *Rivina humilis*, *Schinus terebinthifolius*, or *Toona ciliata*; and fire (HINHP Database 2001; 56 FR 55770).

Lobelia gaudichaudii ssp. *koolauensis* (NCN)

Lobelia gaudichaudii ssp. *koolauensis*, a short-lived perennial member of the bellflower family (Campanulaceae), is an unbranched, woody shrub 0.3 to 1 m (1 to 3.5 ft) tall. The species is distinguished from others in the genus by the length of the stem, the length and color of the corolla, the leaf width, the length of the floral bracts, and the length of the calyx lobes. The subspecies *koolauensis* is distinguished by the greenish or

yellowish white petals and the branched flowering stalks (Lammers 1990; 61 FR 53089).

Lobelia gaudichaudii ssp. *koolauensis* has been observed in flower in September and in fruit in December. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b).

Historically, *Lobelia gaudichaudii* ssp. *koolauensis* was known from only two occurrences in the central Koolau Mountains on Oahu. Currently, this subspecies is known from five occurrences in the central Koolau Mountains, on Federal, State, and private lands at Waimano-Waiawa Ridge, Waimano, the plateau above Sacred Falls, and Kaukonahua Gulch. The total number of plants is estimated to be fewer than 270 (EDA Database 2001; GDSI 2001; HINHP Database 2001).

Lobelia gaudichaudii ssp. *koolauensis* typically grows on moderate to steep slopes in *Metrosideros polymorpha* lowland wet shrublands and bogs at elevations between 383 and 867 m (1,256 and 2,844 ft). Associated native plant species include *Bidens* sp., *Broussaisia arguta*, *Cibotium* sp., *Dicanthelium koolauense* (NCN), *Isachne distichophylla* (ohel), *Machaerina angustifolia*, *Melicope* sp., *Sadleria pallida*, *Scaevola* sp., or *Vaccinium dentatum* (ohelo) (HINHP Database 2001; EDA, *in litt.* 2001).

The primary threats to *Lobelia gaudichaudii* ssp. *koolauensis* are habitat degradation and/or destruction by feral pigs; competition with the nonnative plant species *Axonopus fissifolius*, *Clidemia hirta*, *Pterolepis glomerata*, and *Sacciolepis indica*; trampling by hikers; landslides; and risk of extinction from random environmental events and/or reduced reproductive vigor of the few remaining individuals (HINHP Database 2001; 61 FR 53089).

Lobelia monostachya (NCN)

Lobelia monostachya, a short-lived perennial member of the bellflower family (Campanulaceae), is a prostrate woody shrub with stems 15 to 25 cm (6 to 10 in) long. The species is distinguished from others in the genus by its narrow, linear leaves without stalks and its short pink flowers (Lammers 1999).

This species has been observed in flower in May and June. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific

environmental requirements, and limiting factors (Service 1998b).

Historically, *Lobelia monostachya* was known only from the Koolau Mountains and had not been seen since its original discovery in the 1800s in Niu Valley, and in the 1920s in Manoa Valley. In 1994, Joel Lau discovered one individual in a previously unknown location in Wailupe Valley on State and private lands. Currently, one occurrence with a total of three plants is known (GDSI 2001; HINHP Database 2001).

Lobelia monostachya occurs on steep, sparsely vegetated cliffs in mesic shrubland between 44 and 614 m (144 and 2,014 ft) elevation. Associated native plant species include *Artemisia australis*, *Carex meyenii*, *Eragrostis* sp., or *Psilotum nudum* (HINHP Database 2001).

The major threats to *Lobelia monostachya* are predation by rats; competition with the nonnative plants *Ageratum riparia*, *Kalanchoe pinnata*, *Melinis minutiflora*, and *Schinus terebinthifolius*; and risk of extinction from random environmental events and/or reduced reproductive vigor due to the low number of individuals in the only known occurrence (HINHP Database 2001; 61 FR 53089).

Lobelia oahuensis (NCN)

Lobelia oahuensis, a short-lived perennial member of the bellflower family (Campanulaceae), is a stout, erect, unbranched shrub 1 to 3 m (3 to 10 ft) tall. *Lobelia oahuensis* differs from other members of the genus in having the following combination of characters: Erect stems 1 to 3 m (3 to 10 ft) long, dense rosettes of leaves at the end of stems, lower leaf surfaces covered with coarse grayish or greenish hairs, and flowers 42 to 45 millimeters (mm) (1.7 to 1.8 in) long (Lammers 1999).

This species has been observed in flower during November. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b).

Historically, *Lobelia oahuensis* was known from Kahana Ridge, Kipapa Gulch, and the southeastern Koolau Mountains of Oahu. The 12 current occurrences totaling 42 individuals are located on private, State, and Federal lands. These occurrences are on Mt. Olympus, Konahuanui summit, Waikakalaua-Waikane Ridge, Puu o Kona, the summit area between Aiea and Halawa Valley, Puu Keahiakahoe and the summit ridge south of Puu Keahiakahoe, Waialae Nui-Waimanalo and Kapakahi-Waimanalo, Puu Kalena,

and Eleao (EDA Database 2001; GDSI 2001; HINHP Database 2001).

Lobelia oahuensis grows on steep slopes between elevations of 415 and 959 m (1,361 and 3,146 ft) on summit cliffs in cloudswet wet forests or in lowland wet shrubland that is frequently exposed to heavy wind and rain. Associated native plant species include *Bidens* sp., *Broussaisia arguta*, *Cheirodendron trigynum* (olapa), *Cibotium* sp., *Dicranopteris linearis*, *Dubautia laxa*, *Freycinetia arborea*, *Hedyotis* sp., *Labordia hosakana* (kamakahala), *Lycopodiella cernua* (wawae iole), *Machaerina angustifolia*, *Melicope* sp., *Metrosideros polymorpha*, *Peperomia* sp., *Phyllostegia* sp., *Sadleria squarrosa* (apuu), *Scaevola* sp., *Syzygium sandwicensis*, *Vaccinium* sp., or *Wikstroemia* sp. (HINHP Database 2001; Lammers 1999; Service 1998b).

The primary threats to *Lobelia oahuensis* are competition with the nonnative plant species *Clidemia hirta*, *Erigeron karvinskianus*, *Paspalum conjugatum*, *Rubus argutus*, and *Rubus rosifolius*, and habitat degradation by feral pigs (HINHP Database 2001).

Melicope lydgatei (Alani)

Melicope lydgatei, a long-lived perennial member of the citrus family (Rutaceae), is a small shrub that has leaves arranged oppositely or in threes. The species' leaf arrangement, the amount of fusion of the fruit sections, and the hairless exocarp (outermost layer of the fruit wall) and endocarp (innermost layer) distinguish it from other species in the genus (Wagner *et al.* 1999).

This species has been observed in flower in May and in fruit from June to July. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b).

Melicope lydgatei was formerly known throughout the Koolau Mountains of Oahu from Hauula to Kahana, Kipapa Gulch to Waimano, and Kalihi Valley to Wailupe Valley. Eighteen occurrences remain within its historical range on State and private lands along Poamoho Trail, Peahinaia Trail, and Manana Trail (EDA Database 2001; GDSI 2001; HINHP Database 2001).

Melicope lydgatei typically grows in association with *Acacia koa*, *Bobea elatior*, *Dicranopteris linearis*, *Metrosideros polymorpha*, *Psychotria* sp., or *Syzygium sandwicensis* on ridges in mesic and wet forests at elevations between 349 and 671 m (1,145 and 2,201 ft) (HINHP Database 2001; Service 1998b; EDA, *in litt.* 2001).

The primary threat to *Melicope lydgatei* is a threat of extinction due to random environmental events and/or reduced reproductive vigor because of the small number of occurrences remaining (59 FR 14482).

Melicope saint-johnii (Alani)

Melicope saint-johnii, a long-lived perennial member of the rue family (Rutaceae), is a slender tree 3 to 6 m (10 to 20 ft) tall. This species is distinguished from others in the genus by the combination of the hairless exocarp, hairy endocarp, densely hairy petals, and sparsely hairy to smooth sepals (Stone *et al.* 1999).

No information exists on flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b).

Historically, *Melicope saint-johnii* was known from both the Waianae and Koolau Mountains at Makaha to Mauna Kapu in the Waianae Mountains and Papali Gulch in Hauula, Manoa-Aihualama, Wailupe, and Niu Valley in the Koolau Mountains. Today 6 occurrences of this species are found on Federal and private lands from the region between Puu Kaua and Puu Kanehoa to Mauna Kapu in the southern Waianae Mountains, with a total of fewer than 170 individuals (GDSI 2001; HINHP Database 2001).

Melicope saint-johnii typically grows on mesic forested ridges and gulch bottoms between the elevation of 240 and 953 m (787 and 3,126 ft). Associated native plant species include *Alyxia oliviformis*, *Artemisia australis*, *Bidens torta*, *Carex wahuensis*, *Coprosma longifolia*, *Eragrostis* sp., *Hedyotis schlechtendahliana*, *Labordia kaalae* (kamakahala), *Lysimachia hillebrandii*, *Metrosideros polymorpha*, *Panicum beechyi* (panic grass), *Pipturus albidus*, *Pittosporum* sp., *Pleomele halapepe* (hala pepe), *Psychotria hathewayi*, or *Rumex albescens* (HINHP Database 2001).

The primary threats to *Melicope saint-johnii* are habitat degradation and/or destruction by feral goats and pigs; potential predation by the black twig borer; potential fire; competition with nonnative plant species such as *Ageratina adenophora*, *Ageratina riparia*, *Clidemia hirta*, *Grevillea robusta*, *Lantana camara*, *Melinis minutiflora*, *Morella faya*, *Passiflora suberosa*, *Passiflora* sp., *Psidium cattleianum*, and *Schinus terebinthifolius*; and risk of extinction due to naturally occurring events and/or reduced reproductive vigor because of the few individuals remaining and their restricted distribution (HINHP

Database 2001; Service 1998b; 61 FR 53089).

Myrsine juddii (Kolea)

Myrsine juddii, short-lived perennial a member of the myrsine family (Myrsinaceae), is a many branched shrub ranging from 1 to 2 m (3.5 to 6.6 ft) tall. This species is distinguished from others in the genus by the hairiness of the lower leaf surface and the shape of the leaf base. In addition, the hairy leaves distinguish this species from all other species of *Myrsine* on Oahu (Wagner *et al.* 1999).

Myrsine juddii has been reported from only three occurrences in the central Koolau Mountains: the North Kaukonahua-Kahana Summit divide, Peahinaia Trail, and Puu Kainapuaa to Poamoho Trail. These occurrences are found on State and Federal lands. The total number of individuals is thought to be around 5,000 (GDSI 2001; HINHP Database 2001).

Myrsine juddii typically grows on ridge crests and gulch slopes in wet forests and shrublands dominated by *Metrosideros polymorpha* or a mixture of *Metrosideros polymorpha* and *Dicranopteris linearis* at elevations between 384 and 867 m (1,260 and 2,844 ft). Associated native plant species include *Cheirodendron platyphyllum*, *Cheirodendron trigynum*, *Machaerina* sp., *Melicope clusiifolia* (kolokolo mokihana), *Psychotria marianiana*, and *Syzygium sandwicensis* (GDSI 2001; HINHP Database 2001; Service 1998b; 61 FR 53089; EDA, *in litt.* 2001).

The primary threats to *Myrsine juddii* are habitat degradation and/or destruction by feral pigs; potential impacts from military activities; competition with nonnative plant species such as *Clidemia hirta* and *Psidium cattleianum*; and a risk of extinction from naturally occurring events and/or reduced reproductive vigor due to the small number of extant occurrences (HINHP Database 2001; Service 1998b; 61 FR 53089).

Neraudia angulata (NCN)

Neraudia angulata, a short-lived perennial member of the nettle family (Urticaceae), is an erect shrub up to 3 m (10 ft) tall. This species is distinguished from other species in its genus by the conspicuously angled, ridged, fleshy calyx in the female flower. There are two varieties, *N. angulata* var. *angulata* and *N. angulata* var. *dentata*, that differ in the types of leaf hairs on the lower surface of the leaves and the type of leaf margin (Wagner *et al.* 1999).

Neraudia angulata flowers and fruits from early spring to summer. Fruits

mature in about one month. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b).

Historically, *Neraudia angulata* was known from almost the entire length of the Waianae Mountains, from Kaluakauila Gulch nearly to Puu Manawahua. This species is currently known from Kaluakauila Gulch along Makua-Keaau Ridge to Makaha-Waianae Kai Ridge, on Federal, State, city, county, and private lands. The 27 known occurrences are estimated to comprise approximately 51 individuals (EDA Database 2001; GDSI 2001; HINHP Database 2001).

Neraudia angulata var. *angulata* typically grows on slopes, ledges, or gulches in lowland mesic or dry forest between 189 and 978 m (620 and 3,208 ft) elevation. Associated native plant species include *Artemisia australis*, *Bidens* sp., *Carex meyenii*, *Diospyros* sp., *Dodonaea viscosa*, *Hibiscus* sp., *Nestegis sandwicensis*, *Pisonia sandwicensis*, *Psydrax odorata*, or *Sida fallax*. *Neraudia angulata* var. *dentata* typically grows on cliffs, rock embankments, gulches, and slopes in mesic or dry forests between 110 and 978 m (361 and 3,208 ft) elevation. Associated native plant species include *Alyxia oliviformis*, *Antidesma pulvinatum*, *Artemisia australis*, *Bidens torta*, *Canavalia* sp., *Carex* sp., *Charpentiera* sp., *Diospyros hillebrandii*, *Diospyros sandwicensis*, *Dodonaea viscosa*, *Eragrostis* sp., *Hibiscus* sp., *Metrosideros polymorpha*, *Myrsine lanaiensis*, *Nestegis sandwicensis*, *Pisonia* sp., *Psydrax odorata*, *Rauvolfia sandwicensis*, *Sapindus oahuensis*, *Sida fallax*, or *Streblus pendulinus* (HINHP Database 2001; Service 1998b; 56 FR 55770; EDA, *in litt.* 2001).

The major threats to *Neraudia angulata* var. *angulata* are habitat degradation by feral goats and pigs; potential impacts from military activities; competition from the nonnative plant species *Ageratina riparia*, *Melinis minutiflora*, *Passiflora* sp., *Psidium cattleianum*, and *Schinus terebinthifolius*; fire; and a risk of extinction from naturally occurring events due to the small number of extant individuals. The major threats to *Neraudia angulata* var. *dentata* are habitat degradation by feral pigs and goats; fire; competition with the nonnative plant species *Ageratina adenophora*, *Ageratina riparia*, *Aleurites moluccana*, *Blechnum appendiculatum*, *Erigeron karvinskianus*, *Leucaena leucocephala*,

Melinis sp., *Montanoa hibiscifolia*, *Oplismenus hirtellus*, *Passiflora suberosa*, *Pimenta dioica*, *Psidium guajava*, *Schefflera actinophylla*, *Schinus terebinthifolius*, *Syzygium cumini*, and *Tecoma castanifolia* (yellow elder); and a risk of extinction from naturally occurring events due to the small number of extant individuals (HINHP Database 2001; Service 1998b; 56 FR 55770).

Phyllostegia hirsuta (NCN)

Phyllostegia hirsuta, a short-lived perennial member of the mint family (Lamiaceae), is an erect subshrub or vine with stems densely covered with coarse or stiff hairs. This species is distinguished from others in the genus by the texture, hairiness, size of the leaves, and the length of the upper bracts (Wagner *et al.* 1999).

Phyllostegia hirsuta has been observed in flower in February and in fruit in June. Cultivated material flowered in July. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b).

Historically, *Phyllostegia hirsuta* was known from widespread locations in the Waianae and Koolau Mountains on Oahu. Currently, this species is found in 26 occurrences with a total of between 214 and 227 individuals from the ridge between Makaha and Waianae Kai to the south fork of North Palawai Gulch in the Waianae Mountains and from Kawainui Gulch in Kawaiolo Training Area to south Kaukonahua drainage in the Koolau Mountains. These occurrences are on Federal, State, city, county, and private lands (EDA Database 2001; GDSI 2001; HINHP Database 2001).

Phyllostegia hirsuta is usually found on steep, shaded slopes, cliffs, ridges, gullies, and stream banks in mesic or wet forests dominated by *Metrosideros polymorpha* or a mixture of *Metrosideros polymorpha* and *Dicranopteris linearis* between 195 and 1,202 m (640 and 3,943 ft) elevation. Associated native plant species include *Antidesma platyphyllum*, *Astelia* sp. (painiu), *Broussaiea arguta*, *Chamaesyce multiflora*, *Cibotium* sp., *Claoxylon sandwicense*, *Clermontia kekeana* (oha wai), *Coprosma longifolia*, *Cyanea membranacea*, *Cyrtandra waianaeensis*, *Diplazium sandwichianum*, *Dryopteris unidentata*, *Dubautia laxa*, *Dubautia sherffiana* (naenae), *Elaeocarpus bifidus*, *Freycinetia arborea*, *Hedyotis schlechtendahlana*, *Hedyotis terminalis*, *Hibiscus* sp., *Ilex anomala*, *Labordia kaalae*, *Liparis hawaiiensis* (awapuhiakanalao), *Lysimachia*

hillebrandii, *Machaerina angustifolia*, *Melicope* sp., *Myrsine lessertiana*, *Myrsine sandwicensis* (kolea lau nui), *Neraudia* sp. (NCN), *Nothocestrum* sp., *Perottetia sandwicensis*, *Phyllostegia grandiflora* (kapana), *Pipturus* sp., *Pisonia* sp., *Pleomele* sp., *Pouteria sandwicensis*, *Psychotria* sp., *Rumex albescens*, *Scaevola gaudichaudiana* (naupaka kuahiwi), *Streblus pendulinus*, *Zanthoxylum kauaense* (ae), or native ferns (HINHP Database 2001; Service 1998b; 61 FR 53089).

The primary threats to *Phyllostegia hirsuta* are habitat degradation and/or destruction by feral pigs; potential impacts from military activities; rockslides; predation by rats; and competition with *Adiantum raddianum*, *Athyrium* sp. (NCN), *Axonopus fissifolius*, *Blechnum appendiculatum*, *Buddleia asiatica*, *Clidemia hirta*, *Drymaria cordata* (pipili), *Lantana camara*, *Melinis minutiflora*, *Passiflora suberosa*, *Paspalum conjugatum*, *Physalis peruviana* (poha), *Pimenta dioica*, *Psidium cattleianum*, *Rubus argutus*, *Rubus rosifolius*, or *Schinus terebinthifolius* (HINHP Database 2001).

Phyllostegia kaalaensis (NCN)

Phyllostegia kaalaensis, a member of the mint family (Lamiaceae), is a short-lived perennial herb. The egg-shaped leaves are 5 to 13 cm (2 to 5 in) long. The species is distinguished from others of the genus by the spreading, pointed teeth on the leaf edges and by the hairs along the margins of the calyx and bracts (Wagner *et al.* 1999).

No information is available on flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b).

Phyllostegia kaalaensis was formerly known from only six scattered locations in the Waianae Mountains of Oahu. Currently, this species is known from 7 occurrences containing a total of fewer than 45 plants, in Waianae Kai, Pahole Gulch, central Ekahanui Gulch, Ekahanui Gulch, and Palikea Gulch. These occurrences are on State and private lands (GDSI 2001; HINHP Database 2001).

Phyllostegia kaalaensis is found on gulch slopes and bottoms and on almost vertical rock faces in mesic forest or *Sapindus oahuensis* forest between 374 and 796 m (1,227 and 2,611 ft) elevation. Associated native plant species include *Antidesma platyphyllum*, *Claoxylon sandwicense*, *Diplazium sandwichianum*, *Freycinetia arborea*, *Hibiscus* sp., *Myrsine lanaiensis*, *Myrsine lessertiana*, *Neraudia melastomifolia*, *Pipturus albidus*, *Pouteria sandwicensis*,

Psychotria hathewayi, *Streblus pendulinus*, or *Urera glabra* (HINHP Database 2001).

The major threats to *Phyllostegia kaalaensis* are habitat degradation and/or destruction by feral pigs and goats; fire; trail clearing; competition with the nonnative plant species *Ageratina adenophora*, *Aleurites moluccana*, *Blechnum appendiculatum*, *Buddleia asiatica*, *Christella parasitica*, *Clidemia hirta*, *Cordyline fruticosa*, *Lantana camara*, *Oplismenus hirtellus*, *Passiflora edulis* (passion fruit), *Passiflora ligularis*, *Passiflora suberosa*, *Psidium cattleianum*, *Psidium guajava*, *Rubus rosifolius*, *Schinus terebinthifolius*, and *Toona ciliata*; and risk of extinction from naturally occurring events and/or reduced reproductive vigor due to the small number of occurrences and individuals (HINHP Database 2001; Service 1998b; 61 FR 53089).

Pritchardia kaalae (Loulou)

Pritchardia kaalae, a long-lived perennial member of the palm family (Arecaceae), is a single-stemmed palm up to 5 m (16 ft) tall. The waxy, hairless leaves are thin and papery or thick and leathery. Sometimes small points, dots, or linear, rusty scales are scattered on the lower leaf surface. *Pritchardia kaalae* is distinguished from other members of the genus by the hairless or scaly leaves (Read and Hodel 1999).

Pritchardia kaalae plants have been observed in fruit in April, August, and October and may fruit throughout the year. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b).

Historically, *Pritchardia kaalae* was known from scattered occurrences in the central and north-central Waianae Mountains of Oahu. Currently, 6 occurrences are known from Manuwai Gulch, East Makaleha, Kaumokunui Gulch, Waianae Kai-Haleauau summit divide, Makua-Keaau Ridge and Makaha Valley, totaling about 200 individuals. These occurrences are located on Federal, State, city, and county lands (EDA Database 2001; GDSI 2001; HINHP Database 2001).

Pritchardia kaalae is typically found on steep slopes and gulches in mesic forest or shrubland between elevations of 421 and 1,123 m (1,381 and 3,683 ft). Associated native plant species include *Bidens* sp., *Dodonaea viscosa*, *Dubautia* sp., *Eragrostis* sp., *Metrosideros polymorpha*, *Metrosideros tremuloides*, *Myrsine* sp., *Pipturus* sp., or *Tetraplasandra* sp. (ohe ohe) (HINHP

Database 2001; Service 1998b; 61 FR 53089; EDA, *in litt.* 2001).

Major threats to *Pritchardia kaalae* are habitat degradation by feral pigs and goats; fruit predation by rats; potential impacts from military activities; competition with the nonnative plant species *Ageratina adenophora*, *Rubus argutus*, and *Schinus terebinthifolius*; potential fire; and risk of extinction from naturally occurring events and/or reduced reproductive vigor due to the small number of occurrences (HINHP Database 2001; Service 1998b; 61 FR 53089).

Sanicula mariversa (NCN)

Sanicula mariversa, a short-lived perennial member of the parsley family (Apiaceae), is an upright herb, 40 to 70 cm (16 to 28 in) tall, that produces a caudex (a single branched stem from a sturdy base) growing just beneath the surface of the soil. The larger size of the plant and basal leaves, the color of the flower petals, and the hooked prickles on the fruit separate this species from others of the genus in Hawaii (Constance and Affolter 1999).

Sanicula mariversa is known to flower from February through May, and fruits can be found until August. Dry fruits remain on the plant for a long time and may persist beyond August. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b).

Historically, *Sanicula mariversa* was known from the central Waianae Mountains from Makua-Keaau Ridge to Kalua-Lualualei Summit Ridge. This species is now extant on Ohikilolo Ridge, Keaau-Makaha Ridge, Kamaileunu Ridge, and northwest of Puu Kanehoa on Federal, State, city, and county lands. The 4 known occurrences contain approximately 170 individuals (EDA Database 2001; GDSI 2001; HINHP Database 2001).

Sanicula mariversa typically grows on well-drained, dry slopes and rock faces in mesic shrublands and open grassy areas at elevations between 582 and 978 m (1,909 and 3,208 ft). Associated native species include *Bidens torta*, *Carex meyenii*, *Doryopteris* sp., *Eragrostis* sp., *Metrosideros polymorpha*, or *Metrosideros tremuloides* (HINHP Database 2001; EDA, *in litt.* 2001).

The major threats to *Sanicula mariversa* are habitat degradation by feral goats; fire; erosion; competition from the nonnative plant species *Ageratina riparia*, *Erigeron karvinskianus*, *Melinis minutiflora*, *Schinus terebinthifolius*, and

Stachytarpheta dichotoma; trampling by humans on or near trails; and the risk of extinction due to the small number of occurrences (HINHP Database 2001; Service 1998b; 56 FR 55770).

Schiedea kaalae (NCN)

Schiedea kaalae, a short-lived perennial member of the pink family (Caryophyllaceae), has a short woody caudex less than 20 cm (8 in) long. This species can be distinguished from other members of its genus by its very short stems and its thick leaves with one conspicuous vein (Wagner *et al.* 1999).

This plant has been observed in flower from March through June. Based on field and greenhouse observations, *Schiedea kaalae* has bisexual flowers. A series of experimental self-pollinations, within-population crosses, and crosses among occurrences has demonstrated that *Schiedea kaalae* experiences moderately strong inbreeding depression. These results indicate that reductions in population size could result in expression of inbreeding depression among progeny, with potentially deleterious consequences for the long-term persistence of this species. Consistent with the evidence for inbreeding depression, *Schiedea kaalae* appears to be an out-crossing species. Under greenhouse conditions, flowers do not set seed unless hand-pollinated. In the field, this species was observed being visited by the introduced syrphid fly, *Simosyrphus grandicornis*. The fly did not appear to be foraging for nectar but may have been feeding on pollen. Individuals of *Schiedea kaalae* appear to be long-lived, but there is no evidence of regeneration from seed under field conditions. Seedlings of *Schiedea kaalae*, like those of other *Schiedea* species in mesic or wet sites, are apparently consumed by introduced slugs and snails, which have been observed feeding on *Schiedea membranacea*, a mesic forest species from Kauai. In contrast, *Schiedea* occurring in dry areas produce abundant seedlings following winter rains, presumably because dry areas have fewer nonnative predators. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b; Weller and Sakai, unpublished data).

Historically, *Schiedea kaalae* was known from the north-central and south-central Waianae Mountains and the northern Koolau Mountains of Oahu. This species remains on State and private lands at Pahole Gulch, Kaluaa Gulch, Puu Kaa, Palawai Gulch, Maakua Gulch, Huliwai Gulch, and

Makaua Stream. The 7 known occurrences contain only 49 individuals (GDSI 2001; HINHP Database 2001).

Schiedea kaalae typically grows in deep shade on steep slopes, cliffs, and stream banks in diverse mesic and wet forests at elevations between 64 and 869 m (210 and 2,850 ft). Associated native species include *Alyxia oliviformis*, *Athyrium arnottii* (hoio), *Athyrium sandwichianum*, *Boehmeria grandis*, *Charpentiera* sp., *Claoxylon sandwicense*, *Cyrtandra calpidicarpa*, *Cyrtandra laxiflora*, *Diospyros hillebrandii*, *Dryopteris unidentata*, *Freycinetia arborea*, *Hedyotis acuminata*, *Nothoecstrum longifolium* (aiea), *Pipturus albidus*, *Pisonia sandwicensis*, *Pisonia umbellifera*, *Pouteria sandwicensis*, *Psychotria hathewayi*, *Selaginella arbuscula*, or *Xylosma hawaiiense* (maua) (HINHP Database 2001; Service 1998b).

The major threats to *Schiedea kaalae* are habitat degradation by feral pigs and goats; competition from the nonnative plant species *Ageratina adenophora*, *Ageratina riparia*, *Blechnum appendiculatum*, *Christella parasitica*, *Clidemia hirta*, *Cordyline fruticosa*, *Melinis minutiflora*, *Morella faya*, *Oplismenus hirtellus*, *Passiflora suberosa*, *Psidium cattleianum*, *Psidium guajava*, *Rubus rosifolius*, and *Schinus terebinthifolius*; fire; predation by introduced slugs and snails; and a risk of extinction from naturally occurring events and/or reduced reproductive vigor due to the small number of remaining individuals (HINHP Database 2001; Service 1998b).

Schiedea kealiae (Ma oli oli)

Schiedea kealiae, a short-lived perennial member of the pink family (Caryophyllaceae), is a subshrub with weakly ascending to sprawling stems that form loose clumps. The species is distinguished from others of this endemic Hawaiian genus by the length of the sepals and nectaries and by the stalkless glands found only on the flowering stalk (Wagner *et al.* 1999).

Schiedea kealiae has been observed in flower in December. A series of self-pollinations, within-population crosses, and crosses among occurrences has demonstrated that many related *Schiedea* species experience moderately strong inbreeding depression. These results indicate that reductions in population size could result in expression of inbreeding depression among progeny, with potentially deleterious consequences for the long-term persistence of the species. Individuals of *Schiedea kealiae* appear to be long-lived; however, there is no evidence of regeneration from seed

under field conditions. Seedlings of *Schiedea* species occurring in mesic or wet sites are apparently consumed by introduced slugs and snails, which have been observed feeding on *Schiedea membranacea*, a mesic forest species from Kauai. In contrast, *Schiedea* occurring in dry areas produce abundant seedlings following winter rains, presumably because dry areas have fewer nonnative predators. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b; Weller and Sakai, unpublished data).

Historically, *Schiedea kealiae* was known from the northern Waianae Mountains and one collection from the Palikea area, near the southern end of the same mountain range. Currently, 4 occurrences totaling between 265 and 315 plants are located on the cliffs above Dillingham Airfield and Camp Erdman and at Kaena Point at the northern end of the Waianae Mountains. These occurrences are on private and State lands, as well as State lands under Federal jurisdiction (Army 2001b; GDSI 2001; HINHP Database 2001).

Schiedea kealiae is usually found on steep slopes and cliff faces and bases in dry remnant *Erythrina sandwicensis* forest at elevations between 46 and 341 m (151 and 1,118 ft). Associated native plant species include *Bidens* sp., *Hibiscus arnottianus*, *Lepidium bidentatum* (anaunau), *Lipochaeta remyi* (nehe), *Myoporum sandwicense*, *Plumbago zeylanica*, *Psydrax odorata*, *Sicyos* sp. (anunu), or *Sida fallax* (HINHP Database 2001).

The major threats to *Schiedea kealiae* are competition with the nonnative plant species *Leucaena leucocephala*, *Panicum maximum*, and *Schinus terebinthifolius*; predation by introduced slugs and snails; lack of a pollinator; and risk of extinction from naturally occurring events and/or reduced reproductive vigor due to the small number of existing occurrences. The Kaena Point occurrence is additionally threatened by naturally occurring rock slides and fire (HINHP Database 2001; Service 1998b; 61 FR 53089).

Silene perlmannii (NCN)

Silene perlmannii, a member of the pink family (Caryophyllaceae), is a short-lived perennial plant with stems that are woody at the base. It usually is much branched from the base and often forms clumps. It is the only species of the genus on Oahu and can be distinguished from other *Silene* species by its white petals and a calyx that is

more than 19 mm (0.7 in) long and densely covered with short hairs (Wagner *et al.* 1999).

Silene perlmanii flowers in the spring, depending on climatic conditions. Flowers last for one day. Fruits develop in a few weeks. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b).

Silene perlmanii was discovered in the 1980s and was known from a few individuals in two occurrences in the southern Waianae Mountains on Federal and privately owned lands. The occurrences were about 1.6 km (1 mi) apart at Palikea and Palawai Gulch. Since December of 1997, no individuals are known to be extant in the wild. Currently, this species is known only from individuals under propagation at the National Tropical Botanical Garden (G. Koob, pers. comm. 2002; GDSI 2001; HINHP Database 2001; Service 1998b; 56 FR 55770).

Silene perlmanii typically grew on steep rocky slopes in *Acacia koa*-*Metrosideros polymorpha* lowland mesic forest at elevations between 493 and 919 m (1,617 and 3,014 ft) (HINHP Database 2001; Service 1998b; 56 FR 55770).

The major threats to *Silene perlmanii* are competition from the nonnative plant species *Ageratina adenophora*, *Erigeron karvinskianus*, *Melinis minutiflora*, *Morella faya*, *Passiflora suberosa*, and *Schinus terebinthifolius*; habitat degradation by feral pigs; and the risk of extinction from naturally occurring events and reduced reproductive vigor due to the small number of individuals believed to be extinct (HINHP Database 2001; Service 1998b; 56 FR 55770).

Stenogyne kanehoana (NCN)

Stenogyne kanehoana is a climbing vine in the mint family (Lamiaceae) with stems weakly four-angled, hairy, and 1 to 2 m (3 to 6 ft) long. *Stenogyne kanehoana* is distinguished from the only other member of the genus occurring on Oahu, *S. kaalae*, primarily by the size and color of its flowers. The flowers of *S. kanehoana* are large, white to yellow, and tipped in pink, while those of *S. kaalae* are small and deep purple (Weller and Sakai 1999).

Stenogyne kanehoana generally flowers from February through March, but flowering depends on precipitation, and flowers have been noted from January to as late as April. Fruits mature within six weeks. The lifespan of this species appears to be about seven to 12 years. Little else is known about its flowering cycles, pollination vectors,

seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b).

Stenogyne kanehoana was known from the east ridge of Puu Kanehoa in the Waianae Mountains, near the summit of the ridge connecting Puu Kanehoa with Puu Hapapa to the north and Puu Kaua to the south, a distance totaling approximately 2.8 km (1.7 mi). This population consisting of two plants near the summit of Puu Kanehoa on privately owned land was found dead recently. An additional occurrence in Kaluaa Gulch was discovered in 2000 by Joan Yoshioka of TNCH. This occurrence consists of one to six individual plants and is located on privately owned land (GDSI 2001; HINHP Database 2001; Service 1998b; 57 FR 20592).

The remnant occurrence of *Stenogyne kanehoana* is found in lowland mesic forest between 559 and 1,168 m (1,834 and 3,831 ft) elevation. Associated native plant species include *Acacia koa*, *Alyxia oliviformis*, *Bidens* sp., *Chamaesyce* sp., *Cibotium* sp., *Freycinetia arborea*, *Metrosideros polymorpha*, *Psychotria* sp., or *Scaevola* sp. (HINHP Database 2001).

The major threats to *Stenogyne kanehoana* are habitat degradation and competition for space, water, light, and nutrients by the nonnative species *Clidemia hirta*, *Paspalum conjugatum*, *Passiflora suberosa*, *Psidium cattleianum*, and *Schinus terebinthifolius*. The extremely small number of individual plants and their restricted distribution increases the potential for extinction from naturally occurring events. Other potential threats that have been suggested include fire and deforestation, but, at present, these probably are not serious threats to the species. Habitat degradation by feral pigs, predation by the two spotted leafhopper, and trampling by hikers are also thought to be threats to this species (HINHP Database 2001; Service 1998b; 57 FR 20592).

Tetramolopium filiforme (NCN)

Tetramolopium filiforme, a short-lived perennial member of the aster family (Asteraceae), is a dwarf shrub from 5 to 15 cm (2 to 6 in) tall with complexly branched stems. This species is distinguished from the other extant species on Oahu by its separate male and female flowers both on the same plant and its inflorescence of one to four heads (Lowrey 1999).

In cultivation, *Tetramolopium filiforme* germinates in about three weeks. Fifteen weeks after germination, the plants are approximately 9 cm (3.5 in) high and produce their first buds.

The first blossoms are noted about 18 weeks after germination. During growth, an inflorescence forms at the apex of each shoot while new shoots develop laterally. *Tetramolopium filiforme* is relatively short-lived, usually living fewer than five years. In the wild, it usually flowers in the late winter or spring but flowering can also be induced by heavy rainfall. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b).

Historically, *Tetramolopium filiforme* was known from the northern Waianae Mountains, from Ohikilolo Ridge, Keaau Valley, and Makaha Valley. This species remains in Keaau Valley, Kahanahaiki Valley, Makua-Keaau Ridge, Lualualei, Waianae Kai, and Puu Kawiwi on Federal, State, city, and county lands. The 21 known occurrences are estimated to contain approximately 253 individuals (EDA Database 2001; GDSI 2001; HINHP Database 2001).

Tetramolopium filiforme typically grows on dry cliff faces and ridges in dry and mesic forests at elevations of 247 to 978 m (810 to 3,208 ft).

Associated native species include *Artemisia australis*, *Bidens torta*, *Carex meyenii*, *Dodonaea viscosa*, *Peperomia tetraphylla* (ala ala wai nui), *Schiedea* sp., or *Sida fallax* (HINHP Database 2001).

The major threats to *Tetramolopium filiforme* are habitat degradation by feral goats; competition from the nonnative plant species *Acacia confusa*, *Ageratina riparia*, *Erigeron karvinskianus*, *Kalanchoe pinnata*, *Lantana camara*, *Leucaena leucocephala*, *Melinis minutiflora*, *Melinis repens*, and *Schinus terebinthifolius*; fire; potential impacts from military activities; trampling or collection by humans on or near trails; and a risk of extinction from naturally occurring events and/or reduced reproductive vigor due to the small number of remaining occurrences (HINHP Database 2001; Service 1998b).

Tetraplasandra gymnocarpa (Oheohe)

Tetraplasandra gymnocarpa, a long-lived perennial member of the ginseng family (Araliaceae), is a tree 2.5 to 10 m (8 to 33 ft) tall with 7 to 21 leathery, oval to elliptic leaflets per leaf. *Tetraplasandra gymnocarpa* is distinguished from all other species in the genus in that its ovary appears placed fully above the base of the flower (Lowrey 1999).

This species has been observed in flower in November 1991 and in fruit in May, September, and November. Little else is known about its flowering cycles,

pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b).

Tetraplasandra gymnocarpa was historically known from Punaluu, Waikakalaua Gulch, Mount Olympus, and the region between Niu and Wailupe, all in the Koolau Mountains of Oahu. This species was also sighted in the Waianae Range at Palikea in 1954. Currently, 30 occurrences are scattered along the summit ridges of the Koolau Mountains from the region of Paumalu at the northern extreme to Kulioou and Waimanalo at the southeasternmost point, on Federal, State, city, and county lands. Fewer than 100 individuals are known (EDA Database 2001; GDSI 2001; HINHP Database 2001).

Tetraplasandra gymnocarpa is typically found on windswept summit ridges, on slopes, or in gullies in wet or sometimes mesic lowland forests and shrublands between elevations of 93 and 959 m (305 and 3,146 ft). Associated native plant species include *Acacia koa*, *Antidesma platyphyllum*, *Bidens* sp., *Bobea elatior*, *Broussaisia arguta*, *Cheirodendron* sp., *Cibotium chamissoi*, *Cibotium* spp., *Cyanea humboltiana*, *Dicranopteris linearis*, *Diplopterygium pinnatum*, *Dubautia laxa*, *Freycinetia arborea*, *Hedyotis fosbergii* (manono), *Hedyotis terminalis*, *Labordia* sp., *Lobelia hypoleuca* (kuhiaikamoowahie), *Machaerina angustifolia*, *Melicope* spp., *Metrosideros polymorpha*, *Myrsine fosbergii* (kolea), *Pouteria sandwicensis*, *Psychotria* spp., *Sadleria* spp., *Syzygium sandwicensis*, *Tetraplasandra oahuensis* (ohe mauka), or *Wikstroemia* sp. (HINHP Database 2001; Service 1998b; 59 FR 14482).

The major threats to *Tetraplasandra gymnocarpa* are competition with the nonnative plant species *Aleurites moluccana*, *Araucaria columnaris* (Norfolk Island pine), *Ardisia elliptica* (shoebutton ardisia), *Axonopus fissifolius*, *Clidemia hirta*, *Erigeron karvinskianus*, *Eucalyptus* sp. (gum tree), *Paspalum conjugatum*, *Psidium cattleianum*, *Pterolepis glomerata*, *Sacciolepis indica*, and *Setaria palmifolia*; the two-spotted leafhopper; habitat degradation by feral pigs; and reduced reproductive vigor due to the species' limited gene pool as a consequence of the small number of extant individuals (HINHP Database 2001; Service 1998b; 59 FR 14482).

Trematolobelia singularis (NCN)

Trematolobelia singularis, a short-lived perennial member of the bellflower family (Campanulaceae), is

an unbranched shrub with stems 0.6 to 1.5 m (2 to 5 ft) long. This species differs from others of this endemic Hawaiian genus by the unbranched, erect flowering stalk (Lammers 1999).

This species has been observed in flower in October and has wind dispersed seeds. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b).

Trematolobelia singularis has been reported only from the southern Koolau Mountains. Approximately 165 plants are known from 3 occurrences at Moanalua-Tripler Ridge summit to Puu Keahiakahoe, Konahuanui, and Puu Lanipo. These occurrences are found on State and private lands (GDSI 2001; HINHP Database 2001).

This species usually grows on steep, windswept cliff faces or slopes in *Metrosideros polymorpha*-*Dicranopteris linearis* lowland wet shrubland from 545 to 953 m (1,788 to 3,126 ft) elevation. Associated native plant species include *Broussaisia arguta*, *Cibotium* sp., *Dubautia laxa*, *Eugenia* sp. (nioi), *Melicope* sp., *Sadleria* sp., or *Wikstroemia* sp. (HINHP Database 2001; Service 1998b; 61 FR 53089).

The major threats to *Trematolobelia singularis* are habitat degradation by feral pigs, potential predation by rats and slugs, competition with the aggressive nonnative plant species *Clidemia hirta*, and a risk of extinction from naturally occurring events and/or reduced reproductive vigor due to the small number of extant occurrences (HINHP Database 2001; Service 1998b; 61 FR 53089).

Urera kaalae (Opuhe)

Urera kaalae, a long-lived perennial member of the nettle family (Urticaceae), is a small tree or shrub 3 to 7 m (10 to 23 ft) tall. This species can be distinguished from the other Hawaiian species of the genus by its heart-shaped leaves (Wagner *et al.* 1999).

Urera kaalae has been observed flowering in the spring. It is difficult to predict when seeds will be produced and they are often sterile. This may be an indication of pollinator limitation. The plants are fast-growing. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b).

Historically, *Urera kaalae* was known from the central to southern windward Waianae Mountains, from Waianae Uka to Kupehau Gulch. This species now occurs only in North and South

Ekahanui, Pualii Gulch, Halona Gulch, Kaluaa Gulch, North and South Palawai, Puu Hapapa, Napepeiauloelo Gulch, and Waianae Kai on Federal, State, and private lands. The 12 known occurrences contain approximately 41 individuals (EDA Database 2001; GDSI 2001; HINHP Database 2001).

Urera kaalae typically grows on slopes and in gulches in diverse mesic forest at elevations of 439 to 1,074 m (1,440 to 3,523 ft). Associated native species include *Alyxia oliviformis*, *Antidesma platyphyllum*, *Asplenium kaulfusii*, *Athyrium* sp., *Canavalia* sp., *Charpentiera* sp., *Chamaesyce* sp., *Claoxylon sandwicense*, *Diospyros hillebrandii*, *Doryopteris* sp., *Freycinetia arborea*, *Hedyotis acuminata*, *Hibiscus* sp., *Nestegis sandwicensis*, *Pipturus albidus*, *Pleomele* sp., *Pouteria sandwicensis*, *Psychotria* sp., *Senna gaudichaudii* (kolomona), *Streblus pendulinus*, *Urera glabra*, or *Xylosma hawaiiense* (HINHP Database 2001; Service 1998b; Wagner *et al.* 1999; 61 FR 53089).

The major threats to *Urera kaalae* are habitat degradation by feral pigs; competition from the nonnative plant species *Buddleia asiatica*, *Christella parasitica*, *Clidemia hirta*, *Heliocarpus popayaensis*, *Melinis minutiflora*, *Morella faya*, *Passiflora suberosa*, *Pimenta dioica*, *Psidium cattleianum*, *Psidium guajava*, *Rubus rosifolius*, and *Schinus terebinthifolius*; fire; rockslides; and a risk of extinction from naturally-occurring events and/or reduced reproductive vigor due to the small number of remaining individuals (HINHP Database 2001; Service 1998b; 61 FR 53089).

Viola chamissoniana ssp. *chamissoniana* (Pamakani)

Viola chamissoniana ssp. *chamissoniana*, a short-lived perennial member of the violet family (Violaceae), is a branched shrub up to 90 cm (3 ft) tall. This subspecies can be distinguished from the other members of the genus in the Waianae Mountains by the small size of its leaves (Wagner *et al.* 1999).

Viola chamissoniana ssp. *chamissoniana* has been observed in fruit and flower in April, August, and October. No further information is available on flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, or limiting factors (Service 1998b).

Historically, *Viola chamissoniana* ssp. *chamissoniana* was known from the central and southern Waianae Mountains and Makaleha Valley. This taxon now occurs on Kamaileunu Ridge,

Palikea Ridge (between Nanakuli and Lualualei), Puu Hapapa, Makua-Keaau Ridge, Halona, and Puu Kumakalii on Federal, State, city, and county lands. The 15 known occurrences contain 59 individuals (EDA Database 2001; GDSI 2001; HINHP Database 2001).

Viola chamissoniana ssp. *chamissoniana* typically grows on dry cliffs, rocky ledges, and steep slopes in mesic shrubland and cliff vegetation at elevations of 414 to 1,149 m (1,358 to 3,769 ft). Associated native species include *Artemisia australis*, *Bidens torta*, *Carex meyenii*, *Chamaesyce* sp., *Dodonaea viscosa*, *Dubautia* sp., *Eragrostis* sp., *Leptecophylla tameiameia*, *Lipochaeta tenuis*, *Metrosideros polymorpha*, *Peperomia* sp., *Rumex* sp., *Schiedea* sp., or *Sida fallax* (HINHP Database 2001; Service 1998b; 56 FR 55770).

The major threats to *Viola chamissoniana* ssp. *chamissoniana* are habitat degradation by feral goats and pigs; competition from the nonnative plant species *Ageratina adenophora*, *Ageratina riparia*, *Erigeron karvinskianus*, *Melinis minutiflora*, *Morella faya*, and *Schinus terebinthifolius*; fire; landslides; and a risk of extinction from naturally-occurring events and/or reduced reproductive vigor due to the small number of remaining individuals (HINHP Database 2001; Service 1998b; 56 FR 55770).

Viola oahuensis (NCN)

Viola oahuensis, a short-lived perennial member of the violet family (Violaceae), is usually an erect, unbranched subshrub 6 to 40 cm (2.4 to 16 in) tall. This species is distinguished from other Hawaiian members of the genus by the shape of the stipules (leaf bracts), the length of the leaf stalks, and the length and papery texture of the leaves (Wagner *et al.* 1999).

Viola oahuensis has been observed flowering in August and September. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b).

Historically, *Viola oahuensis* was known from 17 occurrences in the Koolau Mountains of Oahu, scattered over about a 37 km (23 mi) distance from Puu Kainapuaa to Palolo. The 18 extant occurrences, which total fewer than 200 individuals, are now found from the Kawainui-Koloa summit divide to the Waimalu-Koolau-poko divide on Federal, State, and private lands (EDA Database 2001; GDSI 2001; HINHP Database 2001).

Viola oahuensis is generally found on exposed, windswept ridges of moderate to steep slope in wet *Metrosideros polymorpha*-*Dicranopteris linearis* shrublands and *Metrosideros polymorpha* mixed montane bogs in the cloud zone from 415 to 959 m (1,361 to 3,146 ft) elevation. This species typically grows among wind-stunted *Antidesma* sp., *Bidens macrocarpa*, *Broussaisia arguta*, *Cibotium* sp., *Dubautia laxa*, *Hedyotis terminalis*, *Labordia* sp., *Machaerina* sp., *Melicope* sp., *Sadleria* sp., *Syzygium sandwicensis*, *Vaccinium* sp., or *Wikstroemia* sp. (HINHP Database 2001; Service 1998b; 61 FR 53089).

The primary threats to *Viola oahuensis* are habitat degradation and/or destruction by feral pigs; potential impacts from military activities; competition with the nonnative plants *Axonopus fissifolius*, *Clidemia hirta*, *Paspalum conjugatum*, *Psidium cattleianum*, and *Pterolepis* sp. (NCN); and risk of extinction from naturally occurring events and/or reduced reproductive vigor due to the small number of occurrences (HINHP Database 2001; Service 1998b; 61 FR 53089).

Multi-Island Species

Adenophorus periens (Pendent kihi fern)

Adenophorus periens, a member of the grammitis family (Grammitidaceae) and a short-lived perennial, is a small, pendent, epiphytic (not rooted on the ground) fern. This species differs from other species in this endemic Hawaiian genus by having hairs along the pinna margins, by the pinnae being at right angles to the midrib axis, by the placement of the sori on the pinnae, and by the degree of dissection of each pinna (Linney 1989).

Little is known about the life history of *Adenophorus periens*, which seems to grow only in closed canopy dense forest with high humidity. Its breeding system is unknown, but outbreeding is very likely to be the predominant mode of reproduction. Spores are dispersed by wind, possibly by water, and perhaps on the feet of birds or insects. Spores lack a thick resistant coat, which may indicate their longevity is brief, probably measured in days at most. Due to the weak differences between the seasons in the habitats where this species is found, there seems to be no evidence of seasonality in growth or reproduction. Additional information on reproductive cycles, longevity, specific environmental requirements, and limiting factors is not available (Linney 1989).

Historically, *Adenophorus periens* was known from Kauai, the Koolau Mountains of Oahu, Lanai, Maui, and the island of Hawaii. Currently, it is known from several locations on Kauai, Molokai, and Hawaii. This species is no longer extant on the island of Oahu. It was collected in 1909 on the west ridge of Palolo Crater and the west ridge of Palolo Valley (HINHP Database 2001).

Adenophorus periens grows epiphytically on trees in *Metrosideros polymorpha* and *Metrosideros rugosa* wet forests between 309 and 867 m (1,014 and 2,844 ft) elevation. Associated native plant species include *Cheirodendron* spp., *Cibotium* sp., *Dicranopteris linearis*, *Hedyotis terminalis*, *Machaerina angustifolia*, or *Syzygium sandwicensis* (HINHP Database 2001).

Nothing is known of the threats to *Adenophorus periens* on Oahu because the species was last collected there in 1909 (Service 1999; 59 FR 56333).

Alectryon macrococcus (Mahoe)

Alectryon macrococcus, a member of the soapberry family (Sapindaceae), consists of two varieties, *macrococcus* and *auwahiensis*, both trees with reddish-brown branches and leaves with one to five pairs of sometimes asymmetrical egg-shaped leaflets. On leaves of young *A. macrococcus* var. *macrococcus* plants, the underside of the leaf has dense brown hairs.

Alectryon macrococcus var. *auwahiensis* is only found on the island of Maui. The only member of its genus found in Hawaii, this species is distinguished from other Hawaiian members of its family by being a tree with a hard fruit 2.5 cm (1 in) or more in diameter (Wagner *et al.* 1999).

Alectryon macrococcus is a relatively slow-growing, long lived tree that grows in xeric to mesic sites and is adapted to periodic drought. Little else is known about the life history of this species. Flowering cycles, pollination vectors, seed dispersal agents, and specific environmental requirements are unknown (Service 1997).

Currently and historically, *Alectryon macrococcus* var. *macrococcus* occurs on Kauai, Oahu, Molokai, and Maui. On Oahu, there are a total of 82 occurrences containing around 300 individuals. These occurrences are found in Kapuna Gulch, Huliwai Gulch, Kaluaa Gulch, Ekahanui Gulch, Manuwai Gulch, Mohiaka Gulch, Makua Valley, Puu Ku Makalii, Nanakuli-Lualualei Ridge, Palikea Gulch, Makaha, Pahole Gulch, Makaleha Valley, Waianae Kai, Waieli Gulch, Kaluakaula Gulch, Kaaua Gulch, Puu Hapapa, Mikilua subdistrict, Kaaawa Gulch, and Napepeiaulelo

Gulch on Federal, State, city, county, and private lands (EDA Database 2001; GDSI 2001; HINHP Database 2001; Wagner *et al.* 1999; EDA, *in litt.* 2001).

Alectryon macrococcus var. *macrococcus* grows on slopes or ridges, or in gulches, within mesic lowland forests between elevations of 367 and 941 m (1,204 and 3,086 ft). Associated native plant species include *Alyxia oliviformis*, *Antidesma platyphyllum*, *Canavalia* sp., *Charpentiera* sp., *Claoxylon sandwicense*, *Diospyros hillebrandii*, *Diospyros sandwicensis*, *Diplazium sandwichianum*, *Elaeocarpus bifidus*, *Hibiscus arnottianus*, *Metrosideros polymorpha*, *Myrsine lanaiensis*, *Neraudia* sp., *Nestegis sandwicensis*, *Pipturus albidus*, *Pisonia sandwicensis*, *Pisonia umbellifera*, *Pouteria sandwicensis*, *Psychotria hathewayi*, *Psydrax odorata*, *Streblus pendulinus*, or *Xylosma* sp. (HINHP Database 2001).

The threats to *Alectryon macrococcus* var. *macrococcus* on Oahu are habitat degradation by feral goats and pigs; competition with the nonnative plant species *Aleurites moluccana*, *Blechnum appendiculatum*, *Buddleia asiatica*, *Christella parasitica*, *Clidemia hirta*, *Heliocarpos popayanensis*, *Lanata camara*, *Melinis minutiflora*, *Oplismenus hirtellus*, *Passiflora suberosa*, *Pennisetum clandestinum* (kikuyu grass), *Psidium cattleianum*, *Psidium guajava*, *Rubus rosifolius*, *Schinus terebinthifolius*, *Syzygium cumini*, and *Toona ciliata*; damage from the black twig borer; seed predation by rats, mice (*Mus domesticus*), and insects; fire; depressed reproductive vigor; loss of pollinators; and, due to the very small remaining number of individuals and their limited distribution, a single natural or human-caused environmental disturbance, which could easily be catastrophic (Service 1997; 57 FR 20772).

Bonamia menziesii (NCN)

Bonamia menziesii, a member of the morning-glory family (Convolvulaceae) and a short-lived perennial, is a vine with twining branches that are fuzzy when young. This species is the only member of the genus that is endemic to the Hawaiian Islands and differs from other genera in the family by its two styles, longer stems and petioles, and rounder leaves (Austin 1999).

Little is known about the life history of *Bonamia menziesii*. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1999).

Historically, *Bonamia menziesii* was known from Kauai, the Waianae Mountains of Oahu, Molokai, Maui, and the island of Hawaii. Currently, this species is extant on Kauai, Oahu, Lanai, Maui, and Hawaii. There are 18 total occurrences on Oahu, containing a total of fewer than 100 plants. These occurrences are found in Niu Valley, Makaleha Valley, Makua-Keaau Ridge, Wailupe, Waialae Nui-Kapakahi Ridge and Kapakahi Gulch, Kaluakauila Gulch, Keawaula, Hawaii Loa Ridge and Kului Gulch, Nanakuli Valley, Kuaokala, Halona, Waialae Iki, Kapuna Gulch, Mikilua, Waianae Kai, and Alaihehe Gulch on Federal, State, and private lands (EDA Database 2001; GDSI 2001; HINHP Database 2001).

Bonamia menziesii is found on Oahu on steep slopes or level ground in dry or mesic forest in open or closed canopy at elevations between 31 and 809 m (102 and 2,654 ft). Associated native species include *Acacia koa*, *Alyxia oliviformis*, *Dianella sandwicensis*, *Diospyros sandwicensis*, *Dodonaea viscosa*, *Erythrina sandwicensis*, *Hedyotis terminalis*, *Leptecophylla tameiameiae*, *Melicope* sp., *Metrosideros polymorpha*, *Myoporum sandwicense*, *Nestegis sandwicensis*, *Pisonia* sp., *Pittosporum* sp., *Pleomele* sp., *Pouteria sandwicensis*, *Psydrax odorata*, *Rauvolfia sandwicensis*, *Sapindus oahuensis*, *Sicyos* sp., *Sida fallax*, or *Waltheria indica* (HINHP Database 2001; Service 1999).

The primary threats to *Bonamia menziesii* on Oahu are habitat degradation and possible predation by wild and feral pigs, goats, and cattle; competition with the nonnative plant species *Aleurites moluccana*, *Grevillea robusta*, *Hyptis pectinata*, *Kalanchoe pinnata*, *Lantana camara*, *Leucaena leucocephala*, *Melia azedarach*, *Montanoa hibiscifolia*, *Panicum maximum*, *Passiflora suberosa*, *Pennisetum setaceum* (fountain grass), *Pimenta dioica*, *Psidium cattleianum*, *Rivina humilis*, *Schinus terebinthifolius*, *Syzygium cumini*, and *Toona ciliata*; fire; and nonnative insect (*Physomerus grossipes*); and potential impacts from military activities (HINHP Database 2001; Service 1999; 59 FR 56333).

Cenchrus agrimonoides (Kamanomano)

Cenchrus agrimonoides, a member of the grass family (Poaceae) and a short-lived perennial, has leaf blades that are flat or folded and that have a prominent midrib. There are two varieties, *C. agrimonoides* var. *laysanensis* and *C. agrimonoides* var. *agrimonoides*. They differ from each other in that var. *agrimonoides* has smaller burs, shorter stems, and narrower leaves. This species

is distinguished from others in the genus by the cylindrical to lance-shaped bur and the arrangement and position of the bristles (O'Conner 1999).

Little is known about the life history of *Cenchrus agrimonoides*. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors, except that this species has been observed to produce fruit year-round (Service 1999; 65 FR 53108).

Historically, *Cenchrus agrimonoides* var. *agrimonoides* was known from the Waianae Mountains of Oahu, Lanai, Maui, and an undocumented account from the island of Hawaii. *Cenchrus agrimonoides* var. *laysanensis* was historically and currently only known from the Northwest Hawaiian Islands. Currently, *Cenchrus agrimonoides* var. *agrimonoides* is known from Oahu and Maui; on Oahu from a total of 7 occurrences containing between 113 and 118 individuals. These occurrences are found in Pahole Gulch, on Makaha-Waianae Kai Ridge, in or near Kahanahaiki Gulch, in east Makaleha, Puu Kaua, Huliwai Gulch, and in Pualii drainage, on Federal, State, city, county, and private lands (EDA Database 2001; GDSI 2001; HINHP Database 2001; Service 1999; 61 FR 53108).

Cenchrus agrimonoides var. *agrimonoides* on Oahu is usually found on dry upper slopes or ridges in lowland mixed mesic forest at elevations between 357 and 890 m (1,171 and 2,919 ft). Associated native plant species include *Acacia koa*, *Alyxia oliviformis*, *Bobea* sp., *Carex wahuensis*, *Chamaesyce multiflora*, *Coprosma foliosa*, *Diospyros sandwicensis*, *Eragrostis variabilis*, *Gahnia beecheyi* (NCN), *Leptecophylla tameiameiae*, *Metrosideros polymorpha*, *Nestegis sandwicensis*, *Psydrax odorata*, or *Psychotria* sp. (HINHP Database 2001; EDA, *in litt.* 2001).

The major threats to *Cenchrus agrimonoides* var. *agrimonoides* on Oahu are habitat degradation and/or destruction by feral pigs; competition with the nonnative plant species *Ageratina riparia*, *Blechnum appendiculatum*, *Casuarina* sp., *Clidemia hirta*, *Grevillea robusta*, *Paspalum conjugatum*, *Passiflora suberosa*, *Psidium cattleianum*, *Rubus argutus*, and *Schinus terebinthifolius*; trampling and fire from military activities; and a risk of extinction from naturally occurring events and/or reduced reproductive vigor due to the small number of existing individuals (HINHP Database 2001; Service 1999; 61 FR 53108).

Centaurium sebaeoides (Awiwi)

Centaurium sebaeoides, a member of the gentian family (Gentianaceae), is an annual herb with fleshy leaves and stalkless flowers. This species is distinguished from *C. erythraea* (bitter herb), which is naturalized in Hawaii, by its fleshy leaves and the unbranched arrangement of the flower cluster (Wagner *et al.* 1999).

Centaurium sebaeoides has been observed flowering in April. Flowering may be induced by heavy rainfall. Occurrences are found in dry areas, and plants are more likely to be found following heavy rains. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (56 FR 55770).

Historically and currently, *Centaurium sebaeoides* is known from Kauai, Oahu, Molokai, Lanai, and Maui. Currently on Oahu, 2 occurrences of this species remain with a total of between 60 and 80 individuals at Kaena Point and Koko Head on State, city, and county lands (HINHP Database 2001; Service 1999; Wagner *et al.* 1999).

Centaurium sebaeoides typically grows in volcanic or clay soils or on cliffs in arid coastal areas or on coral plains below 368 m (1,207 ft) elevation. Associated native species include *Artemisia* sp., *Bidens* sp., *Jacquemontia ovalifolia*, *Lipochaeta succulenta* (nehe), or *Lysimachia* sp. (kolokolo kuahiwi) (HINHP Database 2001; Wagner *et al.* 1999; 56 FR 55770).

The major threats to *Centaurium sebaeoides* on Oahu are habitat degradation by feral goats and cattle, competition from the nonnative plant species *Leucaena leucocephala*, trampling by humans on or near trails, fire, and a risk of extinction from naturally occurring events due to the small number of existing occurrences and individuals (56 FR 55770; Service 1999).

Colubrina oppositifolia (Kauila)

Colubrina oppositifolia, a member of the buckthorn family (Rhamnaceae) and a long-lived perennial, is a tree with extremely hard red wood. This species is readily distinguished from the other species in Hawaii by its opposite leaf position, dull leaf surface, and entire leaf margins (Wagner *et al.* 1999).

Colubrina oppositifolia has been observed in flower during January, June, September, and December and in fruit during January, June, and September. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific

environmental requirements, and limiting factors (HINHP Database 2001).

Historically and currently, *Colubrina oppositifolia* was known from Oahu, Maui, and the island of Hawaii. Currently, there is a total of 5 occurrences containing 61 individuals on Oahu. These occurrences are found in Kaumokunui Gulch, Makaleha Valley, and Manuwai Gulch on State and private lands (GDSI 2001; HINHP Database 2001).

Colubrina oppositifolia is found in lowland dry and mesic forests dominated by *Diospyros sandwicensis* at elevations between 277 and 761 m (909 and 2,496 ft). Associated native species include *Alyxia oliviformis*, *Nestegis sandwicensis*, *Psydrax odorata*, *Reynoldsia sandwicensis*, or *Sapindus oahuensis* (HINHP Database 2001).

The threats to this species on Oahu are habitat destruction by feral pigs and goats; competition with the nonnative plant species *Aleurites moluccana*, *Lantana camara*, *Pennisetum setaceum*, *Psidium cattleianum*, *Schinus terebinthifolius*, and *Syzygium cumini*; damage from the black twig borer and Chinese rose beetle; fire; potential impacts from military activities; and a risk of extinction from naturally occurring events due to the small number of existing occurrences and individuals (HINHP Database 2001; Service 1996c; 59 FR 10305).

Ctenitis squamigera (Pauoa)

Ctenitis squamigera, a short-lived member of the woodfern family (Aspleniaceae), has a rhizome creeping above the ground that is densely covered with scales similar to those on the lower part of the leaf stalk. It can be readily distinguished from other Hawaiian species of *Ctenitis* by the dense covering of tan-colored scales on its frond (Degener and Degener 1957; Wagner and Wagner 1992).

Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors for *Ctenitis squamigera* (Service 1998a).

Historically, *Ctenitis squamigera* was recorded from Kauai, the Koolau and Waianae Mountains of Oahu, Molokai, Maui, and the island of Hawaii. This species is currently extant on Oahu, Molokai, Lanai, and Maui. Currently on Oahu, 8 occurrences with more than 80 individuals are found in Makaleha Valley, Kaaawa Gulch, Makua Valley, and Waianae Kai Forest Reserve on Federal, State, and private lands (EDA Database 2001; GDSI 2001; HINHP Database 2001).

Ctenitis squamigera is found on gentle to steep slopes in *Metrosideros polymorpha-Diospyros sandwicensis* mesic forest and diverse mesic forest at elevations of 387 to 923 m (1,269 to 3,027 ft). Associated native plant taxa include *Alyxia oliviformis*, *Carex meyenii*, *Diospyros hillebrandii*, *Dodonaea viscosa*, *Doodia kunthiana*, *Dryopteris unidentata*, *Freycinetia arborea*, *Hibiscus* sp., *Myrsine* sp., *Nestegis sandwicensis*, *Pisonia* sp., *Pouteria sandwicensis*, *Psychotria* sp., *Psydrax odorata*, or *Xylosma* sp. (HINHP Database 2001).

The primary threats to *Ctenitis squamigera* on Oahu are habitat degradation by feral pigs and goats; competition with the nonnative plant species *Ageratina riparia*, *Aleurites moluccana*, *Blechnum appendiculatum*, *Clidemia hirta*, *Psidium cattleianum*, *Psidium guajava*, *Schinus terebinthifolius*, *Syzygium cumini*, and *Toona ciliata*; fire; and decreased reproductive vigor and a risk of extinction caused by naturally occurring events due to the small number of existing occurrences (HINHP Database 2001; Service 1998; 59 FR 49025).

Cyanea grimesiana ssp. *grimesiana* (Haha)

Cyanea grimesiana ssp. *grimesiana*, a member of the bellflower family (Campanulaceae) and a short-lived perennial, is a shrub with pinnately divided leaves. This species is distinguished from others in this endemic Hawaiian genus by the pinnately lobed leaf margins and the width of the leaf blades. This subspecies is distinguished from the other two subspecies by the shape and size of the calyx lobes, which overlap at the base (Lammers 1999).

On Molokai, flowering plants have been reported in July and August. Little else is known about the life history of *Cyanea grimesiana* ssp. *grimesiana*. Flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1999).

Currently and historically, *Cyanea grimesiana* ssp. *grimesiana* is known from the Waianae and Koolau Mountains on Oahu, Molokai, Lanai, and Maui. On Oahu, there are seven occurrences known from Palikea Gulch, North Haleauau Gulch, Pahole Natural Area Reserve (NAR), Pia Gulch, Kului Gulch, and in Waialae Iki-Kapakahi on Federal, State, city, county, and private lands containing a total of nine individuals (EDA Database 2001; GDSI 2001; HINHP Database 2001).

Cyanea grimesiana ssp. *grimesiana* is typically found in mesic forest often dominated by *Metrosideros polymorpha* or *M. polymorpha* and *Acacia koa*, or on rocky or steep slopes of stream banks, at elevations between 114 and 746 m (374 and 2,447 ft). Associated native plant species include *Alyxia oliviformis*, *Antidesma* sp., *Bobea* sp., *Clermontia persicaefolia* (oha wai), *Coprosma* sp., *Cyanea angustifolia* (haha), *Dicranopteris linearis*, *Diplazium sandwichianum*, *Joinvillea* sp. (ohe), *Melicope* sp., *Myrsine* sp., *Nestegis sandwicensis*, *Psychotria* sp., *Syzygium sandwicensis*, or *Xylosma* sp. (Service 1999; 61 FR 53108).

The threats to *Cyanea grimesiana* ssp. *grimesiana* on Oahu are habitat degradation and/or destruction caused by wild and feral goats and pigs; competition with the nonnative plant species *Clidemia hirta*, *Psidium cattleianum*, and *Toona ciliata*; random naturally occurring events creating a risk of extinction due to the small number of existing individuals; fire; trampling by hikers and/or military activities; landslides; and predation by rats and various species of slugs (Service 1999; 61 FR 53108).

Cyperus trachysanthos (Puukaa)

Cyperus trachysanthos, a member of the sedge family (Cyperaceae), is a short-lived, perennial, grass-like plant with a short rhizome. The stems are densely tufted, obtusely triangular in cross-section, tall, sticky, and leafy at the base. This species is distinguished from others in the genus by the short rhizome, the leaf sheath with partitions at the nodes, the shape of the glumes, and the length of the stems (Koyama 1999).

Little is known about the life history of *Cyperus trachysanthos*. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1999).

Historically, *Cyperus trachysanthos* was known from Niihau, Kauai, scattered locations on Oahu, Molokai, and Lanai. This species is now extant on Niihau, Kauai, and Oahu. On Oahu, it is known from Kaena Point NAR, nearby Manini Gulch, Diamond Head, Makapuu, Queens Beach, and the Kawainui Marsh area, on Federal, State, and private lands. There are 6 occurrences with a total of 40 individuals on Oahu (HINHP Database 2001; Service 1999).

Cyperus trachysanthos is usually found in seasonally wet sites (mud flats, wet clay soil, seasonal ponds, or wet cliff seeps) on seepy flats, coastal cliffs,

or talus slopes at elevations between 6 and 194 m (609 ft). *Hibiscus tiliaceus* (hau) is often found in association with this species (HINHP Database 2001; Koyama 1999; Service 1999; 61 FR 53108).

The threats to *Cyperus trachysanthos* on Oahu are a risk of extinction from naturally-occurring events due to the small number of occurrences; competition with nonnative plant species; habitat degradation by feral goats; fire; habitat disturbance by off-road vehicles; pumping of wetlands for flood and mosquito control; modifications to the wetland topography; mowing; herbicide application; and run-off from nearby Hawaii Army National Guard (HIARNG) activities such as the cleaning of vehicles, dumping of paints or thinners, or the use of pesticides (Service 1999; 61 FR 53108).

Diellia erecta (Aspenium-leaved diellia)

Diellia erecta, a member of the spleenwort family (Aspleniaceae) and a short-lived perennial, is a fern that grows in tufts of three to nine lance shaped fronds that emerge from a rhizome covered with brown to dark gray scales. This species differs from other members of the genus in having larger brown or dark gray scales, fused or separate sori along both margins of the pinna, shiny black midribs that have a hardened surface, and veins that do not usually encircle the sori (Degener and Greenwell 1950; Wagner 1952).

Little is known about the life history of *Diellia erecta*. Reproductive cycles, dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1999).

Historically, *Diellia erecta* was known from Kauai, the Koolau Mountains on Oahu, Molokai, Lanai, Maui, and the island of Hawaii. Currently, it is known from Kauai, Molokai, Maui, Oahu, and Hawaii. On Oahu, it is known from a single occurrence containing at least 20 plants on Hawaii Loa Ridge on State and private lands (GDSI 2001; HINHP Database 2001).

Diellia erecta is found on moderate to steep gulch slopes or sparsely vegetated rock faces in mesic forest at elevations between 118 and 550 m (387 and 1,804 ft). Associated native plant species include *Coprosma* sp., *Dodonaea viscosa*, *Dryopteris unidentata*, *Myrsine* sp., *Psychotria* sp., *Psydrax odorata*, *Sapindus oahuensis*, *Syzygium sandwicensis*, or *Wikstroemia* sp. (HINHP Database 2001; Service 1999).

The major threats to *Diellia erecta* on Oahu are habitat degradation by pigs; competition with nonnative plant

species, including *Blechnum appendiculatum*, *Clidemia hirta*, *Cordyline fruticosa* (ti), *Oplismenus hirtellus*, *Phymatosorus grossus* (lauae), *Psidium cattleianum*, *Schefflera actinophylla*, and *Schinus terebinthifolius*; and random naturally-occurring events causing extinction and/or reduced reproductive vigor due to the small number of occurrences and existing individuals (HINHP Database 2001; Service 1999; 59 FR 56333).

Diplazium molokaiense (NCN)

Diplazium molokaiense, a short-lived perennial member of the woodfern family (Dryopteridaceae), has a short prostrate rhizome and green or straw colored leaf stalks with thin-textured fronds. This species can be distinguished from other species of *Diplazium* in the Hawaiian Islands by a combination of characteristics, including venation pattern, the length and arrangement of the sori, frond shape, and the degree of dissection of the frond (Wagner and Wagner 1992).

Flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors for *Diplazium molokaiense* are unknown (Service 1998a).

Historically, *Diplazium molokaiense* was found at Makaleha and Schofield Barracks on Oahu, Kauai, Molokai, Lanai, and Maui. However, within the last 20 years, only one occurrence of one individual has been recorded from East Maui. This species was last collected on Oahu in 1945 from Kolekole Pass to Kaala (HINHP Database 2001).

Diplazium molokaiense on Oahu was found on steep, rocky, wooded gulch walls in wet forests from 618 to 1,202 m (2,027 to 3,943 ft) elevation (HINHP Database 2001).

Nothing is known of the threats to *Diplazium molokaiense* because this species was last collected there in 1945.

Eugenia koolauensis (Nioi)

Eugenia koolauensis, a long-lived perennial member of the myrtle family (Myrtaceae), is a small tree or shrub between 2 and 7 m (7 and 23 ft) tall with branch tips covered with dense brown hairs. *Eugenia koolauensis* is one of two species in the genus that are native to Hawaii. It differs from the other species in having leaves that are densely hairy on the lower surface and leaf margins that curve under the leaves (Wagner et al. 1999).

This species has been observed in flower from February to December. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific

environmental requirements, and limiting factors (Service 1998b).

Eugenia koolauensis was historically known from Molokai and from Kaipapau Valley, Hanaimoa and Kahawainui Gulches, and a gully southeast of Kahuku on Oahu. Currently, this species is only found on Oahu in 12 occurrences on Federal, State, and private lands in Hanaimoa, Papali, Kaleleiki, Aimuu, Kaunala, Pahipahialua, Oio, and Palikea Gulches. A total of fewer than 70 individuals occur on Oahu (EDA Database 2001; GDSI 2001; HINHP Database 2001).

Eugenia koolauensis is found on gentle to steep slopes or ridges in mesic or dry forests dominated by *Metrosideros polymorpha* or *Diospyros* sp. from 57 to 437 m (187 to 1,433 ft) in elevation. Other associated native plant species include *Alyxia oliviformis*, *Bobea elatior*, *Carex meyenii*, *Dicranopteris linearis*, *Leptecophylla tameiameia*, *Myrsine lessertiana*, *Nestegis sandwicensis*, *Pleomele halapepe*, *Pouteria sandwicensis*, *Psydrax odorata*, or *Rauvolfia sandwicensis* (HINHP Database 2001; Service 1998b).

The major threats to *Eugenia koolauensis* on Oahu are habitat degradation by feral pigs; competition with nonnative plant species such as *Acacia confusa*, *Aleurites moluccana*, *Araucaria columnaris*, *Ardisia elliptica*, *Casuarina equisetifolia*, *Clidemia hirta*, *Cordyline fruticosa*, *Eucalyptus* sp., *Grevillea robusta*, *Hyptis pectinata*, *Lantana camara*, *Melia azedarach*, *Oplismenus hirtellus*, *Panicum maximum*, *Passiflora laurifolia* (yellow granadilla), *Passiflora suberosa*, *Psidium cattleianum*, *Schinus terebinthifolius*, *Syzygium cumini*, and *Toona ciliata*; and the limited numbers of this species, which make it vulnerable to extinction due to naturally caused events and reduced reproductive vigor (HINHP Database 2001; 59 FR 14482).

Euphorbia haeleeleana (Akoko)

Euphorbia haeleeleana, a member of the spurge family (Euphorbiaceae) and a short-lived perennial, is a dioecious (female and male flowers on separate plants) tree 3 to 14 m (10 to 46 ft) tall. This species is distinguished from others in the genus in that it is a tree and by the large leaves with prominent veins (Wagner *et al.* 1999).

Individual trees of *Euphorbia haeleeleana* bear only male or female flowers and must be cross-pollinated from a different tree to produce viable seed. This species sets fruit between August and October. Little else is known about its flowering cycles,

pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1999; Wagner *et al.* 1999).

Euphorbia haeleeleana is known historically and currently from northwestern Kauai and the Waianae Mountains of Oahu. On Oahu, 8 occurrences of approximately 134 individuals are known from Keawaula Gulch, Kahanahaiki Valley, Kaumokunui-Kaumokuiki Ridge, and Alaieihe Gulch on Federal, State, and private lands (EDA Database 2001; GDSI 2001; HINHP Database 2001).

Euphorbia haeleeleana on Oahu is usually found in dry forest that is often dominated by *Diospyros* sp. at elevations between 156 and 586 m (512 and 1,922 ft). Associated native plant species include *Dodonaea viscosa*, *Erythrina sandwicensis*, *Pleomele* sp., *Psydrax odorata*, *Reynoldsia sandwicensis*, or *Sapindus oahuensis* (HINHP Database 2001).

The main threats to *Euphorbia haeleeleana* on Oahu are habitat degradation and/or destruction by wild and feral goats and pigs; predation by rats; fire; potential impacts from military activities; and competition with the nonnative plant species *Aleurites moluccana*, *Caesalpinia decapetala* (wait-a-bit), *Coffea arabica*, *Digitaria insularis* (sourgrass), *Ficus microcarpa*, *Grevillea robusta*, *Hyptis pectinata*, *Kalanchoe pinnata*, *Lantana camara*, *Leucaena leucocephala*, *Melia azedarach*, *Melinis minutiflora*, *Panicum maximum*, *Passiflora suberosa*, *Psidium cattleianum*, *Rivina humilis*, *Schinus terebinthifolius*, *Syzygium cumini*, and *Toona ciliata* (HINHP Database 2001).

Flueggea neowawraea (Mehamehame)

Flueggea neowawraea, a member of the spurge family (Euphorbiaceae) and a long-lived perennial, is a large dioecious tree up to 30 m (100 ft) tall with white oblong pores covering its scaly, pale brown bark. This species is the only member of the genus found in Hawaii and can be distinguished from similar Hawaiian species in the family by its hairless, whitish lower leaf surfaces and round fruits (Hayden 1999; Service 1999).

Individual trees of *Flueggea neowawraea* bear only male or female flowers and must be cross-pollinated from a different tree to produce viable seed. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Hayden 1999; Service 1999).

Historically, *Flueggea neowawraea* was known from Oahu, Kauai, Maui, Molokai, and the island of Hawaii. Currently, it is known from Kauai, Oahu, Maui, and Hawaii. On Oahu, *Flueggea neowawraea* is known from 23 occurrences with a total of approximately 31 individuals on Federal, State, city, county, and private lands at Makua Valley, Makaha, Alaiheihe Gulch, Kaluaa Gulch, Makaleha Valley, Ekahanui Gulch, Pahole Gulch, Keaau Valley, Kahanahaiki Valley, Kaaawa Gulch, Waianae Kai, Palikea Gulch, Manuwai Gulch, Mohiaka Gulch, Kauhiuhi, Mikilua, and Lualualei (EDA Database 2001; GDSI 2001; HINHP Database 2001).

Flueggea neowawraea occurs on gulch slopes or ridge crests, or near streams, in dry or mesic forest at elevations of 323 to 1,006 m (1,059 to 3,300 ft). Associated native plant species include *Alyxia oliviformis*, *Antidesma platyphyllum*, *Antidesma pulvinatum*, *Bobea* sp., *Chamaesyce herbstii*, *Chamaesyce multifloris*, *Charpentiera* sp., *Claoxylon sandwicensis*, *Diospyros hillebrandii*, *Diospyros sandwicense*, *Erythrina sandwicensis*, *Hedyotis terminalis*, *Hibiscus arnottianus*, *Metrosideros polymorpha*, *Morinda trimera* (noni), *Myoporum sandwicense*, *Myrsine* sp., *Nestegis sandwicensis*, *Pipturus albidus*, *Pisonia sandwicensis*, *Pisonia umbellifera*, *Pittosporum* sp., *Pleomele* sp., *Psydrax odorata*, *Pteralyxia* sp., *Rauvolfia sandwicensis*, *Sapindus oahuensis*, and *Streblus pendulina* (Hayden 1999; HINHP Database 2001).

The primary threat to the continued existence of *Flueggea neowawraea* on Oahu is the black twig borer, which has affected all known *Flueggea neowawraea* plants. Other major threats include habitat degradation by feral pigs and goats; competition with the nonnative plant species *Ageratina riparia*, *Aleurites moluccana*, *Blechnum appendiculatum*, *Clidemia hirta*, *Ficus macrophylla*, *Ficus microcarpa*, *Grevillea robusta*, *Kalanchoe pinnata*, *Lantana camara*, *Melinis minutiflora*, *Paspalum conjugatum*, *Passiflora suberosa*, *Psidium* spp., *Rivina* sp., *Schinus terebinthifolius*, *Syzygium cumini*, and *Toona ciliata*; fire; predation by the Chinese rose beetle; the small occurrence size with its limited gene pool and depressed reproductive vigor, compounded by a requirement for cross-pollination because the species is dioecious; potential impacts from military activities; and predation of the fruit by rats (HINHP Database 2001; Service 1999).

Gouania meyenii (NCN)

Gouania meyenii, a member of the buckthorn family (Rhamnaceae) and a short-lived perennial, is an erect to spreading shrub. It is distinguished from the two other Hawaiian members of its genus by its lack of tendrils on flowering branches, the lack of teeth on the leaves, and the hairiness of the fruits (Wagner *et al.* 1999).

Gouania meyenii flowers from March to May. Seed capsules develop in about six to eight weeks. Plants appear to live about 10 to 18 years in the wild. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b).

Historically, *Gouania meyenii* was known from central and southern areas of Oahu's Waianae Mountains, from Kamaileunu Ridge to Honouliuli and from Diamond Head. Currently, this species is found on Oahu and Kauai. On Oahu, it is found on Makaha-Waianae Kai Ridge on State, private, city, and county lands. The 4 known occurrences on Oahu contain an estimated 63 individuals (GDSI 2001; HINHP Database 2001; Wagner *et al.* 1999).

Gouania meyenii typically grows on moderate to steep slopes in dry shrubland or mesic lowland forest at elevations of 17 to 930 m (56 to 3,050 ft). Associated native plant species include *Alyxia oliviformis*, *Bidens* sp., *Canavalia* sp., *Carex meyenii*, *Chamaesyce* sp., *Charpentiera* sp., *Diospyros sandwicensis*, *Diospyros* sp., *Dodonaea viscosa*, *Dryopteris unidentata*, *Dubautia sherffiana*, *Eragrostis* sp., *Hedyotis* sp., *Hibiscus* sp., *Lysimachia* sp., *Melicope* sp., *Myrsine* sp. (kolea), *Nestegis sandwicensis*, *Pisonia* sp., *Psychotria* sp., *Psydrax odorata*, *Sapindus oahuensis*, *Schiedea* sp., *Senna gaudichaudii*, *Sida fallax*, or *Sophora chrysophylla* (HINHP Database 2001).

The major threats to *Gouania meyenii* on Oahu are competition from the nonnative plant species *Grevillea robusta*, *Kalanchoe pinnata*, *Lantana camara*, *Leucaena leucocephala*, *Melinis minutiflora*, *Oplismenus hirtellus*, *Pimenta dioica*, *Psidium cattleianum*, *Psidium guajava*, and *Schinus terebinthifolius*; fire; habitat degradation by feral pigs and goats; and a risk of extinction from naturally occurring events and/or reduced reproductive vigor due to the small number of remaining occurrences and individuals (HINHP Database 2001).

Gouania vitifolia (NCN)

Gouania vitifolia, a short-lived member of the buckthorn family

(Rhamnaceae), is a climbing shrub or woody vine with tendrils. The species is the only Hawaiian member of the genus with tendrils and toothed leaf margins (Wagner *et al.* 1999).

Gouania vitifolia flowers from March to May. Seed capsules develop in about six to eight weeks. Plants appear to live about 10 to 18 years in the wild. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b).

Historically, *Gouania vitifolia* was known from Maui, the island of Hawaii, and the northwestern portion of the Waianae Mountains in Makaleha, Keaau, and Waianae Kai Valleys on Oahu. Currently, this species is extant on Oahu and Hawaii. It is known from 2 occurrences on Oahu on State and private lands, located at Waianae Kai and Keaau Valley, totaling 44 individuals (GDSI 2001; HINHP Database 2001; Wagner *et al.* 1999).

Gouania vitifolia typically grows on the sides of ridges and gulches in dry to mesic forests at elevations of 39 to 978 m (128 to 3,208 ft). Associated native plant species include *Bidens* sp., *Carex meyenii*, *Chamaesyce* sp., *Diospyros sandwicensis*, *Dodonaea viscosa*, *Erythrina sandwicensis*, *Hedyotis* sp., *Hibiscus arnottianus*, *Melicope* sp., *Nestegis sandwicensis*, *Pipturus albidus*, *Psychotria* sp., or *Urera glabra* (Service 1998b).

The major threats to *Gouania vitifolia* are competition from the nonnative plant species *Aleurites moluccana*, *Buddleia asiatica*, *Cordyline fruticosa*, *Hyptis pectinata*, *Lantana camara*, *Leucaena leucocephala*, *Melinis minutiflora*, *Oplismenus hirtellus*, *Panicum* sp. (panic grass), *Passiflora edulis*, *Passiflora ligularis*, *Passiflora suberosa*, *Psidium cattleianum*, *Rubus argutus*, *Schinus terebinthifolius* and *Toona ciliata*; habitat destruction by feral pigs; and a threat of random extinction and reduced reproductive vigor due to the small number of extant individuals (HINHP Database 2001; 59 FR 32932).

Hedyotis coriacea (Kioele)

Hedyotis coriacea, a short-lived member of the coffee family (Rubiaceae), is a small shrub with leathery leaves that are generally elliptic to oblong in shape. This species is distinguished from others of the genus by its small, triangular calyx lobes that do not enlarge in fruit, by capsules that are longer than wide, and by flower buds that are square in cross-section (Wagner *et al.* 1999).

Little is known about the life history of *Hedyotis coriacea*. Flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1997).

Historically, *Hedyotis coriacea* was known from the Waianae and Koolau Mountains on Oahu and the island of Hawaii. Currently, this species is extant on Maui and Hawaii. This species was last collected on Oahu in the 1800s (HINHP Database 2001).

Hedyotis coriacea is found on steep, rocky slopes in dry to mesic *Dodonaea viscosa* dominated shrublands or forests at elevations of 57 to 836 m (187 to 2,742 ft). Associated native species include *Alyxia oliviformis*, *Leptecophylla tameiameia*, or *Metrosideros polymorpha* (HINHP Database 2001; 57 FR 20772).

Nothing is known of the threats to *Hedyotis coriacea* on Oahu because the species was last collected there in the 1800s (Service 1997; 57 FR 20772).

Hesperomannia arborescens (NCN)

Hesperomannia arborescens, a long-lived member of the aster family (Asteraceae), is a small shrubby tree that usually stands 1.5 to 5 m (5 to 16 ft) tall. This member of an endemic Hawaiian genus differs from other *Hesperomannia* species in having the following combination of characteristics: Erect to ascending flower heads, thick flower head stalks, and usually hairless and relatively narrow leaves (Wagner *et al.* 1999).

This species has been observed in flower from April through June and fruit during March and June. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b; 59 FR 14482).

Hesperomannia arborescens was formerly known from Molokai, Lanai, and scattered occurrences throughout the Koolau Mountains, Oahu, from Koolauloa and Pupukea at its northern extreme to Konahuanui at the southern end. This species is now known from Oahu, Molokai, and Maui. On Oahu, there are 36 occurrences containing between 86 and 93 individuals on private, city, county, State, and Federal lands at a few disjunct locations upslope of Kahuku, Laie, and Malaekahana; along Poamoho Trail above Poamoho Stream; along Waikane-Schofield Trail near the ridge summit; and at Kipapa Gulch, on Halawa Ridge, Waimanalo-Niu divide, Kainawaanui, Kaukonahua Gulch, Maakua-Kaipapau

Ridge, Kapakahi Gulch, Halemano-Opaeula Ridge, Kawaihoa Trail, Kaimananui Gulch, and upper Palolo Valley to Niu Valley (EDA Database 2001; GDSI 2001; HINHP Database 2001; Service 1998b).

Hesperomannia arborescens on Oahu is found in association with *Acacia koa*, *Antidesma platyphyllum*, *Bobea elatior*, *Broussaisia arguta*, *Cheirodendron* sp., *Cibotium* sp., *Coprosma* sp., *Dicranopteris linearis*, *Dubautia* sp., *Hedyotis terminalis*, *Hibiscus arnottianus*, *Labordia sessilis* (kamakahala), *Machaerina angustifolia*, *Melicope* sp., *Metrosideros polymorpha*, *Myrsine* sp., *Nestegis sandwicensis*, *Perottetia sandwicensis*, *Pipturus* sp., *Psychotria mariniana*, *Scaevola gaudichaudiana*, *Scaevola glabra* (ohe naupaka), *Syzygium sandwicensis*, *Tetraplasandra oahuensis*, and *Wikstroemia* sp. It typically grows on steep slopes, ridge tops, and gulches in lowland wet forests and occasionally in shrublands between 110 and 1,147 m (361 and 3,762 ft) in elevation (HINHP Database 2001; Service 1998b; Wagner *et al.* 1999).

The major threats to *Hesperomannia arborescens* are habitat degradation by feral pigs and goats; competition with the nonnative plant species *Axonopus fissifolius*, *Clidemia hirta*, *Leptospermum scoparium*, and *Psidium cattleianum*; fire; impact by humans; and a risk of extinction due to random environmental events or reduced reproductive vigor due to this species' limited numbers (HINHP Database 2001; 59 FR 14482).

Hesperomannia arbuscula (NCN)

Hesperomannia arbuscula, a long-lived perennial member of the aster family (Asteraceae), is a small shrubby tree, 2 to 3.3 m (7 to 11 ft) tall. This species can be distinguished from other members of the genus by the erect flower heads and the leaves, usually hairy beneath, which are one to two times as long as wide (Wagner *et al.* 1999).

Hesperomannia arbuscula usually flowers in the spring depending on precipitation. Seeds mature in about six weeks and trees live for about 10 to 15 years. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b).

Historically, *Hesperomannia arbuscula* was known from the central and southern Waianae Mountains, from Makaleha to Puu Kanehoa on Oahu, and from West Maui. This species is currently known to be extant on the Makaha-Waianae Kai Ridge and in

Kaluaa and Kapuna Gulches on Oahu and on West Maui. The 6 known occurrences on Oahu contain between 90 and 92 individuals on State, private, city, and county lands (GDSI 2001; HINHP Database 2001).

Hesperomannia arbuscula on Oahu typically grows on slopes and ridges in dry to wet forest dominated by *Acacia koa* and *Metrosideros polymorpha* at elevations of 370 to 1,053 m (1,214 to 3,454 ft). Associated native species include *Alyxia oliviformis*, *Antidesma* sp., *Bidens* sp., *Bobea elatior*, the endangered *Cyanea longiflora*, *Diospyros hillebrandii*, *Freycinetia arborea*, *Hedyotis terminalis*, *Hibiscus* sp., *Psychotria* sp., and *Syzygium sandwicensis* (HINHP Database 2001; Service 1998b; Wagner *et al.* 1999).

The major threats to *Hesperomannia arbuscula* on Oahu are habitat degradation by feral pigs; competition from the nonnative plant species *Clidemia hirta*, *Lantana camara*, *Psidium cattleianum*, *Rubus argutus*, and *Schinus terebinthifolius*; trampling by humans; and a risk of extinction from naturally occurring events and/or reduced reproductive vigor due to the small number of remaining occurrences and individuals (HINHP Database 2001; 56 FR 55770).

Hibiscus brackenridgei (Mao hau hele)

Hibiscus brackenridgei, a short-lived perennial member of the mallow family (Malvaceae), is a sprawling to erect shrub or small tree. This species differs from other members of the genus in having the following combination of characteristics: Yellow petals, a calyx consisting of triangular lobes with raised veins and a single midrib, bracts attached below the calyx, and thin stipules that fall off, leaving an elliptical scar.

Three subspecies of *Hibiscus brackenridgei* are now recognized: *brackenridgei*, *molokaiana*, and *mokuleianus*. When we listed this species in 1994, only two subspecies, *brackenridgei* and *mokuleianus*, were recognized. Subsequently we became aware of Wilson's (1993) taxonomic treatment of this group, in which *H. brackenridgei* ssp. *molokaiana* was recognized as distinct from *H. brackenridgei* ssp. *brackenridgei*. Wilson's (1993) treatment is cited in the supplement in the revised edition of the *Manual of the Flowering Plants of Hawaii* as the basis for recognizing *H. brackenridgei* ssp. *molokaiana*. We will address this name change in a future **Federal Register** notice (Bates 1999; HINHP Database 2000; Wagner *et al.* 1999; Wilson 1993).

Hibiscus brackenridgei is known to flower continuously from early February through late May, and intermittently at other times of year. Intermittent flowering may possibly be related to day length. Little else is known about the life history of this plant. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1999).

This species was historically known from Kauai, Oahu, Molokai, Lanai, Maui, and the island of Hawaii. *Hibiscus brackenridgei* ssp. *mokuleianus* is currently known from Oahu, Lanai, Maui, and Hawaii; it may possibly occur on Kauai. On Oahu, there are a total of fewer than 206 individual plants in 5 occurrences at Kaumokunui, Kawaiu, Palikea, Kihakapu, and Kaimuhole Gulches on State and private lands. *Hibiscus brackenridgei* ssp. *molokaiana* is currently known from Oahu. There are a total of five individual plants in one occurrence in Makua Valley on land under Federal jurisdiction (GDSI 2001; HINHP Database 2001; Joel Lau, pers. comm., 2001).

Hibiscus brackenridgei ssp. *mokuleianus* on Oahu occurs on slopes, cliffs, and arid ledges in lowland dry forest and shrubland from 24 to 490 m (79 to 1,607 ft) in elevation. Associated native plant species include *Bidens amplexans* (kookoolau), *Chamaesyce* sp., *Diospyros hillebrandii*, *Dodonaea viscosa*, *Doryopteris* sp., *Erythrina sandwicensis*, *Heteropogon contortus*, *Hibiscus brackenridgei* ssp. *molokaiana*, *Lepidium bidentatum*, *Melanthium remyi*, *Pleomele halapepe*, *Psydrax odorata*, *Reynoldsia sandwicensis*, *Sida fallax*, or *Waltheria indica*. *Hibiscus brackenridgei* ssp. *molokaiana* occurs in dry shrublands between 23 and 580 m (75 to 1,902 ft) elevation. Associated native plant species include *Dodonaea viscosa*, *Doryopteris* sp., *Heteropogon contortus*, *Sida fallax*, and *Waltheria indica* (GDSI Database 2001; HINHP Database 2001; EDA, *in litt.* 2001).

The primary threats to *Hibiscus brackenridgei* ssp. *mokuleianus* on Oahu are habitat degradation and possible predation by pigs, goats, cattle, and rats; competition with the nonnative plant species *Ageratum conyzoides* (maile honohono), *Aleurites moluccana*, *Caesalpinia decapetala*, *Coffea arabica*, *Grevillea robusta*, *Hyptis pectinata*, *Leucaena leucocephala*, *Melia azedarach*, *Neonotonia wightii* (NCN), *Panicum maximum*, *Passiflora edulis*, *Passiflora suberosa*, *Schinus terebinthifolius*, *Spathodea campanulata* (African tulip tree),

Syzygium cumini, and *Toona ciliata*; road construction; fire; and susceptibility to extinction caused by random environmental events or reduced reproductive vigor due to a limited number of occurrences and individuals. The primary threats to *Hibiscus brackenridgei* ssp. *molokaiana* are habitat degradation and possible predation by pigs and goats; competition with the nonnative plant species *Ageratum conyzoides*, *Leucaena leucocephala*, and *Panicum maximum*; fire; predation by the Chinese rose beetle; and susceptibility to extinction caused by random environmental events or reduced reproductive vigor due to the single occurrence and limited number of individuals (HINHP Database 2001; 59 FR 56333).

Isodendron laurifolium (Aupaka)

Isodendron laurifolium, a short-lived perennial member of the violet family (Violaceae), is a slender, erect shrub with few branches. The species is distinguished from others in the genus by its leathery, oblong-elliptic, narrowly elliptic, lance-shaped leaves (Wagner *et al.* 1999).

Little is known about the flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors of this species (Service 1999).

Historically, *Isodendron laurifolium* was known from Kauai and the Waianae and Koolau mountains of Oahu. Currently, this species is found on Kauai and Oahu. On Oahu, there are a total of between 22 and 23 individuals found in 5 occurrences on State, private, city, and county lands in Makaha in the Waianae Mountains, East Makaleha Valley, Waianae Kai, Kaawa Gulch, and Kaumokunui Gulch (GDSI 2001; HINHP Database 2001).

Isodendron laurifolium on Oahu is usually found between 90 and 959 m (295 and 3,146 ft) elevation on gulch slopes, in ravines, and on ridges in diverse mesic or dry forest dominated by *Metrosideros polymorpha*, *Eugenia reinwardtiana*, or *Diospyros sandwicensis* with one or more of the following associated native plant species: *Acacia koa*, *Alyxia oliviformis*, *Antidesma platyphyllum*, *Antidesma pulvinatum*, *Carex wahuensis*, *Charpentiera tomentosa* (papala), *Doodia* sp., *Dryopteris unidentata*, *Hedyotis terminalis*, *Hibiscus arnottianus*, *Nestegis sandwicensis*, *Pisonia* sp., *Pouteria sandwicensis*, *Psydrax odorata*, *Rauvolfia sandwicensis*, *Sapindus* sp. (soapberry), *Smilax melastomifolia* (hoi kuahiwi), or

Xylosma hawaiiense (HINHP Database 2001; Service 1999).

The primary threats to *Isodendron laurifolium* on Oahu are habitat degradation by feral goats and pigs; competition with the nonnative plant species *Aleurites moluccana*, *Cordyline fruticosa*, *Grevillea robusta*, *Psidium cattleianum*, *Schinus terebinthifolius*, and *Toona ciliata*; and a potential threat from military activities (HINHP Database 2001; 61 FR 53108).

Isodendron longifolium (Aupaka)

Isodendron longifolium, a member of the violet family (Violaceae), is a slender, erect shrub. The hairless, leathery, lance-shaped leaves distinguish this species from others in the genus (Wagner *et al.* 1999).

Little is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors of this species (Service 1999).

Historically and currently, *Isodendron longifolium* is known from scattered locations on Kauai and the Waianae Mountains on Oahu. There is a total of 30 individual plants on Oahu in 7 occurrences on Federal, State, and private lands in Palikea Gulch, Kaawa Gulch, Makaua Gulch, and Kaukonahua Stream (EDA Database 2001; HINHP Database 2001).

Isodendron longifolium on Oahu is found on steep slopes and stream banks in mixed mesic or lowland wet *Metrosideros polymorpha*-*Dicranopteris linearis* forest, usually between 363 and 964 m (1,191 and 3,162 ft) elevation. Associated native plant species include *Acacia koa*, *Alyxia oliviformis*, *Antidesma* sp., *Bobea brevipes* (ahakea lau lii), *Carex* sp., *Cyanea* sp. (haha), *Cyrtandra* sp., *Hedyotis terminalis*, *Isachne pallens* (NCN), *Melicope* sp., *Peperomia* sp., *Perrottetia sandwicensis*, *Pittosporum* sp., *Pouteria sandwicensis*, *Psychotria* sp., *Psydrax odorata*, *Selaginella arbuscula*, or *Syzygium sandwicensis* (HINHP Database 2001; Service 1999).

The major threats to *Isodendron longifolium* on Oahu are habitat degradation or destruction by feral goats and pigs; competition with the nonnative plants *Ageratina riparia*, *Clidemia hirta*, *Oplismenus hirtellus*, *Paspalum conjugatum*, *Psidium cattleianum*, and *Thelypteris parasitica*; and a risk of extinction from naturally occurring events due to the small number of occurrences and individuals. The Palikea Gulch occurrence is also potentially threatened by fire (HINHP Database 2001; 61 FR 53108).

Isodendron pyrifolium (wahine noho kula)

Isodendron pyrifolium, a short-lived perennial member of the violet family (Violaceae), is a small, branched shrub. The species is distinguished from others in the genus by its smaller, green-yellow flowers and by its hairy stipules and leaf veins (Wagner *et al.* 1999).

During periods of drought, this species will drop all but the newest leaves. After sufficient rains, the plants produce flowers with seeds ripening one to two months later. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1996c).

Isodendron pyrifolium was known historically from Oahu's central Waianae mountains, Maui, Hawaii, Niihau, Molokai, and Lanai. Currently, this species is found only on the island of Hawaii. This species was last collected on Oahu in the late 1800s (HINHP Database 2001).

Isodendron pyrifolium was found on Oahu on bare rocky hills and in wooded ravines in dry shrublands at low elevations from 363 to 964 m (1,191 to 3,162 ft) (HINHP Database 2001; Wagner *et al.* 1999).

Nothing is known of the threats to *Isodendron pyrifolium* on Oahu because it was last collected there in the 1800s.

Lobelia niihauensis (NCN)

Lobelia niihauensis, a short-lived perennial member of the bellflower family (Campanulaceae), is a small, branched shrub. This species is distinguished from others in the genus by its leaves lacking or nearly lacking leaf stalks, the width of the leaf, and length of the magenta-colored flowers (56 FR 55770).

Lobelia niihauensis flowers in late summer and early fall. Fruits mature four to six weeks later. Plants are known to live as long as 20 years. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b).

Historically, *Lobelia niihauensis* was known from the Waianae Mountains of Oahu (Uluhulu Gulch to Nanakuli Valley), Kauai, and Niihau. It is now known to be extant only on Kauai and Oahu. On Oahu, this species remains on Ohikilolo Ridge, Kaimokuiki-Manuwai Ridge, Kamaileunu Ridge, Mt. Kaala, Makaha-Waianae Kai, Makua Military Reservation, Nanakuli, South Mohiaka Gulch, east of Puu Kalena, Kahanahaiki

Valley, between Puu Hapapa and Puu Kanehoa, Puu Kailio, between Kolekole Pass and Puu Hapapa, North of Palikea, Puu Kaa-Kauhiuhi-Pahoa-Halona subdistricts, and Lualualei Naval Magazine in 40 occurrences containing between 362 and 397 individual plants on Federal, State, city, and county lands (EDA Database 2001; GDSI 2001; HINHP Database 2001).

Lobelia niihauensis on Oahu typically grows on exposed mesic or dry cliffs and ledges, at elevations from 339 to 926 m (1,112 to 3,037 ft). Associated native plant species include *Artemisia* sp., *Bidens* sp., *Carex meyenii*, *Dodonaea viscosa*, *Doryopteris* sp., *Eragrostis* sp., *Leptecophylla tameiameia*, *Lipochaeta tenuis*, *Osteomeles anthyllidifolia*, *Plectranthus parviflorus*, *Schiedea mannii*, or *Sida fallax* (HINHP Database 2001; 56 FR 55770).

On Oahu, the major threats to *Lobelia niihauensis* are habitat degradation and predation by feral goats, rats, and slugs; fire; potential impacts from military activities; and competition from the nonnative plant species *Acacia confusa*, *Ageratina riparia*, *Erigeron karvinskianus*, *Ficus microcarpa*, *Grevillea robusta*, *Kalanchoe pinnata*, *Lantana camara*, *Leucaena leucocephala*, *Melinis minutiflora*, *Melinis repens*, and *Schinus terebinthifolius* (HINHP Database 2001; 56 FR 55770).

Lysimachia filifolia (NCN)

Lysimachia filifolia, a short-lived perennial member of the primrose family (Primulaceae), is a small shrub 15 to 50 cm (0.5 to 1.6 ft) tall. This species is distinguished from other members of the genus by its leaf shape and width, calyx lobe shape, and corolla length (Service 1995b; Wagner *et al.* 1999).

Little is known about the life history of *Lysimachia filifolia*. Flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1995b).

Historically, *Lysimachia filifolia* was known only from Kauai. This species is now known from Oahu and Kauai. On Oahu, there is one occurrence containing a total of 50 individuals, on the slopes of Waiahole Valley in the Koolau Mountains on State land (GDSI 2001; HINHP Database 2001).

On Oahu, *Lysimachia filifolia* typically grows on mossy banks at the base of cliff faces within the spray zone of waterfalls or along streams in lowland wet forests at elevations of 65 to 798 m (213 to 2,617 ft). Associated

plants include mosses, ferns, liverworts, and *Pilea peploides* (NCN) (HINHP Database 2001; Service 1995b; Wagner *et al.* 1999).

The major threat to *Lysimachia filifolia* on Oahu is competition with the nonnative plant species *Ageratina riparia*, *Blechnum appendiculatum*, *Cordyline fruticosa*, *Pluchea* sp. (sourbush), and *Schefflera actinophylla*. Additionally, individuals of the species are vulnerable to rock slides. Because only one occurrence of *Lysimachia filifolia* exists on each of only two islands, the species is threatened by extinction due to naturally caused events (HINHP Database 2001; 59 FR 09304).

Mariscus pennatifolius (NCN)

Mariscus pennatifolius, a member of the sedge family (Cyperaceae), is a short-lived perennial plant with a woody root system covered with brown scales. This species differs from other members of the genus by its three-sided, slightly concave, smooth stems; the length and number of spikelets; the leaf width; and the length and diameter of stems. The two subspecies (*Mariscus pennatifolius* ssp. *pennatifolius* and *Mariscus pennatifolius* ssp. *bryanii*) are distinguished by the length and width of spikelets, shape and length of fruits, and color, length, and width of glumes.

Subsequent to the final rule listing this species in 1994, we became aware of Tucker's (1994) treatment of this genus reclassifying it to *Cyperus*. Tucker's (1994) treatment is cited in the supplement in the revised edition of the *Manual of the Flowering Plants of Hawaii* as the basis for recognizing *Mariscus* as *Cyperus*. We will address this name change in a future **Federal Register** notice (Service 1999; Wagner *et al.* 1999).

Flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown for *Mariscus pennatifolius* ssp. *pennatifolius* (Service 1999).

Historically, *Mariscus pennatifolius* was known from Kauai, Oahu (Waianae Mountains on a ridge above Makaha Valley), East Maui, the island of Hawaii, and Laysan Island in the Northwestern Hawaiian Islands. *Mariscus pennatifolius* ssp. *bryanii* is known from Laysan. Only one occurrence of *Mariscus pennatifolius* ssp. *pennatifolius* has been seen in the last 70 years on the main Hawaiian islands, in Keanae Valley on Maui in the 1970s (HINHP Database 2001).

Mariscus pennatifolius typically grows in mesic and wet *Metrosideros polymorpha* forest and *Metrosideros*

polymorpha-Acacia koa forest at elevations between 424 and 1,032 m (1,391 and 3,385 ft). The associated native plant species on Oahu are unknown (J. Lau, *in litt.* 2001).

No threat information is available for *Mariscus pennatifolius* on Oahu.

Marsilea villosa (Ihiihi)

Marsilea villosa, a short-lived perennial member of the marsilea family (Marsileaceae), is an aquatic to semiaquatic fern similar in appearance to a four-leaved clover that requires periodic flooding to complete its life cycle. The species is the only member of the genus native to Hawaii and is closely related to *Marsilea vestita* of the western coast of the United States (Service 1996a).

Sexual reproduction of *Marsilea villosa* is initiated through the production of a hard sporocarp (a structure in or on which spores are produced) borne on the rhizome of a leaf pair node. The young sporocarp is covered with rust-colored hairs that are lost as the sporocarp matures. The sporocarp will mature only if the soil dries below threshold levels for leaf growth. The sporocarp remains in the soil for an extended period of time and must be scarified before it will open. It is not known how the sporocarp is scarified in *Marsilea villosa*, but bacterial action is thought to erode the wall of the sporocarp to the point that water can be absorbed and force the sporocarp to open, as in other *Marsilea* species (Service 1996a).

Marsilea villosa was historically known from Oahu, Molokai, and Niihau. Currently, it is found on Oahu and Molokai. There are five occurrences on Oahu with an unknown number of individuals at Koko Head, on Lualualei Naval Reservation, and at Kealakipapa on Federal, city, county, and private lands (GDSI 2001; HINHP Database 2001; Service 1996a).

Marsilea villosa typically grows in cinder craters, vernal pools surrounded by lowland dry forest vegetation, mud flats, or lowland grasslands at elevations between 424 and 1,032 m (1,391 and 3,385 ft). Associated native plant species include *Sida fallax* (HINHP Database 2001).

The main reason for the decline of *Marsilea villosa* on Oahu is habitat destruction and the destruction of natural hydrology; many of the areas where it formerly occurred are now sugar cane fields, industrial parks, housing developments, and pastures. The greatest immediate threats to the survival of this species are encroachment and competition from naturalized, nonnative plants such as

Bidens pilosa, *Cynodon dactylon* (Bermuda grass), *Panicum maximum*, and *Prosopis pallida* (kiawe); habitat disturbance by off-road vehicles or by grazing cattle; continued development and habitat degradation; fire; small occurrence size; and fragmentation, trampling, and other impacts from humans and introduced mammals (HINHP Database 2001; 57 FR 27863).

Melicope pallida (Alani)

Melicope pallida, a long-lived perennial member of the citrus family (Rutaceae), is a tree with grayish white hairs and black, resinous new growth. The species differs from other members of the genus by the resinous new growth, leaves folded and in clusters of three, and fruits with separate carpels (Stone *et al.* 1999).

Little is known about the life history of *Melicope pallida*. Flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1995b).

Melicope pallida is currently and historically known from Kauai and Oahu. On Oahu, it is currently known from the Waianae Mountains within TNCH's privately owned Honouliuli Preserve on State and private lands. There is a single occurrence with a single individual (GDSI 2001; HINHP Database 2001).

Melicope pallida usually grows on steep rock faces in lowland dry or mesic forests at elevations of 234 to 841 m (768 to 2,758 ft). Associated native plant species include the endangered *Abutilon sandwicense*, *Acacia koa*, *Alyxia oliviformis*, *Bobea elatior*, *Cibotium* sp., *Dryopteris* sp. (NCN), *Metrosideros polymorpha*, *Pipturus albidus*, *Psychotria mariniana*, *Sapindus oahuensis*, *Syzygium sandwicensis*, *Tetraplasandra* sp., *Wikstroemia oahuensis*, or *Xylosma hawaiiense* (HINHP Database 2001; 59 FR 09304).

The major threat to *Melicope pallida* on Oahu is competition from nonnative plants, especially *Andropogon virginicus*, *Clidemia hirta*, *Psidium cattleianum*, *Pterolepis glomerata*, and *Toona ciliata*. A potential threat to *M. pallida* is the black twig borer, which is known to occur in areas where this species grows and to feed on members of the genus *Melicope*. Additional threats to *M. pallida* are fire, habitat degradation by feral pigs, and a high risk of extinction due to naturally caused events and/or reduced reproductive vigor due to the solitary existing individual on Oahu (HINHP Database 2001; 59 FR 09304).

Nototrichium humile (Kului)

Nototrichium humile, a short-lived perennial member of the amaranth family (Amaranthaceae), is an upright to trailing shrub with branched stems to 1.5 m (5 ft) long. This species is distinguished from the only other species in the genus by the size and hairiness of its inflorescence (Wagner *et al.* 1999).

Nototrichium humile is found on and at the base of rock cliffs and talus slopes in areas in partial shade. Plants have been observed flowering after heavy rain, but flowering is generally heaviest in the spring and summer. Fruits mature a few weeks after flowering. In cultivation, this species is known to live for more than a decade (Service 1998b). Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors.

Historically and currently, *Nototrichium humile* is known from Oahu and Maui. Currently, on Oahu, it is found in Kapuhi Gulch, Pahole Gulch, Kealia, Kahanahaiki, Kaluakauila Gulch, along Makua-Keau Ridge to Makaha-Waianae Kai Ridge, and Nanakuli, where it occurs on Federal, State, city, county, and private lands. There are a total of 25 occurrences containing between 775 and 995 individuals on Oahu (EDA Database 2001; GDSI 2001; HINHP Database 2001).

Nototrichium humile typically grows at elevations of 185 to 806 m (607 to 2,644 ft) on cliff faces, gulches, stream banks, or steep slopes in dry or mesic forests often dominated by *Sapindus oahuensis* or *Diospyros sandwicensis*. Associated native species include the endangered species *Abutilon sandwicense*, *Alyxia oliviformis*, *Antidesma pulvinatum*, *Artemisia australis*, *Bidens cervicata* (kookoolau), *Canavalia* sp., *Carex wahuensis*, *Charpentiera* sp., *Dodonaea viscosa*, *Elaeocarpus bifidus*, *Erythrina sandwicensis*, *Eugenia reinwartiana*, *Hibiscus* sp., *Melanthra tenuis*, *Metrosideros polymorpha*, *Myoporum sandwicense*, *Myrsine lanaiensis*, *Nestegis sandwicensis*, *Peperomia* sp., *Pisonia umbellifera*, *Pleomele* sp., *Pouteria sandwicensis*, *Psydrax odorata*, *Rauvolfia sandwicensis*, *Reynoldsia sandwicensis*, *Sicyos* sp., *Stenogyne* sp., *Streblus pendulinus*, or *Syzygium sandwicensis*, (HINHP Database 2001; Service 1998b; 56 FR 55770).

On Oahu, the major threats to *Nototrichium humile* are habitat degradation by feral goats and pigs; potential impacts of military activities;

competition from the nonnative plant species *Adiantum hispidulum*, *Ageratina adenophora*, *Aleurites moluccana*, *Blechnum appendiculatum*, *Buddleia asiatica*, *Caesalpinia decapetala*, *Coffea arabica*, *Cordyline fruticosa*, *Ficus microphylla*, *Grevillea robusta*, *Hyptis pectinata*, *Kalanchoe pinnata*, *Lantana camara*, *Leucaena leucocephala*, *Melia azedarach*, *Melinis minutiflora*, *Montanoa hibiscifolia*, *Oplismenus hirtellus*, *Panicum maximum*, *Passiflora suberosa*, *Pimenta dioica*, *Psidium cattleianum*, *Psidium guajava*, *Rivina humilis*, *Schefflera actinophylla*, *Schinus terebinthifolius*, *Spathodea campanulata*, *Syzygium cumini*, *Triumfetta semitriloba* (Sacramento bur), and *Toona ciliata*; road building and maintenance; and fire (HINHP Database 2001; Service 1998b; 56 FR 55770).

Peucedanum sandwicense (Makou)

Peucedanum sandwicense, a short-lived perennial and a member of the parsley family (Apiaceae), is a parsley-scented, sprawling herb. Hollow stems arise from a short, vertical, perennial stem with several fleshy roots. This species is the only member of the genus on the Hawaiian Islands (Constance and Affolter 1999).

Flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown for this species (Service 1995b).

Historically and currently, *Peucedanum sandwicense* is known from Molokai, Maui, and Kauai. Discoveries in 1990 extended the known distribution of this species to Oahu. On Oahu, there are a total of 4 occurrences containing 51 individual plants on State, city, and county lands in Keau Valley, Puu Kawiwi, Waianae Kai, and Kamaileunu Ridge (GDSI 2001; HINHP Database 2001).

Peucedanum sandwicense grows on cliffs, slopes, and ridges in *Metrosideros polymorpha* lowland mesic forest between 395 and 977 m (1,296 and 3,205 ft) elevation and is associated with native species such as *Artemisia australis*, *Carex meyenii*, *Dianella sandwicensis*, *Dodonaea viscosa*, *Eragrostis* sp., *Lepidium bidentatum* var. *o-waihiense*, *Melanthra integrifolia* (nehe), *Osteomeles anthyllidifolia*, *Peperomia remyi* (alaala wai nui), *Pittosporum halophilum* (hoawa), *Plechranthus parviflorus*, *Plumbago zeylanica*, *Portulaca lutea* (ihi), *Reynoldsia sandwicensis*, *Santalum ellipticum* (iliahialoe), *Scaevola sericea* (naupaka kahakai), *Schiedea globosa* (NCN), *Senna gaudichaudii*, and *Sida*

fallax (Constance and Affolter 1999; HINHP Database 2001; Service 1995b).

Threats to *Peucedanum sandwicense* on Oahu are habitat degradation by feral goats and pigs and competition with the nonnative plant species *Kalanchoe pinnata*, *Lantana camara*, *Melinis minutiflora*, and *Schinus terebinthifolius* (HINHP Database 2001).

Phlegmariurus nutans (Wawaeiole)

Phlegmariurus nutans is an erect or pendulous herbaceous epiphyte in the clubmoss family (Lycopodiaceae). This species can be distinguished from others of the genus in Hawaii by its epiphytic habit, simple or forking fruiting spikes, and larger and stiffer leaves (59 FR 14482).

This species has been observed fertile, with spores, in May and December. No other information is available on reproductive cycles, dispersal agents, longevity, specific environmental requirements, or limiting factors (Service 1998b).

Historically, *Phlegmariurus nutans* was known from the island of Kauai and from scattered locations in the Koolau Mountains of Oahu, bounded by Kaluanui Valley to the north, Paalaa to the west, and Mount Tantalus to the south. This species is now known only from Oahu in 3 occurrences containing seven individual plants on Federal and State lands in Kaukonahua Gulch, Kahana, and Kaipapau Gulch (EDA Database 2001; GDSI 2001; HINHP Database 2001).

Phlegmariurus nutans on Oahu grows on tree trunks, usually on open ridges, forested slopes, and cliffs in *Metrosideros polymorpha*-dominated wet forests and shrublands and occasionally mesic forests between 227 and 846 m (745 and 2,775 ft) in elevation. Associated native plant species include *Antidesma platyphyllum*, *Broussaisia arguta*, *Cyrtandra laxiflora*, *Dicranopteris linearis*, *Elaphoglossum* sp. (ekaha), *Hedyotis terminalis*, *Hibiscus* sp., *Machaerina angustifolia*, *Psychotria mariniana*, *Syzygium sandwicensis*, or *Wikstroemia oahuensis* (HINHP Database 2001; Service 1998b; EDA, *in litt.* 2001).

The primary threat to *Phlegmariurus nutans* on Oahu is susceptibility to extinction from naturally caused events and decreased reproductive vigor because of the small number of remaining individuals and limited distribution of the species. Additional threats to *Phlegmariurus nutans* are habitat degradation by feral pigs; floods; and the nonnative plants *Clidemia hirta*, *Paspalum conjugatum*, *Psidium*

cattleianum, and *Sacciolepis indica* (HINHP Database 2001).

Phyllostegia mollis (NCN)

Phyllostegia mollis, a short-lived member of the mint family (Lamiaceae), grows as a nearly erect, densely hairy, nonaromatic, perennial herb. A suite of technical characteristics concerning the kind and amount of hair, the number of flowers in a cluster, and details of the various plant parts separate this species from other members of the genus (Wagner *et al.* 1999).

Individual *Phyllostegia mollis* plants live for approximately five years. The species is known to flower in late winter and spring. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1998b).

Historically, *Phyllostegia mollis* was known from Molokai, Maui, and Oahu from the central and southern Waianae Mountains, Mt. Kaala to Honouliuli, and Makiki in the Koolau Mountains. Currently, this species is only known from Oahu and Maui. On Oahu, this species remains only in Kaluaa Gulch, Palawai Gulch, Puu Kumakalii, Mohiakea Gulch, Huliwai Gulch, Waieli Gulch, and Pualii Gulch on Federal and private lands. The 5 occurrences contain between 85 and 105 individuals (EDA Database 2001; GDSI 2001; HINHP Database 2001).

Phyllostegia mollis typically grows on steep slopes and in gulches in diverse mesic to wet forests at elevations of 519 to 928 m (1,702 to 3,044 ft). Associated native plant species include *Acacia koa*, *Alyxia oliviformis*, *Antidesma platyphyllum*, *Carex meyenii*, *Chamaesyce multiformis*, *Claoxylon sandwicense*, *Diospyros hillebrandii*, *Dryopteris unidentata*, *Metrosideros polymorpha*, *Myrsine* sp., *Pipturus alba*, *Pisonia umbellifera*, *Pouteria sandwicensis*, *Psychotria hathewayi*, or *Urera glabra* (HINHP Database 2001; EDA, *in litt.* 2001).

The major threats to *Phyllostegia mollis* are competition from the nonnative plant species *Ageratina adenophora*, *Blechnum appendiculatum*, *Christella parasitica*, *Clidemia hirta*, *Heliocarpus popayanensis*, *Kalanchoe pinnata*, *Passiflora suberosa*, *Psidium cattleianum*, *Rubus rosifolius*, and *Schinus terebinthifolius*; rockslides; habitat degradation and predation by feral pigs and goats; and the small number of extant occurrences, which makes the species vulnerable to extinction and/or reduced reproductive vigor (HINHP Database 2001).

Phyllostegia parviflora (NCN)

Phyllostegia parviflora, a member of the mint family (Lamiaceae), is a perennial herb. The species is distinguished from others of the genus by the shape of the leaves and the length of the leaf stalks and lower corolla. The varieties of this species are differentiated by hairs on the inflorescence and leaves and by the branching of the inflorescence.

At the time of listing of this species in 1996, only two varieties were recognized, *Phyllostegia parviflora* var. *glabriuscula* and *P. parviflora* var. *parviflora*. Subsequently we became aware of Wagner *et al.*'s (1999) taxonomic treatment of this group in which *P. parviflora* var. *lydgatei* was recognized. This treatment is cited in the supplement in the revised edition of the *Manual of the Flowering Plants of Hawaii* (Wagner *et al.* 1999) as the basis for recognizing *P. parviflora* var. *lydgatei*. This name change will be addressed in a future **Federal Register** notice.

Historically, *Phyllostegia parviflora* was known from the islands of Oahu, Hawaii, and Maui. This species is now known only from six occurrences on Oahu. *Phyllostegia parviflora* var. *glabriuscula* was only known from the island of Hawaii on private land and has not been observed since the 1800s. *Phyllostegia parviflora* var. *parviflora* is now known from only 30 plants on the east side of Puu Pauao, on State and Federal lands. *Phyllostegia parviflora* var. *lydgatei* is known from only four plants in North Pualii Gulch on private land (GDSI 2001; HINHP Database 2001).

Phyllostegia parviflora var. *lydgatei* is typically found on moderate to steep slopes in mesic forest from 555 to 881 m (1,820 to 2,890 ft) elevation. Native vegetation associated with *Phyllostegia parviflora* var. *lydgatei* includes *Antidesma platyphyllum*, *Chamaesyce multiformis*, *Claoxylon sandwicense*, *Coprosma foliosa*, *Dryopteris unidentata*, *Myrsine lessertiana*, *Pipturus albidus*, *Pouteria sandwicensis*, *Selaginella arbuscula*, or *Xylosma hawaiiense*. *Phyllostegia parviflora* var. *parviflora* is typically found in *Metrosideros polymorpha* mixed lowland wet forest from 232 to 867 m (761 to 2,844 ft) elevation. Native vegetation associated with *Phyllostegia parviflora* var. *parviflora* includes *Antidesma* sp., *Broussaisia arguta*, *Cheirodendron* sp., *Cibotium* sp., *Cyrtandra* sp., *Dicranopteris linearis*, *Melicope* sp., *Phyllostegia glabra* (NCN), *Pipturus* sp., *Pritchardia* sp., *Syzygium sandwicensis*, *Tetraplasandra* sp., or

Touchardia latifolia (HINHP Database 2001).

The major threats to *Phyllostegia parviflora* var. *lydgatei* are habitat degradation and/or destruction by feral pigs; landslides or rockslides; competition with the nonnative plant species *Ageratina adenophora*, *Christella parasitica*, *Passiflora suberosa*, *Psidium cattleianum*, *Rivina humilis*, *Rubus rosifolius*, and *Schinus terebinthifolius*; and a risk of extinction and/or reduced reproductive vigor due to the small number of remaining individuals and occurrences. The major threats to *Phyllostegia parviflora* var. *parviflora* on Oahu are competition with the nonnative plant species *Ageratina* sp. and *Clidemia hirta*; and extinction and/or reduced reproductive vigor due to the small number of remaining individuals in each respective occurrence (HINHP Database 2001; Service 1999; 61 FR 53108).

Plantago princeps (laukahi kuahiwi)

Plantago princeps, a short-lived member of the plantain family (Plantaginaceae), is a small shrub or robust perennial herb. This species differs from other native members of the genus in Hawaii by its large branched stems, flowers at nearly right angles to the axis of the flower cluster, and fruits that break open at a point two-thirds from the base. The four varieties, vars. *anomala*, *laxiflora*, *longibracteata*, and *princeps*, are distinguished by the branching and pubescence of the stems; the size, pubescence, and venation of the leaves; the density of the inflorescence; and the orientation of the flowers (Wagner *et al.* 1999).

Individuals have been observed in fruit from April through September. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1999).

Plantago princeps was historically found on Kauai, Oahu, Molokai, Hawaii, and Maui. It is no longer extant on the island of Hawaii. *Plantago princeps* var. *longibracteata* was known from Kauai and Oahu, but there are currently no remaining Oahu populations. The 11 extant occurrences of var. *princeps* on Oahu consist of between 130 and 180 individuals on Federal, State, city, county, and private lands at Palawai Gulch, Ekahanui Gulch, Nanakuli-Lualualei Ridge, Makua-Makaha Ridge, Mohiaka Gulch, and Pahole Gulch (EDA Database 2001; GDSI 2001; HINHP Database 2001).

On Oahu, *Plantago princeps* var. *longibracteata* was typically found on the sides of waterfalls and wet rock

faces between 64 and 835 m (210 and 2,739 ft) elevation. Associated native plant species included *Bidens* sp., *Coprosma granadensis* (makole), *Eugenia* sp., *Lobelia gaudichaudii* (NCN), *Metrosideros rugosa*, or *Scaevola glabra*. *Plantago princeps* var. *princeps* is typically found on slopes and ledges in *Metrosideros polymorpha* lowland mesic forests and shrublands between 110 and 1,064 m (361 to 3,490 ft) elevation. Associated native plant species include *Artemisia australis*, *Bidens* sp., *Chamaesyce* sp., *Dubautia plantaginea*, *Eragrostis* sp., *Lysimachia* sp., *Pilea peplodes*, and *Viola* sp. (pamakani) (HINHP Database 2001; EDA, *in litt.* 2001).

The primary threats to *Plantago princeps* var. *longibracteata* on Oahu were predation and habitat degradation by feral pigs and goats and competition with various nonnative plant species. The primary threats to *Plantago princeps* var. *princeps* are rockslides and competition with the nonnative plant species *Erigeron karvinskianus*, *Melinis minutiflora*, and *Schinus terebinthifolius* (HINHP Database 2001; Service 1999; 59 FR 56333).

Platanthera holochila (NCN)

Platanthera holochila, a short-lived perennial member of the orchid family (Orchidaceae), is an erect, deciduous herb. The stems arise from underground tubers, the pale green leaves are lance-to egg-shaped, and the greenish-yellow flowers occur in open spikes. This is the only species of this genus that occurs on the Hawaiian Islands (Wagner *et al.* 1999). It is distinguished from other Hawaiian orchids by its underground tubers that lack roots at the nodes or pseudobulbs and by the shape and length of its dorsal sepal.

Flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown for this species (Service 1999).

Historically, *Platanthera holochila* was known from Maui, Oahu, Molokai, and Kauai. Currently, it is extant on Kauai, Molokai, and Maui. This species was last collected on Oahu in 1938 in the area from Puu Kainapua to Kawainui-Kaipapau summit ridge and Kipapa Gulch (HINHP Database 2001).

On Oahu, *Platanthera holochila* was found in *Metrosideros polymorpha*-*Dicranopteris linearis* wet forest or *M. polymorpha* mixed shrubland between 447 and 867 m (1,466 and 2,844 ft) elevation. Associated native plant species included *Broussaisia arguta*, *Cibotium* sp., *Clermontia* sp. (oha wai), *Coprosma* sp., *Dubautia* sp., *Gahnia* sp., *Leptecophylla tameiameiae*, *Luzula*

hawaiiensis (wood rush), *Lycopodiella cernua*, *Lythrum maritimum* (pukamole), *Polypodium pellucidum* (ae), *Sadleria* sp., *Scaevola* sp., *Vaccinium reticulatum*, and *Wikstroemia* sp. (akia) (Service 1999; 61 FR 53108).

The major threats to *Platanthera holochila* are habitat degradation and destruction by ungulates such as cattle and feral pigs, predation by slugs, competition with alien plants, over collection, and the small number of occurrences and individuals, which make the species highly vulnerable to extinction from random environmental events and reduced reproductive vigor (Service 1999).

Pteris lidgatei (NCN)

Pteris lidgatei, a short-lived member of the maidenhair fern family (Adiantaceae), is a coarse perennial herb, 0.5 to 1 m (1.6 to 3.3 ft) tall. It can be distinguished from other species of *Pteris* on the Hawaiian Islands by the texture of its fronds and the tendency of the sori along the leaf margins to be broken into short segments instead of being fused into continuous marginal sori (Wagner 1949; Wagner and Wagner 1992).

Flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown for this species (Service 1998a).

Historically, *Pteris lidgatei* was found on Oahu, Molokai, and Maui. Currently, this species is known from Oahu and Maui. Nine occurrences with approximately 13 individuals occur on Oahu on Federal, State, and private lands Kaluanui, Kawainui drainage, Kaukonahua Gulch, Kawai Iki Stream, Waimano Stream, and Waimano Gulch (EDA Database 2001; GDSI 2001; HINHP Database 2001).

Pteris lidgatei on Oahu grows on steep stream banks and cliffs around 75 m (246 ft) elevation in wet *Metrosideros polymorpha*-*Dicranopteris linearis* forest with *Asplenium* sp. (NCN), *Broussaisia arguta*, *Cibotium chamissoi*, *Cyrtandra* sp., *Dicranopteris linearis*, *Diplopterygium pinnatum*, *Doodia lyonii* (NCN), *Dryopteris sandwicensis*, *Elaphoglossum crassifolium* (ekaha), *Isachne pallens*, *Machaerina angustifolia*, *Sadleria squarrosa*, *Selaginella arbuscula*, or *Sphenomeris chinensis* (palaa) (HINHP Database 2001; EDA, *in litt.* 2001).

The primary threats to *Pteris lidgatei* on Oahu are competition with the nonnative plant species *Ageratina riparia*, *Christella parasitica*, *Clidemia hirta*, *Paspalum conjugatum*, *Psidium cattleianum*, *Pterolepis glomerata*, and

Sacciolepis indica; habitat destruction by feral pigs; and a risk of extinction from naturally occurring events and/or reduced reproductive vigor due to the small number of remaining individuals (HINHP Database 2001).

Sanicula purpurea (NCN)

Sanicula purpurea, a short-lived member of the parsley family (Apiaceae), is a stout herb, 8 to 36 cm (3 to 14 in) tall, arising from a massive perennial stem. This species is distinguished from others in the genus by the number of flowers per cluster and by the color of the petals (Constance and Affolter 1999).

Flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors of *Sanicula purpurea* are unknown (Service 1999).

Historically and currently, *Sanicula purpurea* is known from Oahu and Maui. On Oahu, 5 occurrences totaling approximately 21 individuals are currently known from Kaukonahua-Kahana divide, Helemano-Punaluu divide, the summit between Aiea and Waimano, and North Kaukonahue-Punaluu on Federal, State, and private lands (EDA Database 2001; GDSI 2001; HINHP Database 2001).

Sanicula purpurea on Oahu typically grows in open *Metrosideros polymorpha* mixed montane bogs and windswept shrublands within the cloud zone between 415 and 959 m (1,361 and 3,146 ft) elevation. Associated native plant species include *Bidens* sp., *Cheirodendron* sp., *Dicanthelium koolauense*, *Gahnia beechyi*, *Leptecophylla tameiameia*, *Lycopodium* sp., *Machaerina angustifolia*, *Plantago pachyphylla* (laukahi kuahiwi), *Sadleria pallida*, or *Vaccinium* sp. (HINHP Database 2001; EDA, *in litt.* 2001).

The major threats to *Sanicula purpurea* on Oahu are habitat degradation by feral pigs, a risk of extinction due to random environmental events and/or reduced reproductive vigor due to the small number of existing occurrences, and competition with the nonnative plant species *Axonopus fissifolius* and *Clidemia hirta* (HINHP Database 2001; Service 1999; 61 FR 53108).

Schiedea hookeri (NCN)

Schiedea hookeri, a member of the pink family (Caryophyllaceae), is a sprawling or clumped, long-lived, perennial herb. This species is distinguished from others in this endemic Hawaiian genus by its open, hairy, and sometimes sticky

inflorescence and by the size of the capsules (Wagner *et al.* 1999).

Based on field and greenhouse observations, *Schiedea hookeri* has bisexual flowers. Mature fruits have been observed in June and August. A series of experimental self-pollinations, within-population crosses, and crosses among populations has demonstrated that *S. hookeri* experiences moderately strong inbreeding depression. These results indicate that reductions in population size could result in expression of inbreeding depression among progeny, with potentially deleterious consequences for the long-term persistence of this species. *Schiedea hookeri* appears to be an out-crossing species. Under greenhouse conditions, flowers do not set seed unless hand-pollinated. In the field, the species is presumed to be pollinated by insects, although none have been observed (a related species, *S. lydgatei* on Molokai, is apparently pollinated by native, night-flying moths). Individuals of *S. hookeri* appear to be long-lived, but there is no evidence of reproduction from seed under field conditions. Seedlings of *Schiedea* species occurring in mesic or wet sites are apparently consumed by introduced slugs and snails. In contrast, *Schiedea* occurring in dry areas produce abundant seedlings following winter rains, presumably because the drier sites have fewer nonnative predators. *Schiedea hookeri* differs considerably through its range in potential for clonal growth. Plants from Kaluakaula Gulch are upright and show little potential for clonal spread. In contrast, clonal growth has been detected for individuals at Kaluaua Gulch, where the growth form is decumbent and plants apparently root at the nodes (HINHP Database 2001; Service 1999; Weller and Sakai, unpublished data). No further information is available on flowering cycles, seed dispersal agents, longevity, specific environmental requirements, or limiting factors.

Historically, *Schiedea hookeri* was known from the Waianae Mountains of Oahu and a single fragmentary collection from Maui that may represent a different species. Currently, this species is known from 17 occurrences on Oahu containing between 328 and 378 individuals in East Makaleha, Makaha-Waianae Kai Ridge, Kaluakaula Gulch, between Kalaulula and Kanewai Streams, Kaluaua Gulch, north of Puu Ku Makalii, Waianae Kai, Makua-Makaha Ridge, between Kolekole Pass and Puu Hapapa, southwest of Puu Kaula, Palikea Gulch, Makaha, Kamaileunu Ridge, and Kahanahaiki on Federal, State, city, county, and private lands (EDA

Database 2001; GDSI 2001; HINHP Database 2001; Service 1999).

Schiedea hookeri is usually found on slopes, cliffs and cliff bases, rock walls, and ledges in diverse mesic or dry lowland forest, often dominated by *Metrosideros polymorpha*, *Diospyros sandwicensis*, or *Diospyros hillebrandii*, and at elevations between 208 and 978 m (682 and 3,208 ft). Associated plant species include *Acacia koa*, *Alyxia oliviformis*, *Antidesma pulvinatum*, *Artemisia australis*, *Bidens torta*, *Carex meyenii*, *Carex wahuensis*, *Charpentiera tomentosa*, *Dodonaea viscosa*, *Elaeocarpus bifidus*, *Eragrostis grandis*, *Hibiscus* sp., *Leptecophylla tameiameia*, *Melanthera tenuis*, *Pisonia sandwicensis*, *Pouteria sandwicensis*, *Psydrax odorata*, *Sida fallax*, or *Stenogyne* sp. (Service 1999).

The primary threats to *Schiedea hookeri* are habitat degradation and/or destruction by feral goats and pigs; competition with the nonnative plant species *Adiantum hispidulum*, *Ageratina adenophora*, *Ageratina riparia*, *Aleurites moluccana*, *Blechnum appendiculatum*, *Christella parasitica*, *Clidemia hirta*, *Cordyline fruticosa*, *Grevillea robusta*, *Heliocarpus popayanensis*, *Hyptis pectinata*, *Kalanchoe pinnata*, *Lantana camara*, *Melia azedarach*, *Melinis minutiflora*, *Panicum maximum*, *Passiflora suberosa*, *Pimenta dioica*, *Psidium cattleianum*, *Psidium guajava*, *Schinus terebinthifolius*, *Syzygium cumini*, and *Toona ciliata*; and predation by introduced slugs and snails. The Kaluakaula Gulch occurrence is also potentially threatened by fire and military activities (Service 1999).

Schiedea nuttallii (NCN)

Schiedea nuttallii, a long-lived perennial member of the pink family (Caryophyllaceae), is a generally hairless, erect subshrub. This species is distinguished from others in this endemic Hawaiian genus by its habit, length of the stem internodes, length of the inflorescence, number of flowers per inflorescence, and smaller leaves, flowers, and seeds (Wagner *et al.* 1999).

Flowers and fruits of *Schiedea nuttallii* are abundant in the wet season but can be found throughout the year. Plants located close to the Makua rim on Oahu have been under observation for 10 years, and they appear to be long-lived. Based on field and greenhouse observations, the species has bisexual flowers. *Schiedea nuttallii* appears to be an out-crossing species. Under greenhouse conditions, plants fail to set seed unless hand-pollinated, suggesting that this species requires insects for pollination. Seedlings of *Schiedea*

occurring in mesic or wet sites are apparently consumed by introduced slugs and snails. In contrast, *Schiedea* occurring in dry areas produce abundant seedlings following winter rains, presumably because there are fewer nonnative predators in drier sites. Other information about reproductive cycles, longevity, specific environmental requirements, and limiting factors is unknown (Service 1999).

Historically *Schiedea nuttallii* was known from scattered locations on Kauai, Oahu, Molokai, and Maui. Currently, it occurs on Kauai, Oahu, and Molokai. On Oahu, 7 occurrences with 49 individuals are found on Pahole-Makua Ridge, Pahole-Kahanahaiki Ridge, Ekahanui Gulch, Kahanahaiki Valley, and Pahole Gulch, on Federal, State, and private lands (EDA Database 2001; GDSI 2001; HINHP Database 2001; Service 1999).

Schiedea nuttallii on Oahu typically grows on steep rock walls and forested slopes in *Acacia koa*-*Metrosideros polymorpha* lowland mesic forest and *Metrosideros polymorpha*-*Dodonaea viscosa* forest at elevations between 436 and 1,185 m (1,430 and 3,887 ft). Associated native plant species include *Alyxia oliviformis*, *Antidesma platyphyllum*, *Bidens torta*, *Cibotium chamissoi*, *Coprosma* sp., the endangered *Cyanea longiflora*, *Hedyotis terminalis*, *Ilex anomala*, *Machaerina* sp., *Peperomia* sp., *Perrottetia sandwicensis*, *Pipturus* sp., or *Psydrax odorata* (HINHP Database 2001; EDA, *in litt.*, 2001).

Schiedea nuttallii on Oahu is seriously threatened by competition with the nonnative plant species *Andropogon virginicus*, *Clidemia hirta*, *Grevillea robusta*, *Melinis minutiflora*, *Paspalum conjugatum*, and *Psidium cattleianum*; predation by the black twig borer, slugs, and snails; habitat degradation by feral pigs; and a risk of extinction from naturally occurring events (e.g., landslides) and/or reduced reproductive vigor due to the small number of individuals (HINHP Database 2001; Service 1999; 61 FR 53108).

Sesbania tomentosa (Ohai)

Sesbania tomentosa, a short-lived perennial member of the pea family (Fabaceae), is typically a sprawling shrub but may also be a small tree. Each compound leaf consists of 18 to 38 oblong to elliptic leaflets that are usually sparsely to densely covered with silky hairs. The flowers are a salmon color tinged with yellow, orange-red, scarlet, or, rarely, pure yellow. *Sesbania tomentosa* is the only endemic Hawaiian species in the genus,

differing from the naturalized *S. sesban* by the color of the flowers, the longer petals and calyx, and the number of seeds per pod (Geesink *et al.* 1999).

The pollination biology of *Sesbania tomentosa* has been studied by David Hopper, University of Hawaii. His findings suggest that although many insects visit *Sesbania* flowers, the majority of successful pollination is accomplished by native bees of the genus *Hylaeus* and that occurrences at Kaena Point on Oahu are probably pollinator-limited. Flowering at Kaena Point is highest during the winter-spring rains and gradually declines throughout the rest of the year. Other aspects of this plant's life history are unknown (Service 1999).

Currently, *Sesbania tomentosa* occurs on six of the eight main Hawaiian Islands (Kauai, Oahu, Molokai, Kahoolawe, Maui, and Hawaii) and in the Northwestern Hawaiian Islands (Nihoa and Necker). It is no longer extant on Niihau and Lanai. On Oahu, *Sesbania tomentosa* is known from 3 occurrences of 54 to 55 wild and approximately 200 outplanted individuals on State-owned land within the Kaena Point NAR and from Keawaula on State and private lands (GDSI 2001; HINHP Database 2001; Service 1999; 59 FR 56333).

On Oahu, *Sesbania tomentosa* is found on cliff faces, broken basalt, and sand dunes with rock outcrops in *Scaevola sericea* coastal dry shrubland and *Sporobolus virginicus* (aki aki) mixed grasslands between sea level and 152 m (0 and 499 ft) elevation. Associated native plant species include *Heliotropium anomalum* (ahinahina), *Jacquemontia ovalifolia* ssp. *sandwicensis*, *Melanthra* sp., *Myoporum sandwicense*, or *Sida fallax* (HINHP Database 2001; Service 1999).

The primary threats to *Sesbania tomentosa* on Oahu are competition with the nonnative plant species *Lantana camara* and *Leucaena leucocephala*; lack of adequate pollination; seed predation by rats, mice, and, potentially, nonnative insects; fire; trampling by hikers, motorcycles, and all-terrain vehicles; and a risk of extinction from naturally occurring events (e.g. tsunami) and/or reduced reproductive vigor due to the small number of occurrences and individuals (HINHP Database 2001; Service 1999; 59 FR 56333).

Silene lanceolata (NCN)

Silene lanceolata, a member of the pink family, is an upright, short-lived perennial with stems 15 to 50 cm (6 to 20 in) long, which are woody at the base. The flowers are white with deeply-

lobed, clawed petals. This species is distinguished from other Hawaiian members of the genus by its erect stem, terminal inflorescence, and length of the calyx, clawed petals, and carpophore (ovary structure) (Wagner *et al.* 1999).

Flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors for *Silene lanceolata* are unknown (Service 1996d).

The historical range of *Silene lanceolata* includes five Hawaiian Islands: Kauai, Oahu, Molokai, Lanai, and Hawaii. *Silene lanceolata* is presently extant on Molokai, Oahu, and Hawaii. On Oahu, there are 4 occurrences with 62 individuals located in Koiahi Gulch and Waianae Kai on Federal and State lands (EDA Database 2001; GDSI 2001; HINHP Database 2001).

On Oahu, *Silene lanceolata* grows on cliff faces and ledges of gullies in dry to mesic shrubland and cliff communities at elevations of about 351 to 978 m (1,151 to 3,208 ft). Associated native plant species include *Artemisia australis*, *Bidens* sp., *Carex* sp., *Chamaesyce* sp., *Dodonaea viscosa*, *Lysimachia* sp., *Osteomeles anthyllidifolia*, *Schiedea mannii*, or the endangered *Tetramolopium filiforme* (HINHP Database 2001).

The threats to *Silene lanceolata* on Oahu are habitat destruction by feral goats and pigs; wildfires; and competition with the nonnative plant species *Ageratina riparia*, *Erigeron karvinskianus*, *Lantana camara*, *Melinis minutiflora*, *Melinis repens*, and *Schinus terebinthifolius* (HINHP Database 2001; Service 1996d; 57 FR 46325).

Solanum sandwicense (Popolo aiakeakua)

Solanum sandwicense, a member of the nightshade family (Solanaceae), is a large sprawling shrub. The younger branches are more densely hairy than older branches, and the oval leaves usually have up to four lobes along the margins. This short-lived perennial species differs from other members of the genus by having dense hairs on young plant parts, a greater height, and lacking prickles (Symon 1999).

Little is known about the life history of *Solanum sandwicense*. Flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1995b).

Historically, *Solanum sandwicense* was known from both Oahu and Kauai. This species was last seen on Oahu in 2000. Currently, this species is only

known from Kauai (GDSI Database 2001; HINHP Database 2001; Service 1995b; 59 FR 09304; 65 FR 66808; J. Yoshioka, TNCH, pers. comm., 2000).

Solanum sandwicense was found on Oahu on talus slopes and in streambeds in open, sunny areas at elevations between 131 and 1,006 m (430 and 3,300 ft). Associated native plant species included *Pisonia* sp. or *Psychotria* sp. (HINHP Database 2001; Service 1995b; 59 FR 09304).

The major threats to occurrences of *Solanum sandwicense* on Oahu were habitat degradation by feral pigs; competition with the nonnative plant species *Passiflora suberosa*, *Psidium* sp., and *Schinus terebinthifolius*; fire; landslides; and a risk of extinction from naturally occurring events and reduced reproductive vigor due to the small number of existing individuals (HINHP Database 2001; Service 1995b; 59 FR 09304).

Spermolepis hawaiiensis (NCN)

Spermolepis hawaiiensis, a member of the parsley family (Apiaceae), is a slender annual herb with few branches. Its leaves are dissected into narrow, lance-shaped divisions. *Spermolepis hawaiiensis* is the only member of the genus native to Hawaii. It is distinguished from other native members of the family by being a nonsucculent annual with an umbrella-shaped inflorescence (Constance and Affolter 1999).

Flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors of this species are unknown (Service 1999).

Historically, *Spermolepis hawaiiensis* was known from Kauai, Oahu, Lanai, and the island of Hawaii. It is currently known from Molokai and Maui as well as the above four islands. On Oahu, there are 6 known occurrences totaling between 110 and 910 individuals, on Makua-Keaau Ridge and near the entrance of Diamond Head on State, Federal, city, and county lands (EDA Database 2001; GDSI 2001; HINHP Database 2001).

Spermolepis hawaiiensis on Oahu typically grows on steep to vertical cliffs or at the base of cliffs and ridges in coastal dry cliff vegetation at elevations of 25 to 839 m (82 to 2,752 ft). Associated native plant species include *Artemisia australis*, *Bidens* sp.,

Dodonaea viscosa, *Doryopteris* sp., *Heteropogon contortus*, *Santalum ellipticum*, or *Waltheria indica* (HINHP Database 2001; EDA, *in litt.*, 2001).

The primary threats to *Spermolepis hawaiiensis* on Oahu are habitat degradation by feral goats; competition with nonnative plant species such as *Lantana camara*, *Melinis minutiflora*, and various grasses; and habitat destruction and death of plants due to erosion, landslides, and rock slides resulting from natural weathering (HINHP Database 2001; Service 1999; 59 FR 56333).

Tetramolopium lepidotum ssp. *lepidotum* (NCN)

Tetramolopium lepidotum ssp. *lepidotum*, a short-lived perennial member of the aster family (Asteraceae), is an erect shrub 12 to 36 cm (4.7 to 14 in) tall, branching near the ends of the stems. Leaves are lance-shaped and wider at the leaf tip. This taxon can be distinguished from the other extant species on Oahu by its bisexual disk flowers and its inflorescence of 6 to 12 heads (Lowrey 1999).

Tetramolopium lepidotum ssp. *lepidotum* produces flowers and fruit from April through July. Little else is known about its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors (Service 1995b; 59 FR 09304).

Historically, *Tetramolopium lepidotum* ssp. *lepidotum* was known from Lanai and nearly the entire length of the Waianae Mountains, from Makua Valley to Cachexia Ridge, on Oahu. It is now known only from Oahu. A total of 5 occurrences of approximately 15 individual plants are currently known from Federal, State, and private lands on Mauna Kapu, Ekahanui-Lualualei summit, Waianae Kai, and Puu Hapapa. TNCH has outplanted three individuals in a fenced exclosure within Honouliuli Preserve. These plants have since died, yet two healthy individuals have sprouted near the exclosure (EDA Database 2001; GDSI 2001; HINHP 2001; Lowrey 1999; Service 1998b; 56 FR 55770).

Tetramolopium lepidotum ssp. *lepidotum* typically grows on grassy ridge tops, slopes, or cliffs in windblown dry forests at elevations of 330 to 1,157 m (1,082 to 3,795 ft).

Associated native species include *Bidens* sp., *Carex wahuensis*, *Eragrostis* sp., or *Metrosideros polymorpha* (HINHP Database 2001).

The major threats to *Tetramolopium lepidotum* ssp. *lepidotum* on Oahu are competition from the nonnative plant species *Andropogon virginicus*, *Melinis minutiflora*, and *Schinus terebinthifolius*; habitat degradation and predation by feral goats and pigs; fire; and a risk of extinction and/or reduced reproductive vigor due to the small number of occurrences and individuals (HINHP Database 2001; Service 1998b; 56 FR 55770).

Vigna o-wahuensis (NCN)

Vigna o-wahuensis, a member of the pea family (Fabaceae), is a slender, twining, short-lived perennial herb with fuzzy stems. Each leaf is made up of three leaflets that vary in shape from round to linear. This species differs from others in the genus by its thin yellowish petals, sparsely hairy calyx, and thin pods that may or may not be slightly inflated (Geesink *et al.* 1999).

Flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors of this species are unknown (Service 1999).

Historically, *Vigna o-wahuensis* was known from Niihau, Oahu, Molokai, Lanai, Kahoolawe, Maui, and the island of Hawaii. Currently, *V. o-wahuensis* is known from the islands of Molokai, Lanai, Kahoolawe, Maui, and Hawaii. There are no currently known occurrences on Oahu. The last collection on Oahu was made in 1938 on the Mokulua Islets and North Islet (HINHP Database 2001).

Vigna o-wahuensis on Oahu occurred on open dry fossil reef, climbing over shrubs and grasses on limestone deposit, and on fairly steep slopes from sea level to 609 m (0 to 1,998 ft) in elevation. The associated native plant species on Oahu are unknown (HINHP Database 2001).

Nothing is known of the threats for *Vigna o-wahuensis* on Oahu (Service 1999).

A summary of occurrences and landownership for the 101 plant species reported from the island of Oahu is given in Table 1.

TABLE 1.—SUMMARY OF EXISTING OCCURRENCES ON OAHU, AND LANDOWNERSHIP FOR 101 SPECIES REPORTED FROM OAHU

Species	Number of current occurrences	Landownership/Jurisdiction		
		Federal	State	Private
<i>Abutilon sandwicense</i>	30	X ^{2, 6}	X	X
<i>Adenophorus periens</i>	0			
<i>Alectryon macrococcus</i>	82	X ^{1, 2, 6}	X	X
<i>Alsinidendron obovatum</i>	6	X ¹	X	
<i>Alsinidendron trinerve</i>	13	X ²	X	
<i>Bonamia menziesii</i>	18	X ^{1, 6}	X	X
<i>Cenchrus agrimonoides</i>	7	X ^{1, 2}	X	X
<i>Centaurium sebaeoides</i>	2	.....	X	X
<i>Chamaesyce celastroides</i> var. <i>kaenana</i>	15	X ¹	X	
<i>Chamaesyce deppeana</i>	1	.....	X	.....
<i>Chamaesyce herbstii</i>	4	.....	X	X
<i>Chamaesyce kuwaleana</i>	5	X ⁶	X	
<i>Chamaesyce rockii</i>	20	X ^{2, 3, 8}	X	X
<i>Colubrina oppositifolia</i>	5	.....	X	X
<i>Ctenitis squamigera</i>	8	X ^{1, 2}	X	X
<i>Cyanea acuminata</i>	20	X ^{2, 3, 8}	X	X
<i>Cyanea crispa</i>	11	X ³	X	X
<i>Cyanea grimesiana</i> ssp. <i>grimesiana</i>	7	X ²	X	X
<i>Cyanea grimesiana</i> ssp. <i>obatae</i>	8	.....	X	X
<i>Cyanea humboldtiana</i>	9	X ^{3, 8}	X	X
<i>Cyanea koolauensis</i>	42	X ^{2, 3, 4, 8}	X	X
<i>Cyanea longiflora</i>	4	.....	X	X
<i>Cyanea pinnatifida</i>	0			
<i>Cyanea st.-johnii</i>	7	X ³	X	X
<i>Cyanea superba</i>	0	.....		
<i>Cyanea truncata</i>	2	.....	X	X
<i>Cyperus trachysanthos</i>	6	X ⁷	X	
<i>Cyrtandra crenata</i>	0	.....		
<i>Cyrtandra dentata</i>	11	X ^{1, 3}	X	
<i>Cyrtandra polyantha</i>	1	.....	X	X
<i>Cyrtandra subumbellata</i>	5	X ^{2, 8}	X	X
<i>Cyrtandra viridiflora</i>	23	X ^{3, 8}	X	X
<i>Delissea subcorata</i>	21	X ^{1, 2}	X	X
<i>Diellia erecta</i>	1	.....	X	X
<i>Diellia falcata</i>	30	X ^{1, 2, 6}	X	X
<i>Diellia unisora</i>	4	.....	X	X
<i>Diplazium molokaiense</i>	0			
<i>Dubautia herbstobatae</i>	12	X ¹	X	
<i>Eragrostis fosbergii</i>	4	X ²	X	
<i>Eugenia koolauensis</i>	12	X ^{3, 4}	X	X
<i>Euphorbia haeleeleana</i>	8	X ¹	X	X
<i>Flueggea neowawraea</i>	23	X ^{1, 2, 6}	X	X
<i>Gardenia mannii</i>	49	X ^{2, 3, 4, 8}	X	X
<i>Gouania meyenii</i>	4	.....	X	X
<i>Gouania vitifolia</i>	2	.....	X	X
<i>Hedyotis coriacea</i>	0			
<i>Hedyotis degeneri</i>	4	X ¹	X	
<i>Hedyotis parvula</i>	7	X ^{1, 6}	X	
<i>Hesperomannia arborescens</i>	36	X ^{3, 4, 8}	X	X
<i>Hesperomannia arbuscula</i>	6	.....	X	X
<i>Hibiscus brackenridgei</i>	6	X ^{1, 6}	X	X
<i>Isodendron laurifolium</i>	5	.....	X	X
<i>Isodendron longifolium</i>	7	X ²	X	X
<i>Isodendron pyriform</i>	0			
<i>Labordia cyrtandrae</i>	9	.....	X	X
<i>Lepidium arbuscula</i>	12	X ^{1, 2, 6}	X	
<i>Lipochaeta lobata</i> var. <i>leptophylla</i>	4	X ^{2, 6}	X	
<i>Lipochaeta tenuifolia</i>	41	X ^{1, 2, 6}	X	
<i>Lobelia gaudichaudii</i> ssp. <i>koolauensis</i>	5	X ^{2, 3, 8}	X	X
<i>Lobelia monostachya</i>	1	.....	X	X
<i>Lobelia niihauensis</i>	40	X ^{1, 2, 6}	X	
<i>Lobelia oahuensis</i>	12	X ^{1, 2, 3, 8}	X	X
<i>Lysimachia filifolia</i>	1	.....	X	
<i>Mariscus pennatifolius</i>	0			
<i>Marsilea villosa</i>	5	X ⁶	X	X
<i>Melicope lydgatei</i>	18	X ³	X	X
<i>Melicope pallida</i>	1	.....	X	X
<i>Melicope saint-johnii</i>	6	X ⁶	.....	X
<i>Myrsine juddii</i>	3	X ³	X	

TABLE 1.—SUMMARY OF EXISTING OCCURRENCES ON OAHU, AND LANDOWNERSHIP FOR 101 SPECIES REPORTED FROM OAHU—Continued

Species	Number of current occurrences	Landownership/Jurisdiction		
		Federal	State	Private
<i>Neraudia angulata</i>	27	X ^{1, 2, 6}	X	
<i>Nototrichium humile</i>	25	X ^{1, 2, 6}	X	X
<i>Peucedanum sandwicense</i>	4	.....	X	.....
<i>Phlegmariurus nutans</i>	3	X ^{2, 3, 8}	X	.....
<i>Phyllostegia hirsuta</i>	26	X ^{2, 3, 6, 8}	X	X
<i>Phyllostegia kaalaensis</i>	7	.....	X	X
<i>Phyllostegia mollis</i>	5	X ²	X	
<i>Phyllostegia parviflora</i>	6	X ³	X	X
<i>Plantago princeps</i>	11	X ^{1, 2, 3, 6, 8}	X	X
<i>Platanthera holochila</i>	0	.....	.....	.....
<i>Pritchardia kaalae</i>	6	X ^{1, 2}	X	.....
<i>Pteris lidgatei</i>	9	X ^{2, 3, 8}	X	X
<i>Sanicula mariversa</i>	4	X ^{1, 6}	X	
<i>Sanicula purpurea</i>	5	X ^{2, 3, 8}	X	X
<i>Schiedea hookeri</i>	17	X ^{1, 2, 6}	X	X
<i>Schiedea kaalae</i>	7	.....	X	X
<i>Schiedea kealiae</i>	4	X ⁵	X	X
<i>Schiedea nuttallii</i>	7	X ^{1, 2}	X	X
<i>Sesbania tomentosa</i>	3	.....	X	X
<i>Silene lanceolata</i>	4	X ¹	X	.....
<i>Silene perlmannii</i>	0	.....	.....	.....
<i>Solanum sandwicense</i>	0	.....	.....	.....
<i>Spermolepis hawaiiensis</i>	6	X ¹	X	.....
<i>Stenogyne kanehoana</i>	1	.....	.....	X
<i>Tetramolopium filiforme</i>	21	X ^{1, 6}	X	.....
<i>Tetramolopium lepidotum</i> ssp. <i>lepidotum</i>	5	X ^{2, 6}	X	X
<i>Tetraplasandra gymnocarpa</i>	30	X ^{2, 3, 4, 8}	X	X
<i>Trematolobelia singularis</i>	3	.....	X	X
<i>Urera kaalae</i>	12	X ^{2, 6}	X	X
<i>Vigna o-wahuensis</i>	0	.....	.....	.....
<i>Viola chamissoniana</i> ssp. <i>chamissoniana</i>	15	X ^{1, 2, 6}	X	.....
<i>Viola oahuensis</i>	18	X ^{2, 3, 8}	X	X

¹ Makua Military Reservation² Schofield Barracks Military Reservation/Schofield Barracks East Range³ Kawaihoa Training Area⁴ Kahuku Training Area⁵ Dillingham Military Reservation⁶ Naval Magazine Pearl Harbor Lualualei Branch and Naval Computer and Telecommunication Area Master Station Pacific Transmitting Facility at Lualualei⁷ Hawaii Army National Guard⁸ Oahu Forest National Wildlife Refuge**Previous Federal Action**

On May 28, 2002, we published the court-ordered proposed critical habitat designations for the 101 plant species from Oahu (67 FR 37108). In that proposed rule (beginning on page

37147), we included a detailed summary of the previous Federal actions completed prior to publication of the proposal. We now provide updated information on the actions that we have completed since the proposed

critical habitat designation. In Table 2, we list the final critical habitat designations or nondesignations previously completed for 41 of the 101 plant species from Oahu, which also occur on other islands.

TABLE 2.—SUMMARY OF PREVIOUS FINAL CRITICAL HABITAT ACTIONS FOR THE 101 PLANT SPECIES FROM OAHU

Species	Final critical habitat designation or nondesignation	
	Date(s)	Federal Register
<i>Adenophorus periens</i>	02/27/03	68 FR 9116
	05/18/03	68 FR 12982
<i>Alectryon macrococcus</i>	02/27/03	68 FR 9116
	03/18/03	68 FR 12982
	05/14/03	68 FR 25934
<i>Bonamia menziesii</i>	02/27/03	68 FR 9116
	05/14/03	68 FR 25934
<i>Cenchrus agrimonoides</i>	05/14/03	68 FR 25934
<i>Centaurium sebaeoides</i>	02/27/03	68 FR 9116
	03/18/03	68 FR 12982

TABLE 2.—SUMMARY OF PREVIOUS FINAL CRITICAL HABITAT ACTIONS FOR THE 101 PLANT SPECIES FROM OAHU—
Continued

Species	Final critical habitat designation or nondesignation	
	Date(s)	Federal Register
<i>Colubrina oppositifolia</i>	05/14/03	68 FR 25934
<i>Ctenitis squamigera</i>	05/14/03	68 FR 25934
	02/27/03	68 FR 9116
	03/18/03	68 FR 12982
	05/14/03	68 FR 25934
<i>Cyanea grimesiana</i> ssp. <i>grimesiana</i>	03/18/03	68 FR 12982
	05/14/03	68 FR 25934
<i>Cyperus trachysanthos</i>	02/27/03	68 FR 9116
<i>Diellia erecta</i>	02/27/03	68 FR 9116
	03/18/03	68 FR 12982
	05/14/03	68 FR 25934
<i>Diplazium molokaiense</i>	02/27/03	68 FR 9116
	03/18/03	68 FR 12982
	05/14/03	68 FR 25934
<i>Eugenia koolauensis</i>	03/18/03	68 FR 12982
<i>Euphorbia haeleeleana</i>	02/27/03	68 FR 9116
<i>Flueggea neowawraea</i>	02/27/03	68 FR 9116
	03/18/03	68 FR 12982
	05/14/03	68 FR 25934
<i>Gouania meyenii</i>	02/27/03	68 FR 9116
<i>Gouania vitifolia</i>	05/14/03	68 FR 25934
<i>Hedyotis coriacea</i>	05/14/03	68 FR 25934
<i>Hesperomannia arborescens</i>	03/18/03	68 FR 12982
<i>Hesperomannia arbuscula</i>	05/14/03	68 FR 25934
<i>Hibiscus brackenridgei</i>	03/18/03	68 FR 12982
	05/14/03	68 FR 25934
<i>Isodendron laurifolium</i>	02/27/03	68 FR 9116
<i>Isodendron longifolium</i>	02/27/03	68 FR 9116
<i>Isodendron pyriform</i>	03/18/03	68 FR 12982
	05/14/03	68 FR 25934
<i>Lobelia niihauensis</i>	02/27/03	68 FR 9116
<i>Lysimachia filifolia</i>	02/27/03	68 FR 9116
<i>Mariscus pennatiformis</i>	02/27/03	68 FR 9116
	05/14/03	68 FR 25934
	05/22/03	68 FR 25934
<i>Melicope pallida</i>	02/27/03	68 FR 9116
<i>Nototrichium humile</i>	05/14/03	68 FR 25934
<i>Peucedanum sandwicense</i>	02/27/03	68 FR 9116
	03/18/03	68 FR 12982
	05/14/03	68 FR 25934
<i>Phlegmariurus nutans</i>	02/27/03	68 FR 9116
<i>Phyllostegia mollis</i>	05/14/03	68 FR 25934
<i>Plantago princeps</i>	02/27/03	68 FR 9116
	03/18/03	68 FR 12982
	05/14/03	68 FR 25934
<i>Platanthera holochila</i>	02/27/03	68 FR 9116
	05/14/03	68 FR 25934
<i>Pteris lidgatei</i>	03/18/03	68 FR 12982
	05/14/03	68 FR 25934
<i>Sanicula purpurea</i>	05/14/03	68 FR 25934
<i>Schiedea nuttallii</i>	02/27/03	68 FR 9116
	03/18/03	68 FR 12982
<i>Sesbania tomentosa</i>	02/27/03	68 FR 9116
	03/18/03	68 FR 12982
	05/14/03	68 FR 25934
	05/22/03	68 FR 28054
<i>Silene lanceolata</i>	03/18/03	68 FR 12982
<i>Solanum sandwicense</i>	02/27/03	68 FR 9116
<i>Spermolepis hawaiiensis</i>	02/27/03	68 FR 9116
	03/18/03	68 FR 12982
	05/14/03	68 FR 25934
<i>Vigna o-wahuensis</i>	05/14/03	68 FR 25934

For many of 101 plant species from Oahu, the issue of whether critical habitat would be prudent was discussed in previous proposals and incorporated into the May 28 proposal (see 65 FR 79192; 65 FR 83158; 67 FR 3939; 67 FR 15856; 67 FR 9806; 67 FR 16492; 67 FR 36968; 67 FR 37108). In the May 28, 2002 proposed rule, we proposed that critical habitat designation was not prudent for *Cyrtandra crenata* because it had not been seen recently in the wild, and no genetic material of the species was known to exist. We also proposed that critical habitat designation was not prudent for *Pritchardia kaalae*, because it would likely increase the threat from vandalism or collection of the species. Critical habitat for the remaining 99 (*Abutilon sandwicense*, *Adenophorus periens*, *Alectryon macrococcus*, *Alsinidendron obovatum*, *Alsinidendron trinerve*, *Bonamia menziesii*, *Cenchrus agrimonoides*, *Chamaesyce celastroides* var. *kaenana*, *Chamaesyce deppeana*, *Chamaesyce herbstii*, *Chamaesyce kuwaleana*, *Chamaesyce rockii*, *Colubrina oppositifolia*, *Ctenitis squamigera*, *Cyanea acuminata*, *Cyanea crisa*, *Cyanea grimesiana* ssp. *grimesiana*, *Cyanea grimesiana* ssp. *obatae*, *Cyanea humboltiana*, *Cyanea koolauensis*, *Cyanea longiflora*, *Cyanea pinnatifida*, *Cyanea st.-johnii*, *Cyanea superba*, *Cyanea truncata*, *Cyperus trachysanthos*, *Cyrtandra dentata*, *Cyrtandra polyantha*, *Cyrtandra subumbellata*, *Cyrtandra viridiflora*, *Delissea subcordata*, *Diellia erecta*, *Diellia falcata*, *Diellia unisora*, *Diplazium molokaiense*, *Dubautia herbstobatae*, *Eragrostis fosbergii*, *Eugenia koolauensis*, *Euphorbia haeleeleana*, *Flueggea neowawraea*, *Gardenia mannii*, *Gouania meyenii*, *Gouania vitifolia*, *Hedyotis coriacea*, *Hedyotis degeneri*, *Hedyotis parvula*, *Hesperomannia arborescens*, *Hesperomannia arbuscula*, *Hibiscus brackenridgei*, *Isodendron laurifolium*, *Isodendron longifolium*, *Isodendron pyriformis*, *Isodendron longifolium*, *Isodendron pyriformis*, *Labordia cyrtandrae*, *Lepidium arbuscula*, *Lipochaeta lobata* var. *leptophylla*, *Lipochaeta tenuifolia*, *Lobelia gaudichaudii* ssp. *koolauensis*, *Lobelia monostachya*, *Lobelia niuhauensis*, *Lobelia oahuensis*, *Lysimachia filifolia*, *Mariscus pennatifolius*, *Marsilea villosa*, *Melicope lydgatei*, *Melicope pallida*, *Melicope saint-johnii*, *Myrsine juddii*, *Neraudia angulata*, *Nototrichium humile*, *Pelea lydgatei*, *Peucedanum sandwicense*, *Phlegmariurus nutans*, *Phyllostegia hirsuta*, *Phyllostegia kaalaensis*, *Phyllostegia mollis*, *Phyllostegia parviflora*, *Plantago*

princeps, *Platanthera holochila*, *Pteris lidgatei*, *Sanicula mariversa*, *Sanicula purpurea*, *Schiedea hookeri*, *Schiedea kaalae*, *Schiedea kealiae*, *Schiedea nuttallii*, *Sesbania tomentosa*, *Silene lanceolata*, *Silene perlmannii*, *Solanum sandwicense*, *Spermolepis hawaiiensis*, *Stenogyne kanehoana*, *Tetramolopium filiforme*, *Tetramolopium lepidotum* ssp. *lepidotum*, *Tetraplasandra gymnocarpa*, *Trematolobelia singularis*, *Urera kaalae*, *Vigna o-wahuensis*, *Viola chamissoniana* ssp. *chamissoniana*, and *Viola oahuensis*) of the 101 plant species was proposed on approximately 45,067 ha (111,364 ac) of land on the island of Oahu (67 FR 37108).

The publication of the proposed rule opened a 60-day public comment period, which closed on July 29, 2002. On July 11, 2002, we submitted joint stipulations to the U.S. District Court with Earthjustice requesting extension of the court orders for the final rules to designate critical habitat for plants from Lanai (December 30, 2002), Kauai and Niihau (January 31, 2003), Molokai (February 28, 2003), Maui and Kahoolawe (April 18, 2003), Oahu (April 30, 2003), the Northwestern Hawaiian Islands (April 30, 2003), and the island of Hawaii (May 30, 2003), citing the need to conduct additional review of the proposals, address comments received during the public comment periods, and conduct a series of public workshops on the proposals. The joint stipulations were approved and ordered by the court on July 12, 2002. On August 26, 2002, we published a notice (67 FR 54766) reopening the public comment period until September 30, 2002, on the proposal to designate critical habitat for plants from Oahu. On October 10, 2002, we published a notice (67 FR 63066) announcing the reopening of the comment period until November 30, 2002 and announcing a public hearing. On October 15, 2002, we held a public information meeting at the McCoy Pavilion, Honolulu, Oahu. On October 17, 2002, we held a public information meeting at Nanakuli High School, Nanakuli, Oahu. On November 19, 2002, we held a public hearing at the Ala Moana Hotel, Honolulu, Oahu. On December 26, 2002, we published a notice (67 FR 78763) announcing the availability of the draft economic analysis and reopening the comment period until January 27, 2003.

In the final rule designating critical habitat for plants on Lanai, published in the **Federal Register** on January 9, 2003 (68 FR 1220), we indicated that critical habitat was prudent for the following 17 multi-island species that also occur on Oahu: *Adenophorus periens*, *Bonamia menziesii*, *Cenchrus agrimonoides*,

Centaurium sebaeoides, *Ctenitis squamigera*, *Cyanea grimesiana* ssp. *grimesiana*, *Cyperus trachysanthos*, *Diellia erecta*, *Diplazium molokaiense*, *Hesperomannia arborescens*, *Hibiscus brackenridgei*, *Isodendron pyriformis*, *Sesbania tomentosa*, *Silene lanceolata*, *Spermolepis hawaiiensis*, *Tetramolopium lepidotum* ssp. *lepidotum*, and *Vigna o-wahuensis*. In the final rule designating critical habitat for plants on Kauai and Niihau, published on February 27, 2003 (68 FR 9116), we indicated that critical habitat was prudent for the following 16 multi-island species that are also found on Oahu: *Alectryon macrococcus*, *Euphorbia haeleeleana*, *Flueggea neowawraea*, *Gouania meyenii*, *Isodendron laurifolium*, *Isodendron longifolium*, *Lobelia niuhauensis*, *Lysimachia filifolia*, *Mariscus pennatifolius*, *Melicope pallida*, *Peucedanum sandwicense*, *Phlegmariurus nutans*, *Plantago princeps*, *Platanthera holochila*, *Schiedea nuttallii*, and *Solanum sandwicense*. In the final rule designating critical habitat for plants on Molokai (68 FR 12982), we indicated that critical habitat was prudent for the following four multi-island species that are also found on Oahu: *Eugenia koolauensis*, *Isodendron pyriformis*, *Marsilea villosa*, *Phyllostegia mollis*, and *Pteris lidgatei*. In the final rule designating critical habitat for plants on Maui and Kahoolawe, published on May 14, 2003 (68 FR 25934) we indicated that critical habitat was prudent for the following eight multi-island species that are also found on Oahu: *Colubrina oppositifolia*, *Gouania vitifolia*, *Hedyotis coriacea*, *Hesperomannia arbuscula*, *Isodendron pyriformis*, *Nototrichium humile*, *Phyllostegia parviflora*, *Sanicula purpurea*, and *Schiedea hookeri*. In the final rule designating critical habitat for plants in the Northwestern Hawaiian Island, published on May 22, 2003 (68 FR 28054) we indicated that critical habitat was prudent for the following two multi-island species that are also found on Oahu: *Mariscus pennatifolius* and *Sesbania tomentosa*.

Summary of Comments and Recommendations

We received a total of seven oral and 694 written comments during the four comment periods. These included responses from 7 State offices, 13 local agencies, and 36 private organizations or individuals. Of the written comments, we received approximately 638 letters by electronic mail or coupon/postcard that stated general support for the proposed critical habitat

designations but that did not provide substantive comments. Of the other 56 comments, 12 supported the proposed designation, 31 were opposed to it, and 13 provided information or declined to oppose or support the designation. We reviewed all comments received for substantive issues and new information regarding critical habitat and the Oahu plants. Similar comments were grouped into six general issues relating specifically to the proposed critical habitat designations and the draft economic analysis on the proposed determinations. These are addressed in the following summary.

Peer Review

In accordance with our policy published on July 1, 1994 (59 FR 34270), we solicited independent opinions from 17 knowledgeable individuals with expertise in one or several fields, including familiarity with the species, the geographic region, or the principles of conservation biology. We received comments from eight. All eight generally supported our methodology and conclusion, but none expressed a position for or against the designation of critical habitat. Comments received from the peer reviewers are summarized in the following section and were considered in developing the final rule.

Issue 1: Biological Justification and Methodology

(1) *Comment:* One commenter stated that the proposal designates areas that are not essential to the species.

Our Response: In accordance with our policy on peer review published on July 1, 1994 (59 FR 34270), we solicited the expert opinions of appropriate and independent specialists regarding the proposed rule. The purpose of this peer review was to ensure that our method of designating critical habitat for Oahu plants was based on scientifically sound data, assumptions, and analysis. The comments of the peer reviewers were taken into consideration in the development of this final designation. The majority of our peer reviewers support our methodology. Changes in this final rule that decrease the boundaries of some units are based on additional information received during the public comment periods. The changes in boundaries reflected in this final rule are based on additional information regarding the lack of primary constituent elements or additional information regarding the degradation of some of the proposed critical habitat areas and low probability of restoration that affect the areas' essentiality to the species. Areas that

were inadvertently included in the proposed unit and found to be nonessential have also been removed from the final designation.

(2) *Comment:* One commenter stated that the broad brush of primary constituent elements has resulted in the proposed designation of large amounts of State land with little companion scientific effort to identify limiting factors or management actions needed. Another commenter stated that the critical habitat designations are based on guesswork.

Our Response: The Act requires us to use the best scientific and commercial information available in undertaking species listing and recovery actions, including the designation of critical habitat as set forth in this rule. In this final rule, we concluded that some areas were not essential for the conservation of the Oahu plant species, based on newly available information concerning status of the species in specific areas and level of habitat degradation. Several of the units proposed as critical habitat have been excluded because they are not essential for the conservation of the species. These excluded units are nonessential because either they lack the species' primary constituent elements or other habitat exists for these species that has more primary constituent elements and/or is less degraded. See the "Summary of Changes from the Revised Proposed Rule" section.

The magnitude of additional research and investigations required to determine limiting factors and specific management actions needed for each species at each location is beyond the scope of critical habitat designation. The Act requires us to designate critical habitat on the basis of the best scientific and commercial data available. Based on the information available at the time the proposal was prepared and taking into consideration additional information received during the public comment periods on the proposal and draft economic analysis, we believe we have designated scientifically appropriate areas for the conservation of these species.

(3) *Comment:* The Army requested exclusion of grass-dominated portions of Makua Military Reservation and exclusion of grass-dominated habitat and forested areas dominated by nonnative plants (*e.g.* *Eucalyptus* sp. and *Schinus terebinthifolius*) at Schofield Barracks.

Our Response: These areas were excluded from the final critical habitat designation because they do not contain the primary constituent elements

necessary for the conservation of the Oahu plant species.

(4) *Comment:* One commenter did not believe that the Service has demonstrated that designating this large an area, absent any active management by the Federal government, can lead to the recovery of the identified species.

Our Response: We agree that active management is a necessary part of achieving recovery for these species and that the ultimate purpose of critical habitat is to contribute to the conservation of listed species. This can be best be achieved by cooperation between the Service and other partners. A critical habitat designation alone will not lead to the recovery of these species. Recovery of the species will require the cooperation of Federal and non-Federal land managers to manage lands in a manner that is compatible with species' recovery. We have numerous programs for assisting landowners with management for the conservation of these species.

(5) *Comment:* One peer reviewer indicated that the general goal of establishing at least 8 to 10 viable populations for each species may not apply to some rare, localized island endemics that likely never had 8 to 10 populations throughout their evolutionary history.

Our Response: Fewer than eight populations are being designated for some very restricted species for which adequate habitat does not exist, and which were likely always rare, since they are very narrow endemics (*Alsinidendron trinerve*, *Chamaesyce celastroides* var. *kaenana*, *Chamaesyce deppeana*, *Chamaesyce herbstii*, *Chamaesyce kuwaleana*, *Cyanea pinnatifida*, *Cyrtandra polyantha*, *Cyrtandra subumbellata*, *Diellia unisora*, *Dubautia herbstobatae*, *Eragrostis fosbergii*, *Lipochaeta tenuifolia*, *Lobelia monostachya*, *Melicope saint-johnii*, *Sanicula mariversa*, *Schiedea kealiae*, *Silene perlmannii*, *Stenogyne kanehoana*, *Tetramolopium filiforme*, and *Trematalobelia singularis*). The recovery plan for some more well understood species may also have different recovery objectives (*Marsilea villosa*), and the designation reflects these differences. However, in general, the recovery objectives found in recovery plans for these species state that 8 to 10 viable populations are required for recovery of each species. Establishing and conserving 8 to 10 viable populations on one or more islands within the historic range of the species will provide each species with a reasonable expectation of persistence and eventual recovery, even with the

high potential that one or more of these populations will be eliminated by normal or random adverse events, such as fires and nonnative plant invasions (Hawaii and Pacific Plant Recovery Committee (HPPRCC) 1994; Luijten *et al.* 2000; Mangel and Tier 1994; Pimm *et al.* 1998; Stacey and Taper 1992). We conclude that designation of adequate suitable habitat for 8 to 10 populations as critical habitat is essential to give most species a reasonable likelihood of long-term survival and recovery, based on currently available information. Each recovery plan states that these recovery goals will be revised as more specific information becomes available for each species.

(6) *Comment:* One peer reviewer commented that we should be wary of making propagation or reintroduction decisions based on the preservation of interpopulational genetic diversity. Observed or measurable genetic diversity is always at neutral loci, which gives absolutely no indication of differences in relative fitness. Another peer reviewer asked if the consequences of small, isolated populations on genetic drift or inbreeding have been addressed, *e.g.*, through occasional gene flow.

Our Response: Many of the species have been reduced to such low numbers that the recovery plans identify propagation and reintroduction as a key step. While we do not have direct evidence for most species to indicate that reduced reproductive vigor or inbreeding are problems, we believe they should be considered, based on current conservation biology theory and practice. This is particularly important to consider when developing a propagation and reintroduction program, to ensure that recovery efforts do not cause or exacerbate genetic issues. While measures of genetic diversity do not directly measure relative fitness, it is reasonable to assume that the two are correlated. The issue of gene flow and genetic drift will be addressed through research actions identified as needed in the recovery plans.

(7) *Comment:* The proposal failed to contain the total of historically known listed plants, and therefore failed to propose critical habitat for all listed plants Statewide. About 10 percent of the historically known listed endangered plant species from the Hawaiian Islands are missing from the proposals. The following Oahu plants are listed as endangered, but not included in proposed critical habitat designations: *Abutilon menziesii*, *Achyranthes splendens* var. *rotundata*, *Caesalpinia kawaiensis*, *Chamaesyce skottsbergii* var. *skottsbergii*, *Panicum*

fauriei var. *carteri*, *Scaevola coriacea*, and *Scheidea adamantis*. It is unclear why critical habitat was not discussed with respect to *Abutilon menziesii*, *Achyranthes splendens* var. *rotundata*, *Caesalpinia kawaiensis*, *Chamaesyce skottsbergii* var. *skottsbergii*, and *Gardenia brighamii*. For example, the recovery plan for *G. brighamii* specifically calls for the establishment of three populations on Oahu. This is a serious concern since the proposed rule states "the U.S. Fish and Wildlife Service proposes critical habitat for 99 of the 101 plant species known historically from the island of Oahu that are listed under the ESA." This statement is incorrect. The above-mentioned species are found on Oahu, they are listed under the ESA, and they are not addressed in the proposed rule.

Our Response: We have corrected the statement cited above in this final rule. The following species were not part of the 1998 court order and subsequent stipulations, and therefore were not included in this rulemaking: *Abutilon menziesii*, *Achyranthes rotundata* (currently *Achyranthes splendens* var. *rotundata*), *Euphorbia skottsbergii* var. *kalaeloana*, *Gardenia brighamii*, *Mezouneuron kawaiense* (currently *Caesalpinia kawaiensis*), *Scaevola coriacea*, and *Scheidea adamantis*. Critical habitat for these species will be considered if funding and resources become available. In addition, critical habitat has already been designated for *Panicum carteri* (currently *Panicum fauriei* var. *carteri*) on the island of Mokoli'i (48 FR 46328).

(8) *Comment:* One peer reviewer expressed concern that the Service may remove areas from designation if the landowner provides sufficient assurance that the land is adequately managed for a particular species. The Service cannot lawfully exclude areas from critical habitat based on a finding that they are adequately managed or protected. Critical habitat should be determined independent of the management situation. Another peer reviewer stated that none of the lands should be excluded from proposed critical habitat because of their existing land management.

Our Response: In accordance with section 3(5)(A)(i) of the Act and regulations at 50 CFR 424.12, in determining which areas to propose as critical habitat, we are required to base critical habitat determinations on the best scientific and commercial data available and to consider those physical and biological features (primary constituent elements) that are essential to the conservation of the species and that may require special management

considerations or protection. If an area is covered by a plan that meets our management criteria, we believe it does not constitute critical habitat as defined by the Act because the primary constituent elements found there are not considered to be in need of special management or protection. For a detailed explanation of this evaluation see the "Analysis of Managed Lands Under Section 3(5)(A)" section below. However, to the extent that special management considerations and protection may be required for any of these areas and they, therefore, would meet the definition of critical habitat according to section 3(5)(A)(i), they are also properly excluded from designation under section 4(b)(2) of the Act (see *Analysis of Impacts under Section 4(b)(2)*).

(9) *Comment:* One peer reviewer and many commenters stated that focusing conservation efforts on the most pristine, least degraded sites is a logical, efficient, and cost-effective strategy whenever possible. Unfortunately, for many of the listed plant species, there is simply not enough suitable habitat remaining. Another peer reviewer stated that, in general, as much habitat should be protected as possible. Many peer reviewers were optimistic about the potential for degraded areas to be restored. One peer reviewer commented that populations could be established in the most degraded habitat if sufficient funds and person hours are dedicated toward follow-up maintenance after restoration. Another commenter stated that there is only a nominal possibility that the endangered native plants would survive in highly degraded areas and areas dominated by nonnative plants that are proposed as critical habitat. Yet another commenter stated that designations in degraded habitats are unrealistic and could waste resources on impractical restoration efforts. The commenter went on to suggest that low elevation areas may not be adequately represented; therefore it is important that the proposal not be trimmed back in any lower elevation areas. Another peer reviewer stated that the Service should designate lowland areas for potential future restoration and population recovery efforts.

Our Response: We agree that recovery of a species is more likely in designated critical habitat in the least degraded areas containing the primary constituent elements. To this end, several units have been excluded for some species, as sufficient numbers of alternative critical habitat units are available in less degraded areas. However, for some species, especially those only known from low elevation areas, only degraded

habitat remains. Therefore, some units still contain degraded habitat, but we believe that these areas can be restored if the landowner is supportive and resources are made available.

(10) *Comment:* One peer reviewer questioned why some areas designated as essential habitat by the HPPRCC are not included in the proposed critical habitat.

Our Response: In accordance with section 3(5)(A)(i) of the Act and regulations at 50 CFR 424.12, in determining which areas to propose as critical habitat, we are required to use the best scientific and commercial data available and to consider those physical and biological features (primary constituent elements) that are essential to the conservation of the species and that may require special management considerations or protection. The HPPRCC used a different set of criteria to select the areas they deemed to be essential plant habitat. They selected habitat for all endangered, threatened, proposed, and candidate species. Some of these species were not included in the selection of critical habitat. Therefore, the essential plant habitat and critical habitat areas will not completely overlap.

(11) *Comment:* One peer reviewer recommended additional consultations with academic and professional experts. Some reviewers stated that no assessment of the quality of any of the data sources is provided, and no information is given as to how data sources of varying qualities were weighted in making delineations of critical habitat or how decisions were made as to what to rely on in the absence of rigorous assessments of relative quality. These commenters agreed with the Service's statement that "lack of detailed scientific data makes it impossible for us to develop a quantitative model." Lack of knowledge means that the proposed critical habitat designation is based only on the general habitat features of the areas in which the plants currently occur. While this approach may be expedient, it has resulted in designations based on best-guess estimations, rather than on science or the realities of plant recovery. The Service needs to give greater weight to scientific or commercial data that is empirical and has been field tested or verified, and the Service needs to allow peer review by a panel of unbiased scientists. One reviewer stated that the scientific basis for critical habitat designation is weak. Other commenters felt that the data on which the proposed critical habitat is based are 30 years old and may need updating.

Our Response: In an expansion of our policy on peer review published on July 1, 1994 (59 FR 34270), we solicited the expert opinions of 19 appropriate and independent specialists regarding the proposed rule. The purpose of this peer review was to ensure that our methodology for designation of critical habitat for Oahu plants was based on scientifically sound data, assumptions, and analysis. The comments of the peer reviewers were taken into consideration in the development of this final designation. The majority of peer reviewers support our methodology. We also met with field botanists from the Hawaii Natural Heritage Program, the Department of Land and Natural Resources, the Hawaii Army National Guard, and the Department of the Army. All data and information on species status received in preparation of this rule were weighted equally and considered to come from reliable sources. Where discrepancies existed between different data sources, the most current data were used.

New information indicated that some of the areas identified as essential habitat in the "Recovery Plan for Multi Island Plants" (USFWS 1999) do not contain the primary constituent elements necessary for the conservation of any of the 99 plant species included in this final designation. The essential plant habitat maps take into consideration all listed endangered plants on Oahu, as well as species of concern. We agree that additional time would be beneficial for the preparation of these final rules and the collection of more scientific information, but we are required under the court-approved stipulation to finalize this designation by April 30, 2003, using the best information currently available. If provided with new information, we may propose revisions in the critical habitat designation in the future.

(12) *Comment:* Some reviewers commented that deletion of significant portions of any of the proposed critical habitat units is likely to prevent the recovery of, and lead to the extinction of, listed species. Smaller units present real management challenges and may be so small that their ecological integrity and the viability of listed plants cannot be maintained.

Our Response: In this final rule, we concluded that many areas were not essential for the conservation of the Oahu plant species, based on information received during the public comment periods concerning the status of the species in specific areas and degree of habitat degradation. Several units or portions of units proposed as critical habitat have been excluded

because they are not essential for the conservation of the species. These excluded units or portions of units are not essential because they either lack the species' primary constituent elements or other areas exist that provide for the conservation of the species. See the "Summary of Changes from the Proposed Rule" section.

We realize that smaller areas will most likely require more management to maintain the plant populations and their habitat, but in many cases they are the only areas with the primary constituent elements needed by each species. We concur with the importance of protecting the ecosystems on which these species depend, as stated in purpose of the Act (section 2(b)), and of managing areas large enough to maintain and expand populations. We considered the importance of this, as well as the location of primary constituent elements, when delineating the boundaries of critical habitat for these final designations of critical habitat. We included areas that provide the biological and other processes essential for the conservation of the species. We acknowledge the potential negative impacts of edge effects on small habitat fragments. However, these species' primary constituent elements are found only within the areas that were designated critical habitat, and expanding the designated critical habitats would add areas that lack the primary constituent elements. All of the changes from the proposed critical habitat are based on the best available information and information received during comment periods and are based on biological issues, not political or social issues. If new information becomes available indicating that the existing critical habitat designations are not essential for the conservation of the species and/or that other areas are, we may propose new designations for those species at that time.

(13) *Comment:* A peer reviewer stated that the absence of native pollinators may demographically doom populations of facultative and obligate out-crossing species. The same peer reviewer commented that relationships among breeding systems (out-crossing or selfing), effective population size, levels of genetic exchange, and spatial distribution need to be considered.

Our Response: We agree; however, this information is unknown for the majority of the 99 plant species on Oahu for which we are designating critical habitat. If new information becomes available, we will reevaluate critical habitat based on the new information for that species at that time.

Issue 2: Effects of Designation

(14) *Comment:* A strongly preferred approach is to encourage the establishment of voluntary partnerships with landowners to bring about the desired species conservation.

Our Response: We realize that designation of critical habitat alone will not achieve recovery. Many threatened and endangered species occur on private lands and we recognize the importance of conservation actions by private landowners. Cooperation from private landowners is an important element of our conservation efforts, and we have had considerable success in developing partnerships with large and small landowners, government agencies, and non-governmental organizations for conservation activities on Oahu, elsewhere in the State of Hawaii, and throughout the Nation. We also recognize the importance of partnerships with other Federal and State agencies and land managers.

We administer several programs aimed at providing incentives for landowners to conserve endangered and threatened species on their lands; one of these incentives is the Endangered Species Landowner Incentive Program, which was first funded by Congress in fiscal year 1999. Under this program, we provide technical assistance and funding to landowners for carrying out conservation actions on their lands. In the first year alone, 145 proposals totaling \$21.1 million competed for \$5 million in grant money. Additional information on our landowner incentive programs may be found on our Web site (<http://endangered.fws.gov/landowner/index.html>). In addition, we have excluded areas under 4(b)(2) of the Act from the final designation of critical habitat on several islands because landowners have developed voluntary partnerships to manage the resources on their lands. We believe that the benefits of excluding these areas outweigh the benefits of including these areas in a final critical habitat designation.

(15) *Comment:* One peer reviewer stated that it is both prudent and necessary to designate critical habitat for these rare species. This provides the needed long-term management stability that allows government agencies and private organizations to cooperate and concentrate on recovery efforts. It may provide additional incentives for securing funding to research and recover populations. Designation of critical habitat also provides for additional protection of habitat that is unoccupied by a particular species, therefore allowing for future reintroduction of the species. In the

absence of critical habitat protection, much of the currently unoccupied habitat will continue to be destroyed by nonnative plants and animals, urban sprawl, and other development. On the other hand, one commenter stated that if site-specific locality information will have to be published in the final rule for every species, then the potential harm (from trespassing and theft of the species) far outweighs any potential benefit from designating critical habitat. Another commenter failed to see how imposing the proposed designation of critical habitat on privately owned, privately managed lands with no Federal nexus can lead to the recovery of the identified species.

Our Response: See **SUPPLEMENTARY INFORMATION** above.

(16) *Comment:* One commenter stated that all species should be offered protection, but they cannot support protection for some and not for others. They are concerned about the nonnative animals, whose fate would be decided by agencies that consider them invasive and kill them. The current interpretation of critical habitat allows the Federal government and its partners to utilize any methodology they wish in dealing with feral animals with impunity, although such methods may be cruel and environmentally unsound.

Our Response: The designation of critical habitat does not give the Federal government and its partners the authority to utilize any methodology they wish in dealing with feral animals. Any potential animal control program would be subject to all applicable State, Federal, and local laws. Also, critical habitat does not allow or enable the Federal government to control feral animals on non-Federal land. Such decisions will still be made by the landowner and are not regulated by critical habitat.

(17) *Comment:* The designation of critical habitat in areas actively used by the 25th Infantry Division (Light Infantry) for national defense purposes will adversely affect the Army's ability to carry out its essential mission. Training is essential to maintain specific proficiencies that are critical to wartime performance. Designating the proposed areas as critical habitat would have a negative effect on the Army's ability to carry out its national defense mission as well as to undergo the proposed transformation of its forces in the State of Hawaii. Designations of critical habitat will negatively impact the missions of the United States Marine Corps units who rely on the Army lands for their training. The skills learned at Makua and Schofield Barracks are critical to our Marines' ability to

perform all manner of combat operations, because the natural and physical attributes of the training areas mirror battlefield conditions found in other nations in the Pacific region and are found nowhere else in the United States. The Army has a comprehensive conservation program that provides better accountability and management of endangered plant species than the speculative benefit of critical habitat. The Army's natural resource programs provide sufficient management of rare plants, negating the need for critical habitat designation. For example, the Makua Implementation Plan details the actions required to stabilize 28 plant taxa and the Oahu tree snail. Further, the Army has worked with the Service to develop Integrated Natural Resource Management Plans (INRMPs) for its installations on Oahu.

Our Response: We have removed Makua Military Reservation, Schofield Barracks, Schofield Barracks East Range, Kahuku Training Area, Kawaihoa Training Area, and Dillingham Military Reservation from final critical habitat designation because the benefits of excluding these lands under 3(5)(A) and 4(b)(2) outweigh the benefits of including these lands in a final designation (see "*Analysis of Impacts Under Section 4(b)(2): Other Impacts*"). We agree that the Army has implemented a comprehensive program of endangered species management on its lands under the INRMP process and appreciate the amount of financial and manpower resources they have provided for this effort. Army cooperation and support will be required to prevent the extinction and promote the recovery of all of the listed species on this island due to the need to implement proactive conservation actions such as ungulate management, weed control, fire suppression, and plant propagation.

(18) *Comment:* One landowner was concerned that their past cooperative efforts were not considered in this designation. In particular, this landowner had conveyed to the Service the southern portion of the Oahu Forest National Wildlife Refuge. In conveying the southern portion of the refuge to the Service, the landowner understood that a primary motivation for and purpose of the conveyance was to protect the native forest and certain native plant species therein, and therefore, the parties worked together to include certain lands in the conveyance. By its proposed rules, the Service appears to ignore or fails to consider this process, with the result being that the conveyance is treated as if it occurred in a vacuum.

Our Response: As summarized in the "Summary of Changes to the Proposed

Rule" section, the lands referred to in this comment were excluded from critical habitat designation because the primary constituent elements for the plant species proposed in this area are not present (former Oahu L unit).

(19) *Comment:* The draft economic analysis states that if a landowner needs a Federal permit or receives Federal funding for a specific activity, the Federal agency issuing the permit or dispersing the funds would consult with the Service to determine how the action may affect the designated critical habitat. The commenter questioned what is meant by the term "consult." The nature of the consultation could result in control over whether the Federal government conducts its proposed action on those lands or not, thereby controlling the land to the extent that the private landowner could or could not do business with the Federal government. What would the consultation result in when a proposed Federal action is benign compared to the activities not affected by critical habitat designation, such as, grazing, farming, hunting, or recreational use?

Our Response: Under section 7 of the Act, all Federal agencies must consult with the Service to insure that any action that they authorize, fund, or carry out is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of critical habitat. If the Service finds that the proposed actions are likely to jeopardize the continued existence of an endangered or threatened species or result in destruction or adverse modification of critical habitat, we suggest reasonable and prudent alternatives that would allow the Federal agency to implement their proposed action without such adverse consequences.

Every consultation is unique, and it is impossible to comment on what the results of a future consultation will be without details of the proposed activity and the status of the species and its critical habitat at the time of the consultation. However, the consultation is focused on the direct and indirect effects of the proposed Federal action on the species or critical habitat and on effects of activities that be interrelated or interdependent. If the effects of the action, when added to the environmental baseline in the project area, would not destroy or adversely modify critical habitat or jeopardize the species, the project could proceed without modification.

Issue 3: Site-Specific Biological Comments

(20) *Comment:* One landowner stated that, based on the methodology used and the fact that many areas are not occupied by any listed species in the 7,500 acres in units I and M that they own, and which are either within the agricultural district and in agricultural use or which are in the conservation district and developed for and in active use for telecommunications, these lands should be excluded.

Our Response: Based on comments received from field experts, these areas were removed from the final critical habitat designation because either they do not contain the primary constituent elements necessary for the conservation of these species or there are less degraded areas on Oahu that provide habitat essential for the conservation of these species.

(21) *Comment:* One landowner indicated that the boundary of a particular proposed critical habitat area runs through a small eucalyptus grove that is used quite extensively for educational purposes. By moving the boundary line in this location as requested in a map supplied by the landowner, there would be no impact upon existing operations (cattle ranching or otherwise).

Our Response: This area was removed from the final critical habitat designation because it does not contain the primary constituent elements necessary for the conservation of the species in this area.

(22) *Comment:* Two commenters were unclear how water source and distribution facilities in Unit L and other units in which the Waiahole Ditch is included will be affected if additional irrigation water is allocated for delivery to the central Oahu isthmus. They also expressed concern that routine ditch operations and maintenance may become problematic, especially if a section 7 consultation becomes necessary. Another commenter stated that the proposed rule identifies the alteration of watersheds and water diversion as activities that could trigger section 7 consultation if there is Federal involvement. If the ability to divert or take water from these sources or systems is restricted or limited, the impact would affect all lands served by such water sources or systems. In some cases, these water systems are very extensive and therefore the impacts could be quite substantial and far-reaching.

Our Response: Water infrastructure, including ditch irrigation systems, are considered manmade features and therefore are not critical habitat. As

such, their operation and maintenance are not likely to be subject to the critical habitat provisions of section 7 because these features and structures normally do not affect critical habitat.

(23) *Comment:* One peer reviewer commented that Unit L could be potentially expanded to include valley corridors linking the unit at its northern end to lowland/coastal habitats, thus allowing for an elevational gradient to be protected. These areas include the Hauula Beach Park area and the Kawaihoa area. Similarly, a corridor linking Unit L with Unit O would also provide additional protected potential habitat. Extending Unit L at its extreme southeastern tip to include remaining ridge top habitat and possibly providing an elevational corridor with Unit X may also prove beneficial.

Our Response: We believe that the area we have designated meets the recovery goals of 8 to 10 populations for these 99 plant species. Areas outside of the designated critical habitat may be important for the conservation of the species; however, at this time, we do not believe that they are essential to the conservation of these species.

(24) *Comment:* The Navy believes that the designation of critical habitat is redundant and subjects their Federal installations to unnecessary burdens when applied to species whose protection is addressed and managed under an installation's INRMP. Naval Magazine Pearl Harbor is the largest ammunition storage and ordnance operation in Hawaii. Consistent with this mission, large areas of land and water are constrained by the need for safety buffers. Naval Computer and Telecommunication Area Master Station Pacific (NCTAMS PAC) is the largest communications station in the world, and its mission is to provide communications for command and control to all naval commands ashore and afloat in the Pacific and to a wide variety of Army, Marine Corps, Coast Guard, and Air Force commands. The existing and future national defense operations to be conducted in these areas may present incompatibilities with species preservation.

Our Response: We have reviewed the 2001 INRMP for Navy lands on Oahu. It is currently not adequate to outweigh the benefit of including these areas in a final designation (See "*Analysis of Impacts Under Section 4(b)(2): Other Impacts*"). It does not include specific information on the conservation of the listed species found on Navy lands or information about conservation of unoccupied habitat for species historically known from the area. As far as we are aware, this INRMP has not yet

been updated to address management needs of these species. We look forward to working with the Navy in developing management for these areas that is compatible with species recovery.

We have removed some portions of the units on Navy lands, based on additional information received during the comment periods and visits to the base. We determined these areas to be nonessential because of the lack of primary constituent elements or because there are other places for these species that have more primary constituent elements and/or are less degraded. See the "Summary of Changes from the Proposed Rule" section for the justification for each unit's changes.

Issue 4: Species-Specific Biological Comments

(25) *Comment*: There are only three occurrences of the identified species on Damon Estate's land, all three located in the very back of Moanalua Valley, nearly 1.5 miles from the makai (directional term in the Hawaiian language that means towards the ocean) boundary of the proposed critical habitat designation. The landowner does not believe that the Service has established that these reported occurrences, some of them decades old, justify the designation of nearly 1,500 acres, much of which is highly altered from its original native vegetation.

Our Response: This area is currently occupied by eight species (*Chamaesyce rockii*, *Cyanea acuminata*, *Cyanea humboldtiana*, *Gardenia mannii*, *Lobelia oahuensis*, *Tetraplasandra gymnocarpa*, *Trematolobelia singularis*, and *Viola oahuensis*) and contains habitat essential to the conservation of seven species (*Cyanea crispa*, *Cyanea humboldtiana*, *Lobelia oahuensis*, *Sanicula purpurea*, *Tetraplasandra gymnocarpa*, *Trematolobelia singularis*, and *Viola oahuensis*). Therefore, we could not remove this area from final critical habitat designation. Although this area is highly altered, information provided by botanists both in compiling the proposed rule and during the public periods indicates that the area contains the habitat elements essential for the conservation of the above mentioned plant species. This area is located within the following critical habitat units: Oahu 20—*Cyanea crispa*—b, Oahu 20—*Cyanea humboldtiana*—d, Oahu 20—*Lobelia oahuensis*—a, Oahu 20—*Sanicula purpurea*—a, Oahu 20—*Tetraplasandra gymnocarpa*—b, Oahu 20—*Trematolobelia singularis*—b, and Oahu 20—*Viola oahuensis*—a.

(26) *Comment*: Two commenters stated that failure to designate critical habitat for *Cyrtandra crenata*, as long as

this species remains on the endangered species list, denies it the habitat protection that Congress intended. The Service's conclusion in 67 FR 37155 that *Cyrtandra crenata* would not benefit from critical habitat designation is based on a faulty interpretation of the Endangered Species Act to designate critical habitat "to the maximum extent prudent." Another commenter added that given the vast areas on Oahu yet to be surveyed or inventoried, there is no valid basis for the Service to assume that *Cyrtandra crenata* is extinct. The mere fact that this plant has not been seen on Oahu recently does not justify the Service's refusal to protect its critical habitat, as it is common for field biologists to rediscover plant species that have not been seen for decades. The recent discovery of *Asplenium fragile* var. *insulare* (on Maui) and *Phyllostegia waimeae* (on Kauai) are cases in point. Several other commenters stated that the final rule should extend critical habitat protection to *Cyrtandra crenata*.

Our Response: At the present time, we do not believe it would be beneficial to designate critical habitat for this species. It was last observed in the wild in 1947, and we do not know of any genetic material in cultivation. In addition, we are unable to identify the physical and biological features essential for the conservation of this species or any exact location in the wild essential to the conservation of this species. Until the species is rediscovered, we are unable to identify habitat that is essential to its conservation due to lack of information in the historical record. Therefore, no change is made to our not prudent determination here. If this species is rediscovered, we may propose critical habitat for the species at that time.

(27) *Comment*: Several commenters stated that the final rule should extend critical habitat protection to the loulou palm, *Pritchardia kaalae*. As recently as 1999, the Service found that proposed live-fire training at Makua Military Reservation threatened *Pritchardia kaalae* with extinction. This species needs critical habitat protection from military and other threats if it is to have any chance of increasing its numbers and range from the six populations remaining in the wild. In contrast, the Service's claim that designation, which would identify primarily unoccupied habitat and increase threats to the species, is pure speculation.

Our Response: Since the listings of the three *Pritchardia* species on Kauai and Niihau as endangered, and prior to our proposed rules for the designation of critical habitat, we received information verifying vandalism and

collection threats to *Pritchardia* throughout the Hawaiian Islands. This information is included in the proposed rules. No additional information was provided during the comment periods demonstrating that the threats to the *Pritchardia* species on any Hawaiian Island from vandalism or collection would not be increased if critical habitat was designated. We still believe that the benefits of designating critical habitat do not outweigh the potential threats from vandalism and collection of any species of *Pritchardia*. Makua Military Reservation has been removed from critical habitat designation under 4(b)(2) of the Act because the benefits of excluding the area outweigh the benefits of including the area in the final designation (See "Analysis of Impacts Under Section 4(b)(2): Other Impacts").

(28) *Comment*: In the **Federal Register** notice of May 28, 2002 (FR 37108), Table 1 indicates that it includes 101 plants. In fact, the table appears to include 102 plants. Should *Colubrina squamigera* be included? It is neither a listed species nor a candidate species.

Our Response: Table 1 should contain 101 plant species from the island of Oahu listed under the Act for which critical habitat designations are being proposed. The inclusion of *Colubrina squamigera* was the result of a typographical error. No such plant species is historically or currently known.

(29) *Comment*: Coastal habitats may not be well represented in proposed critical habitat. For example, there are few sand dune areas with seasonal pools included in the critical habitat proposal, which will limit the ability to establish multiple populations of several species.

Our Response: The final critical habitat designations published for all Hawaiian Islands except the island of Hawaii, the critical habitat proposed for the island of Hawaii, and habitat located within adequately managed lands provide the habitat necessary for the conservation of 8 to 10 populations of each of the coastal plant species in this rule. Although habitat outside of these areas may be important for the recovery of one or more of these species, it is not essential to their conservation. The best existing habitat for 8 to 10 populations of each of the coastal plant species has been captured in the final critical habitat designation.

(30) *Comment*: One peer reviewer proposes expanding the critical habitat designation to include more (or all) of the conservation district lands in the southeastern Koolau Mountains for the benefit of the southern Koolau endemic species, *Cyanea grimesiana*, *Lipochaeta lobata*, and *Trematolobelia singularis*.

Our Response: Although we agree that this habitat may be important to the recovery of these species, it has not been identified as essential to the conservation of these species. The Service has identified habitat for 8 populations of *Cyanea grimesiana* elsewhere on Oahu and habitat for 10 populations of *Lipochaeta lobata*. In addition, the Service identified enough habitat for six populations of *Trematolobelia singularis*. Although this does not reach the goal of 8 to 10 populations listed in the recovery plan for this species, the Service did not have sufficient information on the habitat suggested by the commenter to determine that it is essential to the conservation of the species.

(31) *Comment:* One peer reviewer commented that any and all suitable habitat in the geographic ranges of the following species should be protected because of potential seed banks and impending climatic changes that could render existing sites unsuitable: *Alsinidendron trinerve*, *Dubautia herbstobatae*, *Hedyotis degeneri* var. *degeneri*, and *Scheidea kealiae*.

Our Response: We have designated all habitat considered to be essential for the conservation of *Alsinidendron trinerve* (habitat for seven populations), *Dubautia herbstobatae* (habitat for six populations), *Hedyotis degeneri* var. *degeneri* (habitat for nine populations), and *Schiedea kealiae* (habitat for four populations). The only areas not included in the final designation of critical habitat for these species were those areas that do not contain the primary constituent elements necessary for the conservation of these species.

Issue 5: Mapping and Primary Constituent Elements

(32) *Comment:* The State Department of Transportation (DOT) stated that the proposed designations near State routes would restrict the design, maintenance, and construction of highways. In particular, Units A and I may impact Route 93 (Farrington Highway), Unit L may impact Interstate Highway H-3, and Unit W may impact Route 72 (Kalanianaʻole Highway). The DOT recommends that buffer zones on each side of the State highway right-of-way should be excluded from critical habitat. The buffer zones should be based on topography and be a minimum of 100 feet in width. The map of proposed critical habitat units that shows Interstate Highway H-3 ending in the middle of Unit L should be corrected.

Our Response: The DOT's comments did not identify any planned widening or other significant improvement project within these units. Rather, their

concerns focused on the impact to routine repair and maintenance. Operation and maintenance of existing manmade features and structures adjacent to critical habitat are not likely to affect critical habitat and therefore are not likely to be subject to section 7 consultation. Because the areas identified in the proposed rule are essential to the conservation of several of the plant species on Oahu, they are included within the final designation. The land area located over the Interstate Highway H-3 tunnel is essential for the conservation of 7 of the 99 Oahu plant species (*Cyanea crispata*, *Cyanea st.-johnii*, *Lobelia oahuensis*, *Lysimachia filifolia*, *Sanicula purpurea*, *Tetraplasandra gymnocarpa*, and *Viola oahuensis*) and is included in the final designated critical habitat.

(33) *Comment:* Several commenters suggested that roads and trails be excluded from critical habitat.

Our Response: Existing manmade features and structures within the boundaries of the mapped units, such as buildings; roads; aqueducts and other water system features, including but not limited to pumping stations, irrigation ditches, pipelines, siphons, tunnels, water tanks, gaging stations, intakes, reservoirs, diversions, flumes, and wells; existing trails; campgrounds and their immediate surrounding landscaped area; scenic lookouts; remote helicopter landing sites; existing fences; telecommunications equipment towers and associated structures and electrical power transmission lines and distribution and communication facilities and regularly maintained associated rights-of-way and access ways; radars; telemetry antennas; missile launch sites; arboreta and gardens, heiau (indigenous places of worship or shrines) and other archaeological sites; airports; other paved areas; and lawns and other rural residential landscaped areas do not contain, and are not likely to develop, primary constituent elements and are specifically excluded from designation under this rule. Therefore, unless a Federal action related to such features or structures indirectly affects nearby habitat containing the primary constituent elements, operation and maintenance of such features or structures generally would not be impacted by the designation of critical habitat.

(34) *Comment:* One commenter expressed concern over proposed critical habitat designation of approximately 800 acres of land in Unit I, which has been in cultivation for over 50 years.

Our Response: This area was removed from the final designation because it does not contain the primary constituent elements necessary for the recovery of any of the 99 plant species on Oahu.

(35) *Comment:* The configuration of units will be difficult to identify on the ground and will have irregular boundaries. These boundaries will complicate management and increase the risk of fragmentation and edge effects on populations within units.

Our Response: We realize that these areas have irregular boundaries, but in many cases they are the only areas with the primary constituent elements needed for each species. We included areas that provide the biological and other processes that are essential for the conservation of the species. We acknowledge the potential negative impacts of edge effects on small habitat fragments. However, these species' primary constituent elements are found only within the areas that were designated as critical habitat, and making them larger would add areas that lack the primary constituent elements and that are not essential to conservation of the species. All of the changes in critical habitat from the proposal are based on the best available information received during comment periods. If new information becomes available indicating the existing critical habitat designations are not essential for the conservation of the species or that other areas are, we may propose new designations for those species at that time.

(36) *Comment:* One commenter believed that the Service considered most of the key elements required for assigning areas crucial for the persistence of plant species; however, one element that appears to have been overlooked and that requires serious consideration in designating critical habitat is the presence of appropriate pollinators for species that do not self-pollinate, or feasible and sustainable alternatives to key pollinators that may be absent.

Our Response: We agree; however, this information is unknown for the majority of these plant species. As new information becomes available, we may reevaluate the critical habitat designations as necessary.

(37) *Comment:* One commenter stated that it appears that a portion of unit M is in the Urban District.

Our Response: This area was removed from the final designation because it does not contain the primary constituent elements necessary for the conservation of *Sesbania tomentosa* or *Centaurium sebaeoides*.

(38) *Comment*: The large scale maps of the designated critical habitat make it impossible to determine the exact boundaries of the critical habitat. This, in turn, makes it impossible to be precise in commenting on economic impacts.

Our Response: The maps in the **Federal Register** provide the general location and shape of critical habitat and are provided for reference purposes to guide Federal agencies and other interested parties in locating the general boundaries of the critical habitat; the maps do not constitute the definition of the boundaries of a critical habitat (50 CFR 17.94). The legal descriptions are the definition of the boundaries of critical habitat, are readily plotted, are transferable to a variety of mapping formats, and were made available electronically upon request for use with GIS programs. Unit boundaries were defined by giving the coordinates in UTM Zone 5 with units in meters using North American Datum of 1983 (NAD83). These coordinates can be used to determine boundaries with some accuracy. At the public hearing, the maps were expanded to wall-size to assist the public in better understanding the proposed critical habitat. These larger scale maps were also provided to individuals upon request. Furthermore, we provided direct assistance in response to written or telephone questions with regard to mapping and landownership within the proposed critical habitat.

Issue 6: Policy and Regulations

(39) *Comment*: Two commenters stated that the Service's suggestion that current management efforts can render otherwise "critical" habitat no longer "critical" illegally reads into section 3(5) of the Act an additional, unstated requirement that habitat cannot be "critical" unless the Service finds it needs more management or protection than it currently receives.

Our Response: Please refer to the response to comment 8.

(40) *Comment*: The proposal violated the commerce clause and exceeds the constitutional limits of the Service's delegated authority. The listed species are not interstate; they exist only in Hawaii and do not cross State lines.

Our Response: The Federal government has the authority under the Commerce Clause of the U.S. Constitution to apply the protections of the Act to species that occur within a single State. A number of court cases have specifically addressed this issue. *The National Association of Homebuilders v. Babbitt*, 130 F. 3d 1041 (D.C. Cir. 1997), *cert. denied*, 1185 S.Ct.

2340 (1998), involved a challenge to application of Act's prohibitions to protect the listed Delhi Sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*). As with the species at issue here, the Delhi Sands flower-loving fly is endemic to only one State. The court held that application of the ESA to this fly was a proper exercise of Commerce Clause power because it prevented loss of biodiversity and destructive interstate competition. Similar conclusions have been reached in other cases, see *Gibbs v. Babbitt*, No. 99-1218 (4th Cir. 2000) and *Rancho Viejo v. Norton*, No. 01-5373 (D.C. Cir. 2003).

(41) *Comment*: One commenter disagreed with the Service's approach of proposing critical habitat designations in advance of any economic analysis. Another commenter stated that economic analysis must be completed before critical habitat can be prudently designated.

Our Response: We agree that the economic analysis must be completed before critical habitat can be designated, and we do so in all cases, including this regulation. The Service must first decide upon a specific area, or set of areas, to propose as critical habitat before the economic analysis of the proposal can begin. In cases such as this rulemaking, where we are under a court-ordered deadline to make a decision by a fixed date, we frequently issue the critical habitat proposal for public comment while the economic analysis is still being prepared, so as to maximize the time available for the public to review and comment on the proposal. When the economic analysis is prepared, it is also issued for public comment. The critical habitat proposal and the economic analysis are then revised as appropriate based on information received during the public comment period, and the economic and other relevant impacts of the proposal are evaluated, along with the available biological information, in making the final critical habitat determination.

(42) *Comment*: One commenter stated that the Service must exclude an area from critical habitat if that area is not "essential" to conservation of the species and if the cost-benefit analysis indicates that it is better to exclude the area. Absent proper completion of the procedure for designation of critical habitat outside the geographic area currently occupied by the species, when such areas are essential for the conservation of the species, "there is no evidence that Congress intended to allow the USFWS to regulate any parcel of land that is merely capable of supporting a protected species"

(*Arizona Cattle Growers Association v. USFWS*, 273 F. 3d 1229 (9th Cir. 2001)).

Our Response: As explained in the Methods section of the proposed rule (67 FR 37108) and this final rule, and in accordance with the Act and regulations (section 4(b)(2) and 50 CFR 424.12), we used the best scientific information available to determine areas that are essential for the conservation of these 99 Oahu plant species, not simply those areas that are capable of supporting the species. This information included the known locations; site-specific species information from the HINHP database and our own rare plant database; species information from the Center for Plant Conservation's (CPC) rare plant monitoring database housed at the University of Hawaii's Lyon Arboretum; island-wide Geographic Information System (GIS) coverages (e.g., vegetation, soils, annual rainfall, elevation contours, land ownership); the final listing rules for these 99 species; discussions with botanical experts; recommendations from the HPPRCC; and public comments (Service 1994, 1995a, 1995b, 1996a, 1996b, 1996c, 1996d, 1997, 1998a, 1998b, 1999; HPPRCC 1998; HINHP Database 2000, CPC *in litt.* 1999; J. Lau *et al.*, pers. comm., 2001). The cost of designating these areas as critical habitat was determined in the draft economic analysis and the addendum to the draft economic analysis. Neither the draft economic analysis nor the addendum found that the financial benefit of excluding these areas was so great that it outweighs the non-financial benefit of including these areas in a final critical habitat designation.

(43) *Comment*: The draft economic analysis concedes that State law protects "habitats" of endangered species and therefore protects federally designated critical habitat, including unoccupied habitat. Thus, designation is not necessary because State law already protects the habitat. In addition, Federal environmental impact analyses provide additional protection for federally listed species.

Our Response: As discussed above in "Previous Federal Action," we were ordered by U.S. District Court (Haw.) to publish proposed and final critical habitat designations or nondesignations for 255 Hawaiian plant species (*Conservation Council for Hawaii v. Babbitt*, 1998, 1999, 2000). In addition, under section 4(a)(3) of the Act, we are required to designate critical habitat for a species at the time it is federally listed as an endangered or threatened species, and on the basis of the best scientific data available and after taking into consideration the economic impact, and

any other relevant impact, of specifying an area as critical habitat (section 4(b)(2)). Further, see response to comment 42.

Issue 7: Economic Issues

(44) *Comment:* The Army believes that the direct and indirect costs and the anticipated costs of project modification, as they relate to military activities, are not adequately considered.

Our Response: Chapter VI, Section 3.q. of the DEA presented estimates of section 7 costs associated with activities in 10 separate areas on Oahu that are under the control of the U.S. military. During public comment, the U.S. Army stated that the cost-estimates for consultations and for possible project modifications on their installations were too low. The addendum revisits the sections of the analysis addressing Army installations and provides revised cost-estimates based upon further discussions with the Service and additional information gathered since completion of the DEA, including the Oahu Training Areas Integrated Natural Resources Management Plan 2002–2006 (OTA INRMP).

However, based on the considerations given in “Analysis of Impacts Under Section 4(b)(2)” and consistent with the direction provided in this section of the Act, we have determined that the benefits of excluding lands under jurisdiction of the U.S. Army on Oahu outweigh the benefits of including them as critical habitat for 76 species of listed plants. Therefore, these lands have been excluded from the critical habitat designations in this final rulemaking.

(45) *Comment:* The DEA does not indicate that the designation of critical habitat will generate any “new” money. It does show that increased regulation due to designation of critical habitat will increase economic risks, drive down profits, and drive away potential investors, thereby reducing “new” money entering Hawaii.

Our Response: The DEA states that a portion of the expenditures on conservation management by the Service, NRCS, and the military could be “new” money. Based on State multipliers, each additional \$1 million of new money spent in Hawaii would generate approximately \$1.8 million in direct and indirect sales in Hawaii and would support approximately 22 direct and indirect jobs in Hawaii (DEA, Chapter VI, Section 7.f.).

Regarding development projects and “new” investment money that could be lost, the DEA noted in Chapter VI, Section 4.h. that: “Over the next 10 years, the number of affected

(development) projects is expected to be small because most of the proposed critical habitat units are: (1) In mountainous areas that are unsuitable for development due to difficult access and terrain, and (2) within the State Conservation District where land-use controls severely limit development.” The development projects that were addressed in Chapter VI of the DEA included: (1) Communications facilities (Sections 3.e. and 4.d.), (2) residential development (Section 3.o.), and (3) a private landfill (Sections 3.p. and 4.e.). The intended designation does not include the large communications complexes at Palehua and Koko Head, urban land suitable for residential development, or the site for the proposed landfill. Only a few of the smaller communications complexes remain in the intended designation. Because of the small footprints of communications towers and for other reasons, the analysis does not anticipate costly project modifications (Section 3.p.). Thus, the analysis anticipates no significant loss of “new” money.

(46) *Comment:* The DEA argues that because critical habitat is mandated by law, it must therefore have economic value. The alleged benefits of species preservation are not economic at all.

Our Response: As noted in Chapter VI, Section 6.a. of the DEA, “[m]any economic studies have demonstrated benefits associated with the conservation and recovery of endangered and threatened species and their ecosystems.

The DEA continues, “However, the additional economic benefits of conservation and recovery that would be attributable to the designation of critical habitat are difficult to estimate because of the scarcity of (1) scientific studies on the magnitude of the recovery and ecosystem changes resulting from the critical habitat designation, and (2) economic studies on the per-unit value of many of the changes. * * * And while some economic studies have been done on the per-unit value of some of these changes, studies have not been done for most.”

The DEA concludes, “As a result, it is not possible, given the information that is currently available, to estimate the value of many of the benefits that could be ascribed to critical habitat designation.”

(47) *Comment:* The DEA dismisses the “worst-case” impacts and does not consider the major adverse impacts from secondary effects or indirect costs. Indirect costs are not considered in the bottom line analysis of the cost of designating critical habitat.

Our Response: Chapter VI, Section 4 of the DEA and Section 5 of the Addendum discuss various indirect costs that can result from the critical habitat designation. These indirect costs are not “worst-case” estimates. Instead, most of them are conditioned upon actions and decisions by the State, the county, investors, etc. Because critical habitat has a limited history in Hawaii, and other States have environmental laws that differ from Hawaii’s laws, uncertainty exists regarding the outcome of these actions and decisions.

Also, these indirect impacts are not dismissed. Rather, they receive the same importance that direct costs receive. The reason the indirect costs are not summed is that many of them should be weighted by the probability of occurrence, but information is not available to determine these probabilities beyond a subjective estimate. As indicated in the DEA, several of the probabilities are “small.” In the case of property values, a loss is expected, but uncertainty exists over the magnitude of this loss.

(48) *Comment:* One commenter stated that the DEA lacks a thorough benefits analysis. Multiple commenters stated that the DEA ignored the benefit of keeping other native species off the endangered species list, of maintaining water quality and quantity, of promoting ground water recharge, and of preventing siltation of the marine environment, thus protecting coral reefs. Another commenter noted that additional benefits of critical habitat include combating global warming, providing recreational opportunities, attracting ecotourism, and preserving Hawaii’s natural heritage. Although the DEA makes general observations of the benefits associated with designating critical habitat, it makes no attempt to quantify these acknowledged benefits. The Service must use the tools available, such as a University of Hawaii Secretariat for Conservation Biology study that estimated the value of ecosystem services, to determine the benefits of critical habitat. On the other hand, one commenter stated that the DEA overestimates economic benefits, and many of the alleged benefits are entirely speculative, unquantifiable, or lack any commercial value.

Our Response: Chapter VI, Sections 6 and 7 of the DEA discussed potential direct and indirect benefits that can result from the proposed designation, including those addressed in the above comment. However, the DEA also indicated that these benefits are not quantified due to lack of information on the value of the environmental benefits that would be attributable specifically to

the critical habitat designations (*i.e.*, the benefits over and above those that will occur due to other existing protections, and over and above the benefits from other conservation projects). Specifically, there is a lack of (1) scientific studies regarding ecosystem changes due to critical habitat, and (2) economic studies on the per-unit value of many of the changes.

The 1999 analysis by University of Hawaii (UH) economists on the total value of environmental services provided by Oahu's Koolau Mountains was in fact used in the DEA as a resource document for concepts, for identifying documents that report the original research on certain subjects, and for illustrating the economic value of an assumed incremental increase in environmental services.

However, as noted in the DEA, estimating the total value of the ecosystem services provided by the Koolau Mountains is a difficult task, requiring some assumptions that are open to challenge, including estimates of the magnitude of the environmental services provided by the Koolau Mountains and estimates of the per-unit value of each service. Also, the UH study does not address all of the benefits of the Koolau Mountains or any of the benefits of the Waianae Mountains.

More to the point, the UH study has limited applicability for valuing the benefits of the intended designation for the 99 Oahu plant species. Since the purpose of the UH study was to estimate the total value of environmental benefits provided by the entire Koolau Mountains on the island of Oahu, it does not address the value of the more limited benefits provided by the intended critical habitat for the 99 Oahu plant species. Specifically, the UH study provides no estimates of the changes in biological and/or environmental conditions resulting from changes in land management due to critical habitat designation.

In any case, the DEA reported that the value of the ecosystem services provided by the Koolau is very large. Since the intended designation covers nearly all of the Koolau Mountains, as well as parts of the Waianae Mountains, and since some project modifications can affect large portions of the mountains, even a very small percentage improvement to ecosystem services can translate into large economic benefits.

In summary, the discussion presented in the DEA on the biological and environmental benefits of critical habitat designation provides an overview of potential benefits, but we did not intend for it to provide a

complete quantitative analysis of the benefits. Instead, we believe that the benefits of critical habitat designation are best expressed in biological terms that can be weighed against the expected cost impacts of the rulemaking.

(49) *Comment:* Treating "better siting of projects by developers so as to avoid costly project delays" as an economic benefit is circular. The costly project delays result from regulations. They could be avoided by not imposing the regulations in the first place.

Our Response: As noted in Chapter VI, Section 6.c. of the DEA, the benefit applies to proposed units or portions of units that the Service regards as occupied. Even without critical habitat, developers must consult with the Service on projects that have Federal involvement and that affect listed species. By knowing the critical habitat boundaries, and if developers have the flexibility, they can site projects outside the boundaries, thereby avoiding certain issues related to threatened and endangered species. But even if there is no flexibility in siting a project, it can still be helpful to developers to know the boundaries of a critical habitat unit. If a project is located outside the unit boundaries, then the developer can proceed with project planning with less risk of facing issues related to critical habitat. On the other hand, if a project is located inside a critical habitat boundary and there is Federal involvement, then the developer and action agency could enter into informal consultations with the Service before proceeding with detailed site plans. Since the discussion applies only to areas that are occupied and would be subject to regulation with or without critical habitat, the logic for the benefit to developers is not circular.

(50) *Comment:* The DEA fails to adequately address the economic value represented by the time, money, and energy that the people of Hawaii invest in the conservation of native Hawaiian plants, including the ethnobotanical value of these plants to the culture of native Hawaiians.

Our Response: Chapter VI, Sections 6 and 7 of the DEA discussed the benefits of critical habitat. While the time, money and energy that the people of Hawaii invest in the conservation of native plants could function as an indicator for residents' "willingness to pay" to protect these species, this information has not been gathered or analyzed comprehensively, and, given the scope of the economic analysis, no primary economic research was conducted. Moreover, as noted in the DEA, even if this information were

available, the economic value of these benefits attributable to critical habitat designation would still be difficult to estimate because of the scarcity of (1) scientific studies on the magnitude of the recovery and ecosystem changes resulting from the critical habitat designation, and (2) economic studies on the per-unit value of many of the changes.

(51) *Comment:* The analysis used in the DEA for Oahu is not consistent with the analysis used in the DEA for the island of Hawaii. The Service should use a consistent methodology in all of its economic analyses.

Our Response: This specific comment objected to differences in the methodology used to estimate direct economic costs related to Army activities and the fact that the estimated costs were much lower for Oahu. The economic analysis for both Oahu and the Big Island (island of Hawaii) used the same methodology. But the direct costs were lower for Oahu because of: (1) Differences in the extent of the overlap between the proposed designations and the Army installations on Oahu versus the installation on the Big Island; (2) differences in the planned military uses of land in the proposed designations; and (3) differences in information available to the analysts regarding project modifications. The addendum revisits the direct costs associated with Army activities and revises them based on updated information.

(52) *Comment:* One private landowner states that designated critical habitat affects over half of his land holdings and will result in impacts to land value, extraordinary levels of governance, and long-term economic impacts.

Our Response: For grazing land in critical habitat, the DEA addressed the possible direct section 7 costs for ranching activities (DEA, Chapter VI, Section 3.h), the indirect impacts of critical habitat on State and county development approvals (DEA, Chapter VI, Section 4.h.), and the possible loss of property value (DEA, Chapter VI, Section 4.i). Because the intended critical habitat would cover less grazing land than the proposed critical habitat, the addendum revisited the possible direct section 7 costs on ranching activities and the potential loss of property value (Sections 4.e and 5.g, respectively). For about 2,070 acres of privately owned agricultural land in the intended critical habitat, the analysis found that the loss in property value would be a small to moderate fraction of \$18.6 million.

(53) *Comment:* The DEA ignores the topic of subsistence gathering.

Our Response: The DEA did not address the potential indirect impact of the proposed critical habitat designation on subsistence activities for three reasons. First, subsistence activity is less extensive, and less important economically, on Oahu than it is on the other islands. This reflects the fact that Oahu has a comparatively large and diverse economy. Second, much of the subsistence hunting that does take place on Oahu is also recreational hunting, which is addressed in the DEA. Third, the DEA did not expect critical habitat to affect subsistence activities and the subsistence lifestyle.

Nevertheless, in response to the comment, the addendum addresses subsistence activities. The analysis found that it is unlikely that new or additional restrictions on access and prohibitions on subsistence will result from critical habitat designation. This assessment is partly based on the Hawaii State Constitution, which protects traditional subsistence activities. The analysis estimates that it is more likely that restrictions (if any) will occur in small, localized areas that have significant biological importance, *i.e.*, areas containing populations of the plants. However, because of the strong stewardship and conservation values associated with those who practice subsistence activities, combined with the cultural tradition of protecting environmentally sensitive areas, subsistence activities are likely to be consistent with any conservation restrictions in localized areas. Thus, the analysis anticipates no significant impact on subsistence activities as a result of the intended designation.

(54) *Comment:* Several commenters stated the following: The DEA fails to consider economic impacts of critical habitat that result through interaction with State law, specifically Hawaii's Land Use Law. Critical habitat could result in downzoning under State law. Hawaii Revised Statutes (HRS) § 205–2(e) states that conservation districts shall include areas necessary for conserving endangered species. HRS § 195D–5.1 states that DLNR shall initiate amendments in order to include the habitat of rare species. Even if DLNR does not act, the Land Use Commission (LUC) might initiate such changes, or they might be forced by citizen lawsuits. Areas for endangered species are placed in the protected subzone with the most severe restrictions. While existing uses can be grandfathered in, downzoning will prevent landowners from being able to shift uses in the future, reduce market value, and make the land unmortgageable. Although the Service acknowledges that there could be

substantial indirect costs relating to redistricting of land to the Conservation District, several commentators disagreed with the characterization of these costs as unlikely. The DEA fails to consider additional third-party lawsuits to force redistricting of lands into the conservation district.

Our Response: Chapter VI, Section 4.g. of the DEA and Section 5.e. of the addendum discuss possible costs associated with redistricting land in critical habitat. Most of the land in the urban district and much of the land in the agricultural district initially proposed for designation are removed in the intended designation. As indicated in Section 5.e. of the addendum, the intended designation includes (1) approximately 3,319 acres of agricultural land, of which 2,070 acres are privately owned; and (2) approximately 0.6 acre of urban land, of which about 0.2 acre is privately owned. Under a worst-case scenario, where all land in the agricultural district is redistricted to Conservation, the reduction in land values would be approximately \$18.6 million.

As discussed more fully in Chapter VI, Section 4.g. of the DEA and Section 5.e. of the addendum, agency-initiated and court-ordered redistricting of some of the privately owned land is reasonably foreseeable (moderate to high probability). Further, this analysis judges the probability that all of the parcels will be redistricted to be very low to low. Tables ES–1 and VI–3 in the DEA characterized the risk of redistricting all of the parcels in the proposed designation as “undetermined,” not as “unlikely.” To more accurately reflect the analysis, this analysis changes the probability to “very low to low.” But even if land is not redistricted, the DEA and the addendum noted that the State may seek agreements with landowners to protect the habitats of listed species in order to retain existing district designations.

The DEA recognized that a real or perceived risk of redistricting can cause a loss of land value that continues until the uncertainty is resolved by (1) the passage of time that reveals the extent of redistricting due to critical habitat, or (2) possibly a State court decision on issues raised by critical habitat designation. Over the long-term, a permanent loss of land value (if any) would depend on how the uncertainty is resolved.

(55) *Comment:* The Service has failed to mention the Federal court ruling on the *New Mexico Cattlegrowers Association v. U.S. Fish and Wildlife Service*, which requires consideration of the impact of listing as well as the

impact of designating an area as critical habitat.

Our Response: The DEA and the addendum considered the economic impacts of section 7 consultations related to critical habitat even if they are attributable coextensively to the listed status of the species. In addition, the DEA and the addendum examined the indirect costs of critical habitat designation, *e.g.*, the relationship between critical habitat designation and a State or local statute.

(56) *Comment:* Any activity that could degrade critical habitat, including activities that are not subject to section 7 consultation, could be seen as an “injury” to (and therefore, under State law, a “taking” of) an endangered plant species under the State of Hawaii's endangered species law (Chapter 195D). It is important that this receive due consideration in evaluating the proposed critical habitat designations (for example, in completing the economic analysis) and that the Service explain to what extent it has considered the potential interplay between the Federal Endangered Species Act and Hawaii's endangered species laws.

Our Response: Chapter VI, Sections 4.b. and 4.f. of the DEA and Section 5.d. of the addendum discuss possible indirect costs resulting from the interplay of the Federal Endangered Species Act and Hawaii State law (*e.g.*, court-ordered mandates to manage private lands for conservation of the plants or to reduce game-mammal populations that harm plants or their habitats). Both the DEA and the addendum considered the economic impacts of section 7 consultations related to critical habitat even if they are attributable coextensively to the listed status of the species. In addition, the DEA and the addendum examined any indirect costs of critical habitat designation. However, the impacts are not attributable to critical habitat designation when the listing of a species prompts action at the State or local level. Take prohibitions under Hawaii law are purely attributable to a listing decision and do not occur as a result of critical habitat designations. There are no take prohibitions associated with the plants' critical habitat.

(57) *Comment:* Several commenters stated the following: The Service did not adequately address the takings of private property as a result of designating critical habitat for endangered plants on Oahu. If the proposed designation of critical habitat precipitates conversion of agricultural lands to conservation land that has no economically beneficial use, then the

Federal and State governments will have taken private property.

Our Response: Chapter VI, Section 4.g. of the DEA and Section 5.e. of the addendum address costs involved in redistricting lands from the Agricultural District to the Conservation District. About 3,319 acres of the intended designation are in the agricultural district, 2,070 acres of which are privately owned. In the event that all of these lands are redistricted to the conservation district, the loss in land value would be approximately \$18.6 million.

However, as discussed more fully in Chapter VI, Section 4.g. of the DEA and Section 5.e. of the addendum, agency-initiated and court-ordered redistricting of some of the privately owned land is reasonably foreseeable (moderate to high probability). But more to the point, any redistricting of land to Conservation, and any corresponding loss of economically beneficial use, would be decided by the LUC and the courts, not the Service, based on an array of State statutory factors. As such, the Federal government would not have taken private property.

(58) *Comment:* Several commenters stated the following: While the Service has stated that critical habitat affects only activities that require Federal permits or funding, and does not require landowners to carry out special management or restrict use of their land, this fails to address the breadth of Federal activities that affect private property in Hawaii and the extent to which private landowners are required to obtain Federal approval before they can use their property. These requirements also extend to State agencies requiring Federal funds or approvals.

Our Response: As discussed in Chapter V, Section 2.b. of the DEA, not every single project, land use, and activity that has a Federal involvement has historically been subject to section 7 consultation with the Service (*e.g.*, a federally guaranteed mortgage). Thus, the analysis was confined to those projects, land uses, and activities that are, in practice, likely to be subject to consultation. The analysis based this assessment on a review of past consultations, current practices, and the professional judgments of Service staff and other Federal agency staff.

(59) *Comment:* Several commenters stated the following: The impact of the proposed designations under State law is potentially more extensive than under Federal law since the Act contains at least general criteria for determining when alteration of critical habitat constitutes "destruction or adverse

modification." The lack of analogous provisions under State law lends itself to a much broader interpretation of what activities might be considered injurious to the species (and therefore prohibited). One commenter asked if, to the extent that the Service has considered the potential interplay between the Act and State statutes, whether the Service is aware of any circumstances where similar issues have been raised under other State conservation statutes when critical habitat was designated. Another commenter noted, however, that because Hawaii's land use laws are uniquely onerous, precedent from other States is of little value. The current wave of proposals to designate critical habitat are the first time that the Act has been applied to significant areas of private land in Hawaii. Consequently, even prior experience in Hawaii is of little relevance.

Our Response: The DEA and the addendum discuss costs resulting from the interplay of the Endangered Species Act and Hawaii State law in the sections on Indirect Costs. The uncertainties regarding the occurrence of many indirect costs and their magnitudes reflect the lack of extensive experience in Hawaii with critical habitat.

(60) *Comment:* Several commenters stated the following: The DEA fails to consider economic impacts of critical habitat that result through interaction with State law, specifically Hawaii's Environmental Impact Statement Law. HRS § 343–5 applies to any use of conservation land, and a full Environmental Impact Statement is required if any of the significance criteria listed in Hawaii Administrative Rule 11–200–12 apply. One of these criteria is that an action is significant if it "substantially affects a rare, threatened or endangered species or its habitat." This will result in costly procedural requirements and delays. However, the DEA does not acknowledge that any impact on endangered species habitat will be deemed to be "significant." In addition, multiple commenters stated that the DEA fails to evaluate the practical effect critical habitat designation will have on development. Special Management Area permits administered by the City & County of Honolulu, as required by Hawaii's Coastal Zone Management Act, will be harder to obtain, will result in delays, will cause a decline in property values, and might make it impossible to develop. This economic impact disappears because the DEA's bottom line erroneously counts only so-called "direct" costs of consultation. The Service has taken the position in other States that it has a right to intervene in

local land use proceedings if they affect endangered species on private property, as evidenced by the Service's petition to the local zoning board in Arizona to postpone approval of a rezoning petition pending a survey to determine the extent to which an endangered plant was present on the property even though no Federal approval was being sought. That the Service does not address these activities in the DEA is a fundamental error of the analysis.

Our Response: Chapter VI, Section 4.h. of the DEA discussed additional State and county environmental review that would be required for projects in critical habitat. However, as mentioned in the addendum, even with the added State and county environmental review, the intended designation will have little or no practical effect on residential, resort, commercial, or industrial development because the analysis anticipates that no such development will occur in the intended critical habitat. Reasons for this are: (1) Most of the intended critical habitat is in mountainous areas that are unsuitable for development due to difficult access and terrain; (2) approximately 96 percent of the intended designation is in the State Conservation District where existing land-use controls severely limit development; (3) almost all of the remaining agricultural land in the intended designation is in areas that are not subject to development pressure because of steep slopes and little or no nearby infrastructure; (4) the small amount of land in the urban district (0.6 acre) is on steep slopes that cannot support development; and (5) all of the land intended for critical habitat designation that is in the Special Management Area is also within the conservation district.

(61) *Comment:* Several commenters stated the following: The DEA fails to consider economic impacts of critical habitat that result through interaction with State law, specifically the State Water Code. HRS § 174C–2 states that "adequate provision shall be made for protection of fish and wildlife". HRS § 174C–71 instructs the Commission of Water Resource Management to establish an instream use protection program to protect fish and wildlife. Since landowners might depend on water pumped from other watersheds, these effects can be far-reaching. It is impossible to tell from the descriptions in the proposal whether any water diversions will have to be reduced as a result of listing and critical habitat designation. It is unfair to dismiss costly but vital sources of energy and inexpensive irrigation water while maintaining the highest level of effort to

protect primary constituent elements for species that do not physically reside in the area but might somehow be transported. If the critical habitat proposal would require reducing water diversions from any stream, the Service should investigate whether that would take anyone's vested water rights. The Service has an obligation to thoroughly investigate this issue and refrain from designating critical habitat until it has determined whether its actions will affect water use. At minimum, portions of specific parcels that include water sources or water systems should be removed.

Our Response: Existing irrigation ditch systems and potable water systems are manmade features that to not contain the primary constituent elements for the plants. Because the Service does not include these manmade features in critical habitat designations, the intended designation will not affect the operation and maintenance of irrigation and potable water systems (DEA, Chapter II, Section 4).

Regarding new stream diversions, Chapter VI, Section 3.j. of the DEA stated that it is highly unlikely that new or expanded ditch systems would be proposed or approved within the proposed designation because it would directly or indirectly reduce stream flow, which is a major environmental concern. But if a stream diversion were to be proposed, critical habitat designation might result in an expanded biological assessment, project delays, project modifications, and an increased probability of denial (DEA, Chapter VI, Section 4.f.). Activities that alter watershed characteristics in ways that would appreciably reduce groundwater recharge or alter natural, dynamic wetland or other vegetative communities may directly or indirectly destroy or adversely modify critical habitat. Such activities may include water diversion or impoundment, excess groundwater pumping, manipulation of vegetation such as timber harvesting, residential and commercial development, and grazing of livestock that degrades watershed values. However, without more specific information on the scope and location of a future (and currently unplanned) stream diversion project, it is not possible to estimate the potential indirect costs.

(62) **Comment:** Any water diversion in, or upstream of, critical habitat will be challenged by people who oppose all diversions on principle. They will contend that diverting water from endangered plants risk driving them to extinction. Opponents of diversions

could use the critical habitat designations to invent a colorable argument sufficient to delay and confuse water use decisions.

Our Response: See the response to the previous comment (61).

(63) **Comment:** The DEA fails to recognize that the indirect costs to private landowners to investigate the implications of critical habitat on their lands are sunk costs associated with the designation process.

Our Response: Chapter VI, Section 4.k. of the DEA indicated that landowners might want to learn how the designation may affect (1) the use of their land (either through restrictions or new obligations), and (2) the value of their land. The cost-estimate to investigate the implications of critical habitat was \$80,000 to \$400,000.

Section 5.g of the addendum revised the estimate to reflect the reduction in the number of potentially affected landowners as a result of the intended modifications to the critical habitat. The revised estimate ranges between \$26,500 and \$227,500. For completeness, the estimate includes expenditures made during the designation process (i.e., sunk costs) and expenditures that will be made after the final designation.

Summary of Changes From the Proposed Rule

Based on a review of public comments received on the proposed determinations of critical habitat, we have reevaluated our proposed designations and included several changes to the final designations of critical habitat. These changes include the following:

(1) We published 303 single species critical habitat units for 99 plant species on the island of Oahu. As proposed, units were identified for multiple species. Delineation of critical habitat for each individual species will assist landowners, Federal agencies, and the Service in focusing and streamlining section 7 consultations.

(2) We changed the scientific names for the following species associated with the listed species found in the "SUPPLEMENTARY INFORMATION: Discussion of the Plant Taxa" section: *Athyrium sandwichianum* changed to *Diplazium sandwichianum* for *Alsindendron trinerve*, *Cyanea acuminata*, and *Diellia falcata*; *Athyrium arnottii* changed to *Diplazium arnottii* for *Schiedea kaalae*; *Blechnum occidentale* changed to *Blechnum appendiculatum* in the discussions of *Alectryon macrococcus*, *Alsindendron obovatum*, *Cenchrus agrimonioides*, *Ctenitis squamigera*, *Cyanea grimesiana* ssp. *obatae*, *Cyanea pinnatifida*,

Cyrtandra dentata, *Delissea subcordata*, *Diellia erecta*, *Diellia falcata*, *Diellia unisora*, *Flueggea neowawraea*, *Hedyotis degeneri*, *Lipochaeta tenuifolia*, *Lysimachia filifolia*, *Neraudia angulata*, *Nototrichium humile*, *Phyllostegia hirsuta*, *Phyllostegia kaalaensis*, *Phyllostegia mollis*, *Schiedea kaalae*, and *Schiedea hookeri*; *Bryophyllum* sp. changed to *Kalanchoe* sp. for *Lipochaeta tenuifolia*; *Glycine wightii* changed to *Neonotonia wightii* for *Hibiscus brackenridgei*; *Lipochaeta* sp. changed to *Melanthera* sp. for *Sesbania tomentosa*; *Lipochaeta integrifolia* changed to *Melanthera integrifolia* for *Peucedanum sandwicense*; *Lipochaeta remyi* changed to *Melanthera remyi* in the discussions of *Hibiscus brackenridgei* and *Schiedea kealiae*; *Lipochaeta tenuis* changed to *Melanthera tenuis* in the discussions of *Lipochaeta lobata* var. *leptophylla*, *Nototrichium humile*, and *Schiedea hookeri*; *Lycopodium* sp. changed to *Lycopodium cernua* for *Lobelia oahuensis*; *Lycopodium cernuum* changed to *Lycopodium cernua* for *Platanthera holochila*; *Morinda sandwicensis* changed to *Morinda trimera* for *Flueggea neowawraea*; *Myrica faya* changed to *Morella faya* in the discussions of *Cyanea grimesiana* ssp. *obatae*, *Hedyotis parvula*, *Melicope saint-johnii*, *Schiedea kaalae*, *Silene perlmannii*, *Urera kaalae*, and *Viola chamissoniana* ssp. *chamissoniana*; *Phymatosorus scolopendria* changed to *Phymatosorus grossus* for *Diellia erecta*; *Pluchea symphytifolia* changed to *Pluchea carolinensis* for *Chamaesyce celastroides* var. *kaenana*; *Setaria gracilis* changed to *Setaria parviflora* for *Labordia cyrtandrae*; *Styphelia tameiameia* changed to *Leptecophylla tameiameia* in the discussions of *Bonamia menziesii*, *Cenchrus agrimonioides*, *Eugenia koolauensis*, *Hedyotis coriacea*, *Hedyotis degeneri*, *Lepidium arbuscula*, *Lobelia niihauensis*, *Platanthera holochila*, *Sanicula purpurea*, *Schiedea hookeri*, and *Viola chamissoniana* ssp. *chamissoniana*; *Thelypteris cyatheoides* changed to *Christella cyatheoides* in the discussion of *Cyanea crispa*; *Thelypteris parasitica* changed to *Christella parasitica* in the discussions of *Alectryon macrococcus*, *Cyanea grimesiana* ssp. *obatae*, *Cyanea truncata*, *Cyrtandra dentata*, *Phyllostegia kaalaensis*, *Phyllostegia mollis*, *Phyllostegia parviflora*, *Pteris lidgatei*, *Schiedea kaalae*, *Schiedea hookeri*, and *Urera kaalae*; *Thelypteris sandwicensis* changed to *Dryopteris sandwicensis* in the discussions of *Cyanea acuminata*, *Cyrtandra*

subumbellata, and *Pteris lidgatei*; and *Sphenomeris chusana* changed to *Sphenomeris chinensis* for *Pteris lidgatei*.

(3) In order to avoid confusion regarding the number of location occurrences for each species (that do not necessarily each represent a viable population) and the number of recovery populations (8 to 10 with 100, 300, or 500 reproducing individuals), we changed the word "population" to "occurrence" where appropriate and updated the number of occurrences and/or individuals for the following species found in the "SUPPLEMENTARY INFORMATION: Discussion of the Plant Taxa" section and "Table 1.—Summary of existing occurrences on Oahu, and landownership for 101 species reported from Oahu": *Abutilon sandwicense* changed from 16 populations to 30 occurrences; *Alectryon macrococcus* changed from 34 populations to 82 occurrences; *Alsinidendron obovatum* changed from 5 populations to 6 occurrences; *Alsinidendron trinerve* changed from 3 populations to 13 occurrences; *Bonamia menziesii* changed from 16 populations to 18 occurrences; *Cenchrus agrimonoides* changed from 8 populations to 7 occurrences; *Centaurium seabaeoides* changed from 3 populations to 2 occurrences; *Chamaesyce celastroides* var. *kaenana* changed from 13 populations to 15 occurrences; *Chamaesyce kuwaleana* changed from 4 populations to 5 occurrences; *Chamaesyce rockii* changed from 16 populations to 20 occurrences; *Ctenitis squamigera* changed from 4 populations to 8 occurrences; *Cyanea acuminata* changed from 22 populations to 20 occurrences; *Cyanea grimesiana* ssp. *grimesiana* changed from 6 populations to 7 occurrences; *Cyanea grimesiana* ssp. *obatae* changed from 6 populations to 8 occurrences; *Cyanea humboldtiana* changed from 8 populations to 9 occurrences; *Cyanea koolauensis* changed from 25 populations to 42 occurrences; *Cyanea st.-johnii* changed from 6 populations to 7 occurrences; *Cyrtandra dentata* changed from 8 populations to 11 occurrences; *Cyrtandra subumbellata* changed from 2 populations to 5 occurrences; *Cyrtandra viridiflora* changed from 8 populations to 23 occurrences; *Delissea subcordata* changed from 18 populations to 21 occurrences; *Diellia falcata* changed from 29 populations to 30 occurrences; *Dubautia herbstobatae* changed from 4 populations to 12 occurrences; *Eugenia*

koolauensis changed from 10 populations to 12 occurrences; *Euphorbia haelealeana* changed from 6 populations to 8 occurrences; *Flueggea neowawraea* changed from 19 populations to 23 occurrences; *Gardenia mannii* changed from 31 populations to 49 occurrences; *Gouania meyenii* changed from 3 populations to 4 occurrences; *Hedyotis degeneri* changed from 5 populations to 4 occurrences; *Hedyotis parvula* changed from 5 populations to 7 occurrences; *Hesperomannia arborescens* changed from 23 populations to 36 occurrences; *Isodendron longifolium* changed from 4 populations to 7 occurrences; *Lepidium arbuscula* changed from 10 populations to 12 occurrences; *Lipochaeta lobata* var. *leptophylla* changed from 5 populations to 4 occurrences; *Lipochaeta tenuifolia* changed from 12 populations to 41 occurrences; *Lobelia gaudichaudii* ssp. *koolauensis* changed from 4 populations to 5 occurrences; *Lobelia niihauensis* changed from 21 populations to 40 occurrences; *Lobelia oahuensis* changed from 10 populations to 12 occurrences; *Marsilea villosa* changed from 4 populations to 5 occurrences; *Melicope lydgatei* changed from 4 populations to 18 occurrences; *Melicope saint-johnii* changed from 5 populations to 6 occurrences; *Neraudia angulata* changed from 5 populations to 27 occurrences; *Nototrichium humile* changed from 21 populations to 25 occurrences; *Phlegmariurus nutans* changed from 5 populations to 3 occurrences; *Phyllostegia hirsuta* changed from 23 populations to 26 occurrences; *Phyllostegia kaalaensis* changed from 4 populations to 7 occurrences; *Phyllostegia mollis* changed from 8 populations to 5 occurrences; *Phyllostegia parviflora* changed from 2 populations to 6 occurrences; *Plantago princeps* changed from 6 populations to 11 occurrences; *Pteris lidgatei* changed from 5 populations to 9 occurrences; *Sanicula purpurea* changed from 4 populations to 5 occurrences; *Schiedea kaalae* changed from 8 populations to 7 occurrences; *Schiedea nuttallii* changed from 5 populations to 7 occurrences; *Silene lanceolata* changed from 2 populations to 4 occurrences; *Spermolepis hawaiiensis* changed from 2 populations to 6 occurrences; *Tetramolopium filiforme* changed from 6 populations to 21 occurrences; *Tetramolopium lepidotum* ssp. *lepidotum* changed from 4 populations to 5 occurrences; *Tetraplasandra gymnocarpa* changed

from 20 populations to 30 occurrences; *Urera kaalae* changed from 11 populations to 12 occurrences; *Viola chamissoniana* ssp. *chamissoniana* changed from 5 populations to 15 occurrences; and *Viola oahuensis* changed from 9 populations to 18 occurrences.

(4) We revised the list of excluded, manmade features in the "Criteria Used to Identify Critical Habitat" and § 17.99(i) to include additional features based on information received during the public comment periods. We added other water system features including but not limited to pumping stations, irrigation ditches, pipelines, siphons, tunnels, water tanks, gaging stations, intakes, reservoirs, diversions, flumes, and wells to aqueducts; existing trails; campgrounds and their immediate surrounding landscaped area; scenic lookouts; remote helicopter landing sites; existing fences; towers and associated structures to telecommunications equipment; other archaeological sites to heiaus (indigenous places of worship or shrines); and electrical power transmission lines and distribution and communication facilities and regularly maintained associated rights-of-way and access ways.

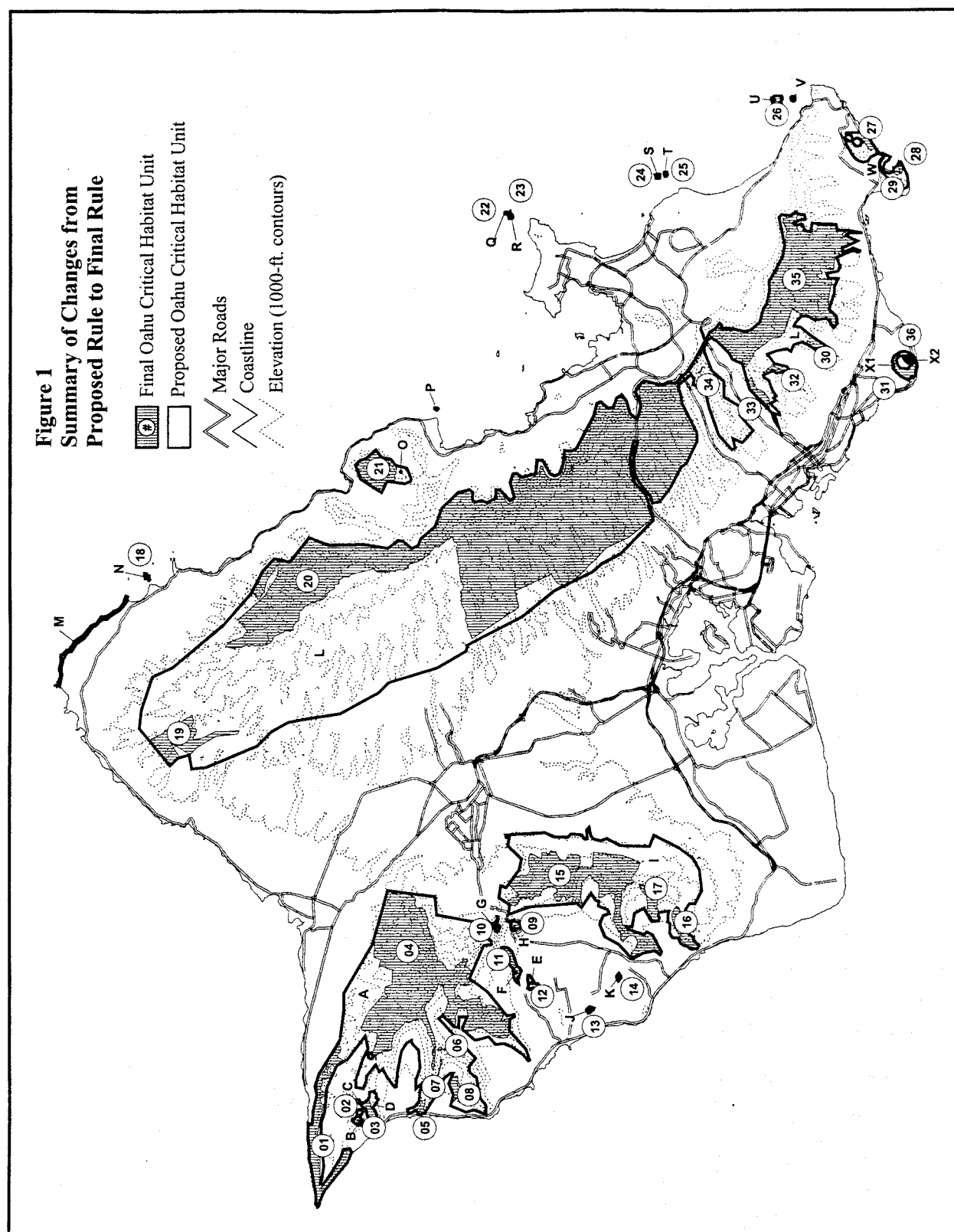
(5) We made revisions to the unit boundaries based on information supplied by commenters, as well as information gained from field visits to some of the sites, that indicated that the primary constituent elements were not present in certain portions of the proposed unit, that certain changes in land use had occurred on lands within the proposed critical habitat that would preclude those areas from supporting the primary constituent elements, or that the areas were not essential to the conservation of the species in question.

(6) Based on information received during the public comment periods, we updated the elevation ranges in § 17.99(j) "Plants on the island of Oahu: Constituent elements".

(7) All Army lands were excluded under 3(5)(A) and 4(b)(2) of the Act because we believe the benefit of excluding these lands outweigh the benefits of including these lands in the final designation (See "Analysis of Impacts Under Section 4(b)(2): Other Impacts").

A brief summary of the modifications made to each unit is given below (see also Figure 1).

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Oahu A

This unit was proposed as critical habitat for 65 species: *Abutilon sandwicense*, *Alectryon macrococcus*, *Alsinidendron obovatum*,

Alsinidendron trinerve, *Bonamia menziesii*, *Cenchrus agrimonioides*, *Centaurium sebaeoides*, *Chamaesyce celastroides* var. *kaenana*, *Chamaesyce herbstii*, *Colubrina oppositifolia*,

Ctenitis squamigera, *Cyanea acuminata*, *Cyanea grimesiana* ssp. *obatae*, *Cyanea longiflora*, *Cyanea superba*, *Cyperus trachysanthos*, *Cyrtandra dentata*, *Delissea subcordata*, *Diellia falcata*,

Diplazium molokaiense, *Dubautia herbstobatae*, *Eragrostis fosbergii*, *Eugenia koolauensis*, *Euphorbia haeleeleana*, *Flueggea neowawraea*, *Gardenia mannii*, *Gouania meyenii*, *Gouania vitifolia*, *Hedyotis degeneri*, *Hedyotis parvula*, *Hesperomannia arborescens*, *Hesperomannia arbuscula*, *Hibiscus brackenridgei*, *Isodendron laurifolium*, *Isodendron longifolium*, *Isodendron pyrifolium*, *Labordia cyrtandrae*, *Lepidium arbuscula*, *Lipochaeta lobata* var. *leptophylla*, *Lipochaeta tenuifolia*, *Lobelia niihauensis*, *Mariscus pennatifolius*, *Melicope pallida*, *Neraudia angulata*, *Nototrichium humile*, *Peucedanum sandwicense*, *Phyllostegia hirsuta*, *Phyllostegia kaalaensis*, *Phyllostegia mollis*, *Plantago princeps*, *Sanicula mariviera*, *Schiedea hookeri*, *Schiedea kaala*, *Schiedea kealiae*, *Schiedea nuttallii*, *Sesbania tomentosa*, *Silene lanceolata*, *Solanum sandwicense*, *Spermolepis hawaiiensis*, *Stenogyne kanehoana*, *Tetramolopium filiforme*, *Tetramolopium lepidotum* ssp. *lepidotum*, *Urera kaalae*, *Vigna o-wahuense*, and *Viola chamissoniana* ssp. *chamissoniana*.

We excluded the proposed critical habitat on Army lands at Makua Military Reservation for *Alsinidendron obovatum*, *Diellia falcata*, *Dubautia herbstobatae*, *Flueggea neowawraea*, *Gouania meyenii*, *Hedyotis parvula*, *Lepidium arbuscula*, *Lipochaeta tenuifolia*, *Lobelia niihauensis*, *Neraudia angulata*, *Nototrichium humile*, *Peucedanum sandwicense*, *Schiedea hookeri*, *Silene lanceolata*, *Tetramolopium filiforme*, and *Viola chamissoniana* ssp. *chamissoniana* and at Schofield Barracks for *Alsinidendron trinerve*, *Cyanea acuminata*, *Cyanea grimesiana* ssp. *obatae*, *Gardenia mannii*, *Labordia cyrtandrae*, *Phyllostegia hirsuta*, *Phyllostegia mollis*, *Solanum sandwicense*, *Stenogyne kanehoana*, *Tetramolopium filiforme*, *Urera kaalae*, and *Viola chamissoniana* ssp. *chamissoniana* because the benefits of excluding these areas outweigh the benefits of including these areas as critical habitat (see "Analysis of Impacts Under Section 4(b)(2): Other Impacts").

In addition, modifications were made to this unit to exclude areas that do not contain the primary constituent elements of *Alectryon macrococcus*, *Bonamia menziesii*, *Cenchrus agrimonoides*, *Colubrina oppositifolia*, *Ctenitis squamigera*, *Euphorbia haeleeleana*, *Flueggea neowawraea*, *Gouania meyenii*, *Gouania vitifolia*, *Hesperomannia arborescens*, *Hibiscus brackenridgei*, *Isodendron laurifolium*, *Isodendron longifolium*, *Isodendron pyrifolium*, *Lobelia niihauensis*,

Phyllostegia mollis, *Plantago princeps*, *Schiedea hookeri*, *Schiedea nuttallii*, *Spermolepis hawaiiensis*, and *Vigna o-wahuense*, all multi-island species. In order to meet the recovery goal of 8 to 10 populations within the historical range of each of these 21 species, locations on other islands have been designated as critical habitat (i.e., locations on Kauai, Molokai, Maui, and/or Kahoolawe), other locations on Oahu are being designated as critical habitat in this rule; and/or other locations have been proposed for designation on the island of Hawaii. In addition, some essential areas were excluded under 4(b)(2) because active management of the area by the landowner outweighed the benefits of including that area as critical habitat. Modifications were also made to this unit to exclude areas that do not contain the primary constituent elements of *Abutilon sandwicense*, *Alsinidendron obovatum*, *Chamaesyce herbstii*, *Cyanea grimesiana* ssp. *obatae*, *Cyanea longiflora*, *Cyanea superba*, *Cyrtandra dentata*, *Delissea subcordata*, *Diellia falcata*, *Gardenia mannii*, *Hedyotis parvula*, *Labordia cyrtandrae*, *Lepidium arbuscula*, *Lipochaeta lobata* var. *leptophylla*, *Lipochaeta tenuifolia*, *Neraudia angulata*, *Phyllostegia hirsuta*, *Schiedea kealiae*, *Tetramolopium filiforme*, and *Viola chamissoniana* ssp. *chamissoniana*, all Oahu-endemic species. In order to meet the recovery goal of 8 to 10 populations within the historical range of each of these 20 species, other locations on Oahu are either being designated as critical habitat in this rule, or areas were excluded under 4(b)(2) in this rule because active management of the area by the landowner outweighed the benefits of including that area as critical habitat.

The area designated as critical habitat for the following 29 Oahu-endemic species provides habitat within their historical ranges for one population each of *Cyanea acuminata* and *Eragrostis fosbergii*; two populations of *Diellia falcata*, *Lipochaeta lobata* var. *leptophylla*, *Phyllostegia hirsuta*, *Schiedea kaalae*, *Tetramolopium filiforme*, and *Urera kaalae*; three populations of *Cyanea grimesiana* ssp. *obatae* and *Cyrtandra dentata*; four populations of *Alsinidendron trinerve*, *Chamaesyce celastroides* var. *kaenana*, *Delissea subcordata*, *Dubautia herbstobatae*, *Hedyotis parvula*, *Labordia cyrtandrae*, *Lepidium arbuscula*, *Lipochaeta tenuifolia*, *Sanicula mariviera*, and *Schiedea kealiae*; five populations of *Chamaesyce herbstii*, *Cyanea longiflora*, and *Viola chamissoniana* ssp. *chamissoniana*; six

populations of *Alsinidendron obovatum*, *Cyanea superba*, and *Neraudia angulata*; seven populations of *Abutilon sandwicense*; and nine populations of *Hedyotis degeneri* and *Phyllostegia kaalaensis*.

The area designated as critical habitat for the following 33 multi-island species provides habitat within their historical ranges for one population each of *Alectryon macrococcus*, *Bonamia menziesii*, *Centaurium sebaeoides*, *Ctenitis squamigera*, *Cyperus trachysanthos*, *Diplazium molokaiense*, *Eugenia koolauensis*, *Euphorbia haeleeleana*, *Flueggea neowawraea*, *Gouania meyenii*, *Hesperomannia arborescens*, *Isodendron pyrifolium*, *Lobelia niihauensis*, *Peucedanum sandwicense*, *Plantago princeps*, *Sesbania tomentosa*, *Silene lanceolata*, *Solanum sandwicense*, *Spermolepis hawaiiensis*, and *Vigna o-wahuense*; three populations of *Colubrina oppositifolia*, *Hesperomannia arbuscula*, *Hibiscus brackenridgei*, *Isodendron longifolium*, *Melicope pallida*, and *Tetramolopium lepidotum* ssp. *lepidotum*; four populations of *Mariscus pennatifolius* and *Schiedea nuttallii*; five populations of *Cenchrus agrimonoides*, *Isodendron laurifolium*, *Nototrichium humile*, and *Schiedea hookeri*; and six populations of *Gouania vitifolia*.

These modifications resulted in the reduction from 8,503 ha (21,013 ac) to 3,921 ha (9,689 ac). This unit was renamed Oahu 4—*Abutilon sandwicense*—a, Oahu 4—*Abutilon sandwicense*—b, Oahu 4—*Abutilon sandwicense*—c, Oahu 4—*Alectryon macrococcus*—a, Oahu 4—*Alsinidendron obovatum*—a, Oahu 4—*Alsinidendron obovatum*—b, Oahu 4—*Alsinidendron trinerve*—a, Oahu 4—*Bonamia menziesii*—c, Oahu 4—*Cenchrus agrimonoides*—a, Oahu 4—*Cenchrus agrimonoides*—b, Oahu 1—*Centaurium sebaeoides*—a, Oahu 1—*Chamaesyce celastroides* var. *kaenana*—a, Oahu 4—*Chamaesyce celastroides* var. *kaenana*—c, Oahu 5—*Chamaesyce celastroides* var. *kaenana*—d, Oahu 4—*Chamaesyce herbstii*—a, Oahu 4—*Colubrina oppositifolia*—a, Oahu 15—*Ctenitis squamigera*—a, Oahu 4—*Cyanea acuminata*—a, Oahu 4—*Cyanea grimesiana* ssp. *obatae*—a, Oahu 4—*Cyanea longiflora*—a, Oahu 4—*Cyanea longiflora*—b, Oahu 4—*Cyanea superba*—a, Oahu 4—*Cyanea superba*—b, Oahu 4—*Cyanea superba*—c, Oahu 1—*Cyperus trachysanthos*—a, Oahu 4—*Cyrtandra dentata*—a, Oahu 4—*Delissea subcordata*—a, Oahu 4—*Diellia falcata*—a, Oahu 4—*Diellia falcata*—b, Oahu 4—*Diplazium molokaiense*—a,

Oahu 4—*Dubautia herbstobatae*—a, Oahu 4—*Dubautia herbstobatae*—b, Oahu 7—*Dubautia herbstobatae*—c, Oahu 4—*Eragrostis fosbergii*—a, Oahu 4—*Eugenia koolauensis*—a, Oahu 4—*Euphorbia haeleeleana*—b, Oahu 4—*Flueggea neowawraea*—a, Oahu 4—*Gouania meyenii*—a, Oahu 4—*Gouania meyenii*—b, Oahu 5—*Gouania vitifolia*—c, Oahu 4—*Gouania vitifolia*—d, Oahu 4—*Gouania vitifolia*—e, Oahu 4—*Gouania vitifolia*—f, Oahu 4—*Gouania vitifolia*—g, Oahu 8—*Gouania vitifolia*—h, Oahu 4—*Hedyotis degeneri*—a, Oahu 4—*Hedyotis degeneri*—b, Oahu 4—*Hedyotis parvula*—a, Oahu 4—*Hesperomannia arborescens*—a, Oahu 4—*Hesperomannia arbuscula*—a, Oahu 4—*Hesperomannia arbuscula*—b, Oahu 1—*Hibiscus brackenridgei*—a, Oahu 4—*Hibiscus brackenridgei*—b, Oahu 5—*Hibiscus brackenridgei*—c, Oahu 4—*Isodendron laurifolium*—a, Oahu 4—*Isodendron laurifolium*—b, Oahu 4—*Isodendron longifolium*—a, Oahu 5—*Isodendron pyrifolium*—a, Oahu 4—*Labordia cyrtandrae*—a, Oahu 4—*Lepidium arbuscula*—a, Oahu 4—*Lipochaeta lobata* var. *leptophylla*—a, Oahu 4—*Lipochaeta tenuifolia*—c, Oahu 4—*Lipochaeta tenuifolia*—d, Oahu 4—*Lipochaeta tenuifolia*—e, Oahu 4—*Lobelia niihauensis*, Oahu 4—*Mariscus pennatifolius*—a, Oahu 4—*Mariscus pennatifolius*—b, Oahu 4—*Melicope pallida*—a, Oahu 4—*Neraudia angulata*—b, Oahu 4—*Neraudia angulata*—c, Oahu 4—*Neraudia angulata*—d, Oahu 4—*Neraudia angulata*—e, Oahu 4—*Nototrichium humile*—b, Oahu 4—*Nototrichium humile*—c, Oahu 4—*Nototrichium humile*—d, Oahu 4—*Peucedanum sandwicense*—a, Oahu 4—*Phyllostegia hirsuta*—a, Oahu 4—*Phyllostegia kaalaensis*—a, Oahu 4—*Phyllostegia kaalaensis*—b, Oahu 4—*Phyllostegia kaalaensis*—c, Oahu 4—*Phyllostegia kaalaensis*—d, Oahu 4—*Phyllostegia kaalaensis*—e, Oahu 4—*Plantago princeps*—a, Oahu 4—*Plantago princeps*—b, Oahu 4—*Sanicula mariversa*—a, Oahu 4—*Sanicula mariversa*—b, Oahu 4—*Sanicula mariversa*—c, Oahu 6—*Sanicula mariversa*—d, Oahu 4—*Schiedea hookeri*—b, Oahu 4—*Schiedea hookeri*—c, Oahu 4—*Schiedea hookeri*—d, Oahu 4—*Schiedea kaalae*—a, Oahu 1—*Schiedea kealiae*—a, Oahu 4—*Schiedea nuttallii*—a, Oahu 1—*Sesbania tomentosa*—a, Oahu 4—*Silene lanceolata*—a, Oahu 4—*Solanum sandwicense*—a, Oahu 5—*Spermolepis hawaiiensis*—a, Oahu 4—*Tetramolopium filiforme*—a, Oahu 4—*Tetramolopium lepidotum* ssp.

lepidotum—a, Oahu 4—*Tetramolopium lepidotum* ssp. *lepidotum*—b, Oahu 4—*Urera kaalae*—a, Oahu 4—*Urera kaalae*—b, Oahu 1—*Vigna o-wahuensis*—a, Oahu 4—*Viola chamissoniana* ssp. *chamissoniana*—a, Oahu 4—*Viola chamissoniana* ssp. *chamissoniana*—b, and Oahu 4—*Viola chamissoniana* ssp. *chamissoniana*—c.

Oahu B

This unit was proposed as critical habitat for seven species: *Bonamia menziesii*, *Euphorbia haeleeleana*, *Gouania vitifolia*, *Hibiscus brackenridgei*, *Isodendron pyrifolium*, *Neraudia angulata*, and *Nototrichium humile*. We excluded the proposed critical habitat for *Euphorbia haeleeleana*, *Hibiscus brackenridgei*, *Isodendron pyrifolium*, and *Nototrichium humile*, all multi-island species. This area is not essential for the conservation of these four species because it lacks one or more of the primary constituent elements, has a lower proportion of associated native species than other areas we consider to be essential to their conservation, and is less likely to contain the primary constituent elements long-term because it is not currently managed for conservation of these species. In addition, there are 10 other locations in historical ranges of these four species on Oahu and other islands that provide habitat for these species and that are either designated as critical habitat in this rule on Oahu, have been previously designated on Kauai, Molokai, and/or Maui, are found in areas on Oahu or other islands that are excluded under 4(b)(2) of the Act because active management of the area by the landowner outweighed the benefits of including that area as critical habitat, or have been proposed for designation on the island of Hawaii.

We excluded the proposed critical habitat for *Neraudia angulata*, a species endemic to Oahu. This area is not essential for the conservation of *Neraudia angulata* because it lacks one or more of the primary constituent elements, has a lower proportion of associated native species than other areas we consider to be essential to the conservation of *N. angulata*, and is less likely to contain the primary constituent elements long-term because it is not currently managed for conservation of this species. In addition, there are 10 other locations in its historical range on Oahu that provide habitat for this species and that are either designated as critical habitat in this rule or are found in areas excluded under 4(b)(2) of the Act (Makua Military Reservation) because active management of the unit

by the landowner outweighed the benefits of including it as critical habitat.

The area designated as critical habitat for the following multi-island species provides habitat within their historical ranges for one population each of *Bonamia menziesii* and *Gouania vitifolia*.

These modifications resulted in the reduction from 34 ha (83 ac) to 23 ha (58 ac). This unit was renamed Oahu 2—*Bonamia menziesii*—a and Oahu 2—*Gouania vitifolia*—a.

Oahu C

This unit was proposed as critical habitat for one species: *Bonamia menziesii*, a multi-island species. This area is not essential for the conservation of *Bonamia menziesii* because it lacks one or more of the primary constituent elements, has a lower proportion of associated native species than other areas we consider to be essential to the conservation of *B. menziesii*, and is less likely to contain the primary constituent elements long-term because it is not currently managed for conservation of this species. In addition, there are 10 other locations in its historical range on Oahu and other islands that provide habitat for this species and that are either designated as critical habitat in this rule, are found in an area managed for the species on Lanai, have been designated on Kauai or Maui, or have been proposed for designation on the island of Hawaii. Exclusion of this area from critical habitat for *Bonamia menziesii* resulted in the complete removal of this unit (14 ha (35 ac)) from the final designation.

Oahu D

This unit was proposed as critical habitat for nine species: *Bonamia menziesii*, *Chamelyce celastroides* var. *kaenana*, *Euphorbia haeleeleana*, *Gouania vitifolia*, *Hibiscus brackenridgei*, *Isodendron pyrifolium*, *Neraudia angulata*, *Nototrichium humile*, and *Schiedea hookeri*. We excluded the proposed critical habitat for *Hibiscus brackenridgei* and *Isodendron pyrifolium*, both multi-island species. This area is not essential for the conservation of *Hibiscus brackenridgei* and *Isodendron pyrifolium* because it lacks one or more of the primary constituent elements, has a lower proportion of associated native species than other areas we consider to be essential to the two species' conservation, and is less likely to contain the primary constituent elements long-term because it is not currently managed for conservation of these species. In addition, there are 10

other locations for *Isodendron pyrifolium* and at least 9 other locations for *Hibiscus brackenridgei* in their historical ranges on Oahu and other islands that provide habitat for these species and that are either designated as critical habitat in this rule, are found in an area managed for the species on Lanai, have been designated on Molokai and Maui, or have been proposed for designation on the island of Hawaii.

The area designated as critical habitat for the following Oahu endemic species provides habitat within their historical ranges for one population each of *Chamaesyce celastroides* var. *kaenana* and *Neraudia angulata*. The area designated as critical habitat for the following multi-island species provides habitat within their historical ranges for one population each of *Bonamia menziesii*, *Euphorbia haelealeana*, *Gouania vitifolia*, *Nototrichium humile*, and *Schiedea hookeri*.

These modifications resulted in the reduction from 110 ha (271 ac) to 67 ha (164 ac). This unit was renamed Oahu 3—*Bonamia menziesii*—b, Oahu 3—*Chamaesyce celastroides* var. *kaenana*—b, Oahu 3—*Euphorbia haelealeana*—a, Oahu 3—*Gouania vitifolia*—b, Oahu 3—*Neraudia angulata*—a, Oahu 3—*Nototrichium humile*—a, and Oahu 3—*Schiedea hookeri*—a.

Oahu E

This unit was proposed as critical habitat for one species: *Chamaesyce kuwaleana*. Modifications were made to this unit to exclude small areas that do not contain the primary constituent elements of *C. kuwaleana*. The area designated as critical habitat for *C. kuwaleana* provides habitat within its historical range for one population. These modifications resulted in the slight reduction from 94 ha (38 ac) to 93 ha (37 ac). The unit was renamed Oahu 12—*Chamaesyce kuwaleana*—c.

Oahu F

This unit was proposed as critical habitat for two species: *Chamaesyce kuwaleana* and *Isodendron pyrifolium*. We excluded the proposed critical habitat for *I. pyrifolium*, a multi-island species. This area is not essential for the conservation of this species because it lacks one or more of the primary constituent elements, has a lower proportion of associated native species than other areas we consider to be essential to the conservation of *Isodendron pyrifolium*, and is less likely to contain the primary constituent elements long-term because it is not currently managed for conservation of this species. In addition, there are 10

other locations in its historical range on Oahu and other islands that provide habitat for this species and that are either designated as critical habitat in this rule, are found in an area managed for the species on Lanai, have been designated on Molokai and Maui, or have been proposed for designation on the island of Hawaii. The area designated as critical habitat for *Chamaesyce kuwaleana* provides habitat within its historical range for one population. This modification resulted in the reduction from 81 ha (200 ac) to 53 ha (131 ac). This unit was renamed Oahu 11—*Chamaesyce kuwaleana*—b.

Oahu G

This unit was proposed as critical habitat for two species: *Tetramolopium filiforme* and *Viola chamissoniana* ssp. *chamissoniana*. We excluded the proposed critical habitat for *Tetramolopium filiforme* on Army lands at Schofield Barracks because the benefits of excluding this area outweigh the benefits of including this area (see “Analysis of Impacts Under Section 4(b)(2): Other Impacts”). The area designated as critical habitat for *Viola chamissoniana* ssp. *chamissoniana* provides habitat within its historical range for one population. This modification resulted in the reduction from 16 ha (40 ac) to 6 ha (15 ac). This unit was renamed Oahu 10—*Viola chamissoniana* ssp. *chamissoniana*—d.

Oahu H

This unit was proposed as critical habitat for *Chamaesyce kuwaleana*. The area designated as critical habitat for *Chamaesyce kuwaleana* provides habitat within its historical range for one population. No modifications were made to the acreage of this unit, which was renamed Oahu 9—*Chamaesyce kuwaleana*—a.

Oahu I

This unit was proposed as critical habitat for 42 species: *Abutilon sandwicense*, *Alectryon macrococcus*, *Alsinidendron obovatum*, *Bonamia menziesii*, *Cenchrus agrimonioides*, *Chamaesyce herbstii*, *Chamaesyce kuwaleana*, *Cyanea grimesiana* ssp. *obatae*, *Cyanea pinnatifida*, *Cyrtandra dentata*, *Delissea subcordata*, *Diellia falcata*, *Diellia unisora*, *Flueggea neowawraea*, *Gardenia mannii*, *Gouania meyenii*, *Hedyotis coriacea*, *Hedyotis parvula*, *Hesperomannia arbuscula*, *Hibiscus brackenridgei*, *Isodendron pyrifolium*, *Lepidium arbuscula*, *Lipochaeta lobata* var. *leptophylla*, *Lobelia niihauensis*, *Melicope pallida*, *Melicope saint-johnii*, *Neraudia*

angulata, *Phyllostegia hirsuta*, *Phyllostegia kaalaensis*, *Phyllostegia mollis*, *Phyllostegia parviflora*, *Plantago princeps*, *Sanicula mariversa*, *Schiedea hookeri*, *Schiedea kaalae*, *Schiedea nuttallii*, *Silene perlmannii*, *Solanum sandwicense*, *Stenogyne kanehoana*, *Tetramolopium lepidotum* ssp. *lepidotum*, *Urera kaalae*, and *Viola chamissoniana* ssp. *chamissoniana*. We excluded the proposed critical habitat on Army lands at Schofield Barracks for *Cyanea grimesiana* ssp. *obatae*, *Gardenia mannii*, *Phyllostegia hirsuta*, *Phyllostegia mollis*, *Solanum sandwicense*, *Stenogyne kanehoana*, *Urera kaalae*, and *Viola chamissoniana* ssp. *chamissoniana* because the benefits of excluding this area outweigh the benefits of including this area (see “Analysis of Impacts Under Section 4(b)(2): Other Impacts”). We also excluded the proposed critical habitat for *Cyrtandra dentata*, *Flueggea neowawraea*, and *Hibiscus brackenridgei*. This area is not essential for the conservation of these three species because it lacks one or more of the primary constituent elements, has a lower proportion of associated native species than other areas we consider to be essential to the conservation of these three species, and is less likely to contain the primary constituent elements long-term because it is not currently managed for conservation of these species. In addition, there are at least 8 other locations for *Cyrtandra dentata*, and at least 10 other locations for *Flueggea neowawraea* and *Hibiscus brackenridgei*, in their historical ranges on Oahu and other islands that provide habitat for these species and that are either designated as critical habitat in this rule; are found on lands managed for the species on Lanai or Oahu’s Army lands; have been designated on Kauai, Molokai, and Maui; or have been proposed for designation on the island of Hawaii.

Modifications were made to this unit to exclude areas that do not contain the primary constituent elements for *Alectryon macrococcus*, *Bonamia menziesii*, *Cenchrus agrimonioides*, and *Tetramolopium lepidotum* ssp. *lepidotum*, all multi-island species. In order to meet the recovery goal of 8 to 10 populations within the historical range of each of these 21 species, other locations either have been designated as critical habitat on Kauai, Molokai, Maui, and/or Kahoolawe; were excluded under 4(b)(2) on one or more of the Hawaiian islands because active management of an area by the landowner outweighed the benefits of including that area as critical habitat;

are being designated as critical habitat in this rule; and/or have been proposed for designation on the island of Hawaii. Modifications were also made to this unit to exclude areas that do not contain the primary constituent elements for *Abutilon sandwicense*, *Chamaesyce herbstii*, *Cyanea pinnatifida*, *Diellia falcata*, *Diellia unisora*, *Melicope saint-johnii*, *Neraudia angulata*, *Phyllostegia hirsuta*, and *Urera kaalae*, all Oahu-endemic species. In order to meet the recovery goal of 8 to 10 populations within the historical range of each of these 20 species, other locations on Oahu are either being designated as critical habitat in this rule or were excluded under 4(b)(2) in this rule because active management of an area by the landowner outweighed the benefits of including that area as critical habitat.

The area designated as critical habitat for the following 24 Oahu-endemic species provides habitat within their historical ranges for one population each of *Alsinidendron obovatum*, *Neraudia angulata*, and *Phyllostegia kaalaensis*; two populations each of *Chamaesyce herbstii*, *Chamaesyce kuwaleana*, *Gardenia mannii*, *Gouania meyenii*, *Sanicula mariversa*, and *Viola chamissoniana* ssp. *chamissoniana*; three populations each of *Abutilon sandwicense*, *Cyanea grimesiana* ssp. *obatae*, *Hedyotis parvula*, *Lepidium arbuscula*, *Melicope saint-johnii*, *Phyllostegia hirsuta*, and *Stenogyne kanehoana*; four populations each of *Cyanea pinnatifida*, *Delissea subcordata*, *Schiedea kaalae*, and *Urera kaalae*; six populations each of *Diellia unisora* and *Silene perlmannii*; seven populations of *Diellia falcata*; and eight populations of *Lipochaeta lobata* var. *leptophylla*.

The area designated as critical habitat for the following 15 multi-island species provides habitat within their historical ranges for one population each of *Alectryon macrococcus*, *Bonamia menziesii*, *Hedyotis coriacea*, *Lobelia niihauensis*, and *Plantago princeps*; two populations each of *Hesperomannia arbuscula*, *Isodendron pyrifolium*, *Schiedea hookeri*, *Schiedea nuttallii*, and *Solanum sandwicense*; three populations each of *Cenchrus agrimonoides*, *Melicope pallida*, *Phyllostegia mollis*, and *Phyllostegia parviflora*; and five populations of *Tetramolopium lepidotum* ssp. *lepidotum*.

This modification resulted in the reduction from 5,109 ha (12,623 ac) to 1,917 ha (4,736 ac). This unit was renamed Oahu 15—*Abutilon sandwicense*—d, Oahu 15—*Abutilon sandwicense*—e, Oahu 17—*Abutilon*

sandwicense—f, Oahu 15—*Alectryon macrococcus*—b, Oahu 15—*Alsinidendron obovatum*—c, Oahu 17—*Bonamia menziesii*—d, Oahu 15—*Cenchrus agrimonoides*—c, Oahu 15—*Cenchrus agrimonoides*—d, Oahu 15—*Chamaesyce herbstii*—b, Oahu 15—*Chamaesyce herbstii*—c, Oahu 15—*Chamaesyce kuwaleana*—d, Oahu 15—*Cyanea grimesiana* ssp. *obatae*—b, Oahu 15—*Cyanea grimesiana* ssp. *obatae*—c, Oahu 15—*Cyanea grimesiana* ssp. *obatae*—d, Oahu 15—*Cyanea pinnatifida*—a, Oahu 15—*Cyanea pinnatifida*—b, Oahu 15—*Cyanea pinnatifida*—c, Oahu 15—*Delissea subcordata*—b, Oahu 15—*Delissea subcordata*—c, Oahu 15—*Delissea subcordata*—d, Oahu 15—*Diellia falcata*—c, Oahu 15—*Diellia falcata*—d, Oahu 15—*Diellia unisora*—a, Oahu 15—*Gardenia mannii*—a, Oahu 15—*Gouania meyenii*—c, Oahu 15—*Hedyotis coriacea*—a, Oahu 4—*Hedyotis parvula*—b, Oahu 15—*Hedyotis parvula*—c, Oahu 15—*Hedyotis parvula*—d, Oahu 15—*Hesperomannia arbuscula*—c, Oahu 15—*Hesperomannia arbuscula*—d, Oahu 15—*Hesperomannia arbuscula*—e, Oahu 16—*Isodendron pyrifolium*—b, Oahu 17—*Isodendron pyrifolium*—c, Oahu 15—*Lepidium arbuscula*—b, Oahu 15—*Lepidium arbuscula*—c, Oahu 15—*Lipochaeta lobata* var. *leptophylla*—b, Oahu 17—*Lobelia niihauensis*—b, Oahu 15—*Melicope pallida*—b, Oahu 15—*Melicope pallida*—c, Oahu 15—*Melicope pallida*—d, Oahu 15—*Melicope pallida*—e, Oahu 15—*Melicope saint-johnii*—a, Oahu 15—*Melicope saint-johnii*—b, Oahu 15—*Neraudia angulata*—f, Oahu 15—*Phyllostegia hirsuta*—b, Oahu 15—*Phyllostegia hirsuta*—c, Oahu 15—*Phyllostegia kaalaensis*—f, Oahu 15—*Phyllostegia mollis*—a, Oahu 15—*Phyllostegia mollis*—b, Oahu 15—*Phyllostegia parviflora*—a, Oahu 15—*Phyllostegia parviflora*—b, Oahu 15—*Phyllostegia parviflora*—c, Oahu 15—*Plantago princeps*—c, Oahu 15—*Sanicula mariversa*—e, Oahu 15—*Sanicula mariversa*—f, Oahu 15—*Schiedea hookeri*—e, Oahu 15—*Schiedea hookeri*—f, Oahu 15—*Schiedea hookeri*—g, Oahu 15—*Schiedea kaalae*—b, Oahu 15—*Schiedea kaalae*—c, Oahu 15—*Schiedea kaalae*—d, Oahu 15—*Schiedea kaalae*—e, Oahu 15—*Schiedea nuttallii*—b, Oahu 15—*Schiedea nuttallii*—c, Oahu 15—*Silene perlmannii*—a, Oahu 15—*Silene perlmannii*—b, Oahu 15—*Silene perlmannii*—c, Oahu 15—*Silene perlmannii*—d, Oahu 15—*Solanum sandwicense*—b, Oahu 15—*Solanum sandwicense*—c, Oahu 15—*Stenogyne*

kanehoana—a, Oahu 15—*Stenogyne kanehoana*—c, Oahu 15—*Tetramolopium lepidotum* ssp. *lepidotum*—c, Oahu 15—*Tetramolopium lepidotum* ssp. *lepidotum*—d, Oahu 15—*Tetramolopium lepidotum* ssp. *lepidotum*—e, Oahu 15—*Tetramolopium lepidotum* ssp. *lepidotum*—f, Oahu 15—*Urera kaalae*—c, Oahu 15—*Urera kaalae*—d, Oahu 15—*Urera kaalae*—e, Oahu 15—*Urera kaalae*—f, Oahu 10—*Viola chamissoniana* ssp. *chamissoniana*—e, and Oahu 15—*Viola chamissoniana* ssp. *chamissoniana*—f.

Oahu J

This unit was proposed as critical habitat for *Marsilea villosa*. The area designated as critical habitat for *Marsilea villosa* provides habitat within its historical range for one population. No modifications were made to the acreage of this unit, which was renamed Oahu 13—*Marsilea villosa*—a.

Oahu K

This unit was proposed as critical habitat for *Marsilea villosa*. The area designated as critical habitat for *Marsilea villosa* provides habitat within its historical range for one population. No modifications were made to the acreage of this unit, which was renamed Oahu 14—*Marsilea villosa*—b.

Oahu L

This unit was proposed as critical habitat for 45 species: *Adenophorus periens*, *Bonamia menziesii*, *Chamaesyce celastroides* var. *kaenana*, *Chamaesyce deppeana*, *Chamaesyce rockii*, *Cyanea acuminata*, *Cyanea crispa*, *Cyanea grimesiana* ssp. *grimesiana*, *Cyanea humboldtiana*, *Cyanea koolauensis*, *Cyanea longiflora*, *Cyanea st.-johnii*, *Cyanea superba*, *Cyanea truncata*, *Cyrtandra dentata*, *Cyrtandra polyantha*, *Cyrtandra subumbellata*, *Cyrtandra viridiflora*, *Delissea subcordata*, *Diellia erecta*, *Eugenia koolauensis*, *Gardenia mannii*, *Hedyotis coriacea*, *Hesperomannia arborescens*, *Isodendron laurifolium*, *Isodendron longifolium*, *Labordia cyrtandrae*, *Lobelia gaudichaudii* ssp. *koolauensis*, *Lobelia monostachya*, *Lobelia oahuensis*, *Lysimachia filifolia*, *Melicope lydgatei*, *Myrsine juddii*, *Phlegmariurus nutans*, *Phyllostegia hirsuta*, *Phyllostegia parviflora*, *Plantago princeps*, *Platanthera holochila*, *Pteris lidgatei*, *Sanicula purpurea*, *Schiedea kaalae*, *Solanum sandwicense*, *Tetraplasandra gymnocarpa*, *Tetraplasandra singularis*, and *Viola oahuensis*. We excluded the proposed critical habitat on Army lands

at Schofield Barracks East Range for *Cyanea acuminata*, *Cyrtandra viridiflora*, *Gardenia mannii*, *Hesperomannia arborescens*, *Myrsine juddii*, *Phlegmariurus nutans*, and *Viola oahuensis*; at Kahuku Training Area for *Cyanea longiflora* and *Eugenia koolauensis*; and at Kawaihoa Training Area for *Cyanea acuminata*, *Cyanea crispa*, *Cyanea grimesiana* ssp. *grimesiana*, *Cyanea humboldtiana*, *Cyanea koolauensis*, *Cyanea longiflora*, *Cyanea st.-johnii*, *Cyrtandra dentata*, *Cyrtandra viridiflora*, *Gardenia mannii*, *Hesperomannia arborescens*, *Labordia cyrtandrae*, *Lobelia gaudichaudii* ssp. *koolauensis*, *Melicope lydgatei*, *Myrsine juddii*, *Phlegmariurus nutans*, *Phyllostegia hirsuta*, *Pteris lidgatei*, *Sanicula purpurea*, *Tetraplasandra gymnocarpa*, and *Viola oahuensis* because the benefits of excluding this area outweigh the benefits of including this area (see “Analysis of Impacts Under Section 4(b)(2): Other Impacts”). We excluded the proposed critical habitat for *Solanum sandwicense*, a multi-island species. This area is not essential for the conservation of this species, because it lacks one or more of the primary constituent elements, has a lower proportion of associated native species than other areas we consider to be essential to the conservation of *S. sandwicense*, and is less likely to contain the primary constituent elements long-term because it is not currently managed for conservation of this species. In addition, there are 10 other locations in its historical range on Oahu and Kauai that provide habitat for this species, which are either designated as critical habitat in this rule, in an area excluded under 4(b)(2) of the Act because active management of the area by the landowner outweighed the benefits of including that area as critical habitat (Schofield Barracks), or have been designated on Kauai.

Modifications were made to this unit to exclude areas that do not contain the primary constituent elements essential to the conservation of *Adenophorus periens*, *Bonamia menziesii*, *Cyanea grimesiana* ssp. *grimesiana*, *Diellia erecta*, *Eugenia koolauensis*, and *Hesperomannia arborescens*, all multi-island species. In order to meet the recovery goal of 8 to 10 populations within the historical range of each of these six species, other locations either have been designated as critical habitat on Kauai, Molokai, Maui, and/or Kahoolawe; were excluded under 4(b)(2) on Oahu, Lanai, and Maui because active management of an area by the landowner outweighed the benefits of including that area as critical habitat;

are being designated as critical habitat in this rule; and/or have been proposed for designation on the island of Hawaii. Modifications were also made to this unit to exclude areas that do not contain the primary constituent elements essential to the conservation of *Chamaesyce rockii*, *Cyanea acuminata*, *Cyanea crispa*, *Cyanea humboldtiana*, *Cyanea koolauensis*, *Cyanea longiflora*, *Cyanea st.-johnii*, *Cyanea truncata*, *Cyrtandra polyantha*, *Cyrtandra subumbellata*, *Cyrtandra viridiflora*, *Delissea subcordata*, *Gardenia mannii*, *Labordia cyrtandrae*, *Lobelia monostachya*, *Lobelia oahuensis*, *Melicope lydgatei*, *Phyllostegia hirsuta*, and *Viola oahuensis*, all island-endemic species. In order to meet the recovery goal of 8 to 10 populations within the historical range of each of these 19 species, other locations on Oahu are either being designated as critical habitat in this rule or were excluded under 4(b)(2) in this rule because active management of an area by the landowner outweighed the benefits of including that area as critical habitat.

The area designated as critical habitat for the following 27 Oahu-endemic species provides habitat within their historical ranges for two populations each of *Chamaesyce celastroides* var. *kaenana*, *Chamaesyce deppeana*, *Cyanea superba*, *Delissea subcordata*, *Gardenia mannii*, and *Phyllostegia hirsuta*; three populations each of *Cyanea longiflora*, and *Schiedea kaalae*; four populations of *Cyanea acuminata*; five populations each of *Chamaesyce rockii*, *Cyrtandra polyantha*, and *Cyrtandra viridiflora*; six populations each of *Labordia cyrtandrae*, *Melicope lydgatei*, *Myrsine juddii*, and *Trematolobelia singularis*; seven populations each of *Cyanea crispa*, *Cyanea koolauensis*, *Cyrtandra subumbellata*, *Lobelia gaudichaudii* ssp. *koolauensis*, *Lobelia monostachya*, and *Tetraplasandra gymnocarpa*; eight populations of *Cyanea humboldtiana*; nine populations each of *Cyanea st.-johnii* and *Cyanea truncata*; and 10 populations each of *Lobelia oahuensis* and *Viola oahuensis*.

The area designated as critical habitat for the following 16 multi-island species provides habitat within their historical ranges for one population each of *Adenophorus periens*, *Bonamia menziesii*, *Diellia erecta*, *Hedyotis coriacea*, *Isodendron laurifolium*, *Isodendron longifolium*, and *Plantago princeps*; two populations each of *Hesperomannia arborescens* and *Platanthera holochila*; three populations each of *Cyanea grimesiana* ssp. *grimesiana* and *Pteris lidgatei*; four populations each of *Eugenia*

koolauensis and *Sanicula purpurea*; five populations of *Phlegmariurus nutans*; and six populations each of *Lysimachia filifolia* and *Phyllostegia parviflora*.

This modification resulted in the reduction from 30,068 ha (74,301 ac) to 15,727 ha (38,863 ac). This unit was renamed Oahu 20—*Adenophorus periens*—a, Oahu 35—*Bonamia menziesii*—e, Oahu 35—*Chamaesyce celastroides* var. *kaenana*—e, Oahu 20—*Chamaesyce deppeana*—a, Oahu 25—*Chamaesyce deppeana*—b, Oahu 20—*Chamaesyce rockii*—a, Oahu 20—*Chamaesyce rockii*—b, Oahu 20—*Chamaesyce rockii*—c, Oahu 20—*Cyanea acuminata*—b, Oahu 20—*Cyanea crispa*—a, Oahu 20—*Cyanea crispa*—b, Oahu 35—*Cyanea crispa*—c, Oahu 20—*Cyanea grimesiana* ssp. *grimesiana*—a, Oahu 35—*Cyanea grimesiana* ssp. *grimesiana*—b, Oahu 19—*Cyanea grimesiana* ssp. *grimesiana*—c, Oahu 20—*Cyanea humboldtiana*—a, Oahu 20—*Cyanea humboldtiana*—b, Oahu 20—*Cyanea humboldtiana*—c, Oahu 20—*Cyanea humboldtiana*—d, Oahu 35—*Cyanea humboldtiana*—e, Oahu 20—*Cyanea koolauensis*—a, Oahu 20—*Cyanea koolauensis*—b, Oahu 35—*Cyanea koolauensis*—c, Oahu 35—*Cyanea koolauensis*—d, Oahu 19—*Cyanea longiflora*—c, Oahu 20—*Cyanea st.-johnii*—a, Oahu 35—*Cyanea st.-johnii*—b, Oahu 35—*Cyanea superba*—d, Oahu 20—*Cyanea truncata*—a, Oahu 35—*Cyrtandra polyantha*—a, Oahu 20—*Cyrtandra subumbellata*—a, Oahu 20—*Cyrtandra subumbellata*—b, Oahu 20—*Cyrtandra viridiflora*—a, Oahu 35—*Delissea subcordata*—e, Oahu 35—*Delissea subcordata*—f, Oahu 35—*Diellia erecta*—a, Oahu 19—*Eugenia koolauensis*—b, Oahu 20—*Eugenia koolauensis*—c, Oahu 20—*Gardenia mannii*—b, Oahu 20—*Gardenia mannii*—c, Oahu 35—*Hedyotis coriacea*—b, Oahu 20—*Hesperomannia arborescens*—b, Oahu 35—*Isodendron laurifolium*—c, Oahu 20—*Isodendron longifolium*—b, Oahu 20—*Labordia cyrtandrae*—b, Oahu 20—*Labordia cyrtandrae*—c, Oahu 20—*Lobelia gaudichaudii* ssp. *koolauensis*—a, Oahu 30—*Lobelia monostachya*—a, Oahu 32—*Lobelia monostachya*—b, Oahu 33—*Lobelia monostachya*—c, Oahu 25—*Lobelia monostachya*—d, Oahu 20—*Lobelia oahuensis*—a, Oahu 35—*Lobelia oahuensis*—b, Oahu 20—*Lysimachia filifolia*—a, Oahu 20—*Melicope lydgatei*—a, Oahu 20—*Myrsine juddii*—a, Oahu 20—*Phlegmariurus nutans*—a, Oahu 20—*Phyllostegia hirsuta*—d, Oahu 20—*Phyllostegia parviflora*—d, Oahu 20—*Plantago princeps*—d, Oahu 20—

Plantago princeps—e, Oahu 20—*Platanthera holochila*—a, Oahu 20—*Platanthera holochila*—b, Oahu 20—*Pteris lidgatei*—a, Oahu 20—*Pteris lidgatei*—b, Oahu 20—*Pteris lidgatei*—c, Oahu 20—*Sanicula purpurea*—a, Oahu 20—*Schiedea kaalae*—e, Oahu 20—*Tetraplasandra gymnocarpa*—a, Oahu 20—*Tetraplasandra gymnocarpa*—b, Oahu 20—*Tetraplasandra gymnocarpa*—c, Oahu 20—*Tetraplasandra gymnocarpa*—d, Oahu 35—*Tetraplasandra gymnocarpa*—e, Oahu 35—*Tetraplasandra gymnocarpa*—f, Oahu 20—*Trematolobelia singularis*—a, Oahu 20—*Trematolobelia singularis*—b, Oahu 34—*Trematolobelia singularis*—c, Oahu 35—*Trematolobelia singularis*—d, Oahu 35—*Trematolobelia singularis*—e, Oahu 20—*Viola oahuensis*—a, and Oahu 20—*Viola oahuensis*—b.

Oahu M

This unit was proposed as critical habitat for *Sesbania tomentosa*. We excluded the proposed critical habitat for this multi-island species. This area is not essential for the conservation of *S. tomentosa* because it lacks one or more of the primary constituent elements, has a lower proportion of associated native species than other areas we consider to be essential to the conservation of *S. tomentosa*, and is less likely to contain the primary constituent elements long-term because it is not currently managed for conservation of this species. In addition, there are at least 10 other locations in its historical range on Oahu and other islands that provide habitat for this species, which are either designated as critical habitat in this rule; have been designated on Kauai, Molokai, Maui, and the Northwestern Hawaiian Islands; or have been proposed for designation on the island of Hawaii. Exclusion of this unit from critical habitat for *Sesbania tomentosa* resulted in the removal of this 100 ha (246 ac) unit from the final designation.

Oahu N

This unit was proposed as critical habitat for two species: *Centaurium sebaeoides* and *Sesbania tomentosa*. We excluded the proposed critical habitat for *Centaurium sebaeoides*, a multi-island species. This area is not essential for the conservation of this species because it lacks one or more of the primary constituent elements, has a lower proportion of associated native species than other areas we consider to be essential to the conservation of *C. sebaeoides*, and is less likely to contain the primary constituent elements long-term because it is not currently managed

for conservation of this species. In addition, there are at least 10 other locations in its historical range on Oahu and other islands that provide habitat for this species, which are either designated as critical habitat in this rule; have been designated on Kauai, Molokai, and Maui; or are found in an area managed for the species on Lanai. The area designated as critical habitat for *Sesbania tomentosa* provides habitat within its historical range for one population. The exclusion of *Centaurium sebaeoides* did not result in a change to the acreage of this unit, which was renamed Oahu 18—*Sesbania tomentosa*—b.

Oahu O

This unit was proposed as critical habitat for three species: *Cyanea crispa*, *Cyanea truncata*, and *Schiedea kaalae*. Modifications were made to this unit to exclude areas that do not contain the primary constituent elements essential to the conservation of *Cyanea crispa* and *Cyanea truncata*, both endemic to Oahu. The area designated as critical habitat for the three Oahu-endemic species provides habitat within their historical ranges for one population each of *Cyanea crispa*, *Cyanea truncata*, and *Schiedea kaalae*. In order to meet the recovery goal of 8 to 10 populations within the historical range of each of these three species, other locations on Oahu are being designated as critical habitat in this rule. Modifications to this unit resulted in the reduction from 431 ha (1,066 ac) to 312 ha (772 ac). This unit was renamed Oahu 21—*Cyanea crispa*—c, Oahu 21—*Cyanea truncata*—b, and Oahu 21—*Schiedea kaalae*—f.

Oahu P

This unit was proposed as critical habitat for *Sesbania tomentosa*. We excluded the proposed critical habitat for this multi-island species. This area is not essential for the conservation of *S. tomentosa* because it lacks one or more of the primary constituent elements, has a lower proportion of associated native species than other areas we consider to be essential to the conservation of *Sesbania tomentosa*, and is less likely to contain the primary constituent elements long-term because it is not currently managed for conservation of this species. In addition, there are at least 10 other locations in its historical range on Oahu and other islands that provide habitat for this species which are either designated as critical habitat in this rule; have been designated on Kauai, Molokai, and Maui, and the Northwestern Hawaiian Islands; or have been proposed for designation on the island of Hawaii.

Exclusion of this unit from critical habitat for *Sesbania tomentosa* resulted in the removal of this entire unit (2 ha (3 ac)) from the final designation.

Oahu Q

This unit was proposed as critical habitat for two species: *Chamaesyce kuwaleana* and *Sesbania tomentosa*. We excluded the proposed critical habitat for *Sesbania tomentosa*, a multi-island species. This area is not essential for the conservation of this species because it lacks one or more of the primary constituent elements, has a lower proportion of associated native species than other areas we consider to be essential to the conservation of *S. tomentosa*, and is less likely to contain the primary constituent elements long-term because it is not currently managed for conservation of this species. In addition, there are at least 10 other locations in its historical range on Oahu and other islands that provide habitat for this species, which are either designated as critical habitat in this rule; have been designated on Kauai, Molokai, and Maui, and the Northwestern Hawaiian Islands; or have been proposed for designation on the island of Hawaii. The area designated as critical habitat for the Oahu-endemic, *Chamaesyce kuwaleana*, provides habitat within its historical range for one population. No modifications were made to the acreage of this unit, which was renamed Oahu 22—*Chamaesyce kuwaleana*—e.

Oahu R

This unit was proposed as critical habitat for two species: *Chamaesyce kuwaleana* and *Sesbania tomentosa*. We excluded the proposed critical habitat for *Sesbania tomentosa*, a multi-island species. This area is not essential for the conservation of this species because it lacks one or more of the primary constituent elements, has a lower proportion of associated native species than other areas we consider to be essential to the conservation of *S. tomentosa*, and is less likely to contain the primary constituent elements long-term because it is not currently managed for conservation of this species. In addition, there are at least 10 other locations in its historical range on Oahu and other islands that provide habitat for this species, which are either designated as critical habitat in this rule; have been designated on Kauai, Molokai, and Maui, and the Northwestern Hawaiian Islands; or have been proposed for designation on the island of Hawaii. The area designated as critical habitat for the Oahu-endemic, *Chamaesyce kuwaleana*, provides

habitat within its historical range for one population. No modifications were made to the acreage of this unit, which was renamed Oahu 23—*Chamaesyce kuwaleana*—f.

Oahu S

This unit was proposed as critical habitat for two species: *Sesbania tomentosa* and *Vigna o-wahuensis*. We excluded the proposed critical habitat for *Sesbania tomentosa*, a multi-island species. This area is not essential for the conservation of this species because it lacks one or more of the primary constituent elements, has a lower proportion of associated native species than other areas we consider to be essential to the conservation of *S. tomentosa*, and is less likely to contain the primary constituent elements long-term because it is not currently managed for conservation of this species. In addition, there are at least 10 other locations in its historical range on Oahu and other islands that provide habitat for this species which are either designated as critical habitat in this rule; have been designated on Kauai, Molokai, and Maui, and the Northwestern Hawaiian Islands; or have been proposed for designation on the island of Hawaii. The area designated as critical habitat for the multi-island species, *Vigna o-wahuensis*, provides habitat within its historical range for one population. No modifications were made to the acreage of this unit, which was renamed Oahu 24—*Vigna o-wahuensis*—b.

Oahu T

This unit was proposed as critical habitat for two species: *Sesbania tomentosa* and *Vigna o-wahuensis*. We excluded the proposed critical habitat for *Sesbania tomentosa*, a multi-island species. This area is not essential for the conservation of this species because it lacks one or more of the primary constituent elements, has a lower proportion of associated native species than other areas we consider to be essential to the conservation of *S. tomentosa*, and is less likely to contain the primary constituent elements long-term because it is not currently managed for conservation of this species. In addition, there are at least 10 other locations in its historical range on Oahu and other islands that provide habitat for this species which are either designated as critical habitat in this rule; have been designated on Kauai, Molokai, and Maui, and the Northwestern Hawaiian Islands; or have been proposed for designation on the island of Hawaii. The area designated as critical habitat for the multi-island

species, *Vigna o-wahuensis*, provides habitat within its historical range for one population. No modifications were made to the acreage of this unit, which was renamed Oahu 25—*Vigna o-wahuensis*—c.

Oahu U

This unit was proposed as critical habitat for three species: *Chamaesyce kuwaleana*, *Sesbania tomentosa*, and *Vigna o-wahuensis*. We excluded the proposed critical habitat for *Sesbania tomentosa*, a multi-island species. This area is not essential for the conservation of this species because it lacks one or more of the primary constituent elements, has a lower proportion of associated native species than other areas we consider to be essential to the conservation of *S. tomentosa*, and is less likely to contain the primary constituent elements long-term because it is not currently managed for conservation of this species. In addition, there are at least 10 other locations in its historical range on Oahu and other islands that provide habitat for this species which are either designated as critical habitat in this rule; have been designated on Kauai, Molokai, and Maui, and the Northwestern Hawaiian Islands; or have been proposed for designation on the island of Hawaii. The area designated as critical habitat for the multi-island species, *Vigna o-wahuensis*, and Oahu endemic, *Chamaesyce kuwaleana*, provides habitat within their historical ranges for one population of each. No modifications were made to the acreage of this unit, which was renamed Oahu 26—*Chamaesyce kuwaleana*—g and Oahu 26—*Vigna o-wahuensis*—d.

Oahu V

This unit was proposed as critical habitat for one species: *Sesbania tomentosa*. We excluded the proposed critical habitat for *Sesbania tomentosa*, a multi-island species. This area is not essential for the conservation of this species because it lacks one or more of the primary constituent elements, has a lower proportion of associated native species than other areas we consider to be essential to the conservation of *S. tomentosa*, and is less likely to contain the primary constituent elements long-term because it is not currently managed for conservation of this species. In addition, there are at least 10 other locations in its historical range on Oahu and other islands that provide habitat for this species which are either designated as critical habitat in this rule; have been designated on Kauai, Molokai, and Maui, and the Northwestern Hawaiian Islands; or have been proposed for designation on the

island of Hawaii. Exclusion of this unit from critical habitat for *Sesbania tomentosa* resulted in the removal of this entire unit (4 ha (10 ac)) from the final designation.

Oahu W

This unit was proposed as critical habitat for three species: *Centaurium sebaeoides*, *Cyperus trachysanthos*, and *Marsilea villosa*. Modifications were made to this unit to exclude areas that do not contain the primary constituent elements essential to the conservation of *Centaurium sebaeoides*, a multi-island species. The area designated as critical habitat for the three multi-island species, *Centaurium sebaeoides*, *Cyperus trachysanthos*, and *Marsilea villosa*, provides habitat within their historical ranges for one population of each. Modifications to this unit resulted in the reduction from 340 ha (840 ac) to 43 ha (106 ac). This unit was renamed Oahu 27—*Centaurium sebaeoides*—b, Oahu 28—*Cyperus trachysanthos*—b, Oahu 29—*Cyperus trachysanthos*—c, Oahu 28—*Marsilea villosa*—c, and Oahu 29—*Marsilea villosa*—d.

Oahu X1

This unit was proposed as critical habitat for two multi-island species: *Gouania meyenii* and *Spermolepis hawaiiensis*. Modifications were made to this unit to exclude areas that do not contain the primary constituent elements essential to the conservation of *Gouania meyenii* and *Spermolepis hawaiiensis*. The area designated as critical habitat for *Gouania meyenii* and *Spermolepis hawaiiensis* provides habitat within their historical ranges for one population of each. These modifications resulted in the reduction from 117 ha (290 ac) to 116 ha (286 ac). This unit was renamed Oahu 31—*Gouania meyenii*—d and Oahu 31—*Spermolepis hawaiiensis*—b.

Oahu X2

This unit was proposed as critical habitat for two multi-island species: *Cyperus trachysanthos* and *Marsilea villosa*. Modifications were made to this unit to exclude small areas that do not contain the primary constituent elements essential to the conservation of *Cyperus trachysanthos* and *Marsilea villosa*. The area designated as critical habitat for *Cyperus trachysanthos* and *Marsilea villosa* provides habitat within their historical ranges for one population of each. This modification resulted in the reduction from 8 ha (21 ac) to 6 ha (15 ac). This unit was renamed Oahu 36—*Cyperus trachysanthos*—d and Oahu 36—*Marsilea villosa*—e.

Critical Habitat

Critical habitat is defined in section 3 of the Act as—(i) the specific areas within the geographic area occupied by a species, at the time it is listed in accordance with the Act, on which are found those physical or biological features (I) essential to the conservation of the species and (II) that may require special management considerations or protection; and, (ii) specific areas outside the geographic area occupied by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. “Conservation,” as defined by the Act, means the use of all methods and procedures that are necessary to bring an endangered or a threatened species to the point at which listing under the Act is no longer necessary.

Critical habitat receives protection under section 7 of the Act through the prohibition against destruction or adverse modification of critical habitat with regard to actions carried out, funded, or authorized by a Federal agency. Section 7 also requires conferences on Federal actions that are likely to result in the destruction or adverse modification of proposed critical habitat. In our regulations at 50 CFR 402.02, we define destruction or adverse modification as “* * * a direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species. Such alterations include, but are not limited to, alterations adversely modifying any of those physical or biological features that were the basis for determining the habitat to be critical.” The relationship between a species’ survival and its recovery has been a source of confusion for some in the past. We believe that a species’ ability to recover depends on its ability to survive into the future when its recovery can be achieved; thus, the concepts of long-term survival and recovery are intricately linked. However, in the March 15, 2001, decision of the United States Court of Appeals for the Fifth Circuit (*Sierra Club v. Fish and Wildlife Service et al.*, 245 F.3d 434) regarding a not prudent finding, the court found our definition of destruction or adverse modification as currently contained in 50 CFR 402.02 to be invalid. In response to this decision, we are reviewing the regulatory definition of adverse modification in relation to the conservation of species.

In order to be included in a critical habitat designation, areas within the geographical range of the species at the time of listing must contain the physical

or biological features essential to the conservation of the species or, for an area outside the geographical area occupied by the species at the time of listing, the area itself must be essential to the conservation of the species (16 U.S.C. 1532(5)(A)).

Section 4 requires that we designate critical habitat for a species, to the extent such habitat is determinable, at the time of listing. When we designate critical habitat at the time of listing or under short court-ordered deadlines, we may not have sufficient information to identify all the areas essential for the conservation of the species, or we may inadvertently include areas that later will be shown to be nonessential. Nevertheless, we are required to designate those areas we know to be critical habitat, using the best information available to us.

Within the geographic areas occupied by the species, we will designate only areas that have features and habitat characteristics that are necessary to sustain the species. If the information available at the time of designation does not show that an area provides essential life cycle needs of the species, then the area should not be included in the critical habitat designation.

Our regulations state that “The Secretary shall designate as critical habitat areas outside the geographical area presently occupied by a species only when a designation limited to its present range would be inadequate to ensure the conservation of the species” (50 CFR 424.12(e)). Accordingly, when the best available scientific and commercial data do not demonstrate that the conservation needs of the species require designation of critical habitat outside of occupied areas, we will not designate critical habitat in areas outside the geographic area occupied by the species.

Our Policy on Information Standards Under the Endangered Species Act, published in the **Federal Register** on July 1, 1994 (59 FR 34271), provides criteria, establishes procedures, and provides guidance to ensure that our decisions represent the best scientific and commercial data available. It requires our biologists, to the extent consistent with the Act and with the use of the best scientific and commercial data available, to use primary and original sources of information as the basis for recommendations to designate critical habitat. When determining which areas are critical habitat, a primary source of information should be the listing package for the species. Additional information may be obtained from recovery plans, articles in peer-reviewed journals, conservation plans

developed by States and counties, scientific status surveys and studies, and biological assessments or other unpublished materials.

It is important to clearly understand that critical habitat designations do not signal that habitat outside the designation is unimportant or may not be required for recovery. Areas outside the critical habitat designation will continue to be subject to conservation actions that may be implemented under section 7(a)(1) and to the regulatory protections afforded by the Act’s 7(a)(2) jeopardy standard and section 9 prohibitions, as determined on the basis of the best available information at the time of the action. We specifically anticipate that federally funded or assisted projects affecting listed species outside their designated critical habitat areas may still result in jeopardy findings in some cases. Similarly, critical habitat designations made on the basis of the best available information at the time of designation will not control the direction and substance of future recovery plans, habitat conservation plans, or other species conservation planning efforts if new information available to these planning efforts calls for a different outcome. Furthermore, we recognize that designation of critical habitat may not include all of the habitat areas that may be determined to be necessary for the recovery of the species.

A. Prudence

Designation of critical habitat is not prudent when one or both of the following situations exist: (i) The species is threatened by taking or other human activity, and identification of critical habitat can be expected to increase the degree of such threat to the species; or (ii) such designation of critical habitat would not be beneficial to the species (50 CFR 424.12(a)(1)).

To determine whether critical habitat would be prudent for each species, we analyzed the potential threats and benefits for each species in accordance with the court’s order. One species, *Cyrtandra crenata*, a Oahu endemic species, is no longer extant in the wild. *Cyrtandra crenata* was last seen in the wild in 1947 (HINHP Database 2001). In addition, this species is not known to be in storage or under propagation. Under these circumstances, we have determined that designation of critical habitat for *Cyrtandra crenata* is not prudent because such designation would be of no benefit to this species. If this species is relocated, we may revise this final determination to incorporate or address new information

as it becomes available (See 16 U.S.C. 1532(5)(B); 50 CFR 424.13(f)).

Due to low numbers of individuals and/or populations and their inherent immobility, the other 100 plant species could be vulnerable to unrestricted collection, vandalism, or disturbance. We examined the evidence currently available for each of these species and found specific evidence of vandalism, disturbance, and/or the threat of unrestricted collection for one species of *Pritchardia*, the native palm. At the time of listing, we determined that designation of critical habitat was not prudent for *Pritchardia kaalae* because it would increase the degree of threat from vandalism or collecting and would provide no benefit (61 FR 53108). Since then, we have received information on the commercial trade in palms conducted through the Internet (Grant Canterbury, Service, *in litt.* 2000). Several nurseries advertise and sell seedlings and young plants, including 13 species of Hawaiian *Pritchardia*. Seven of these species are federally protected, including *Pritchardia kaalae*. In light of this information, we believe that designation of critical habitat would likely increase the threat from vandalism or collection to this species of *Pritchardia* on Oahu. These plants are easy to identify, and they are attractive to collectors of rare palms, either for their personal use or to trade or sell for personal gain (Johnson 1996). We believe that the evidence shows that *Pritchardia kaalae* may be attractive to such collectors. The final listing rule for this species contained only general information on its distribution, but the publication of precise maps and descriptions of critical habitat in the **Federal Register** would make *Pritchardia kaalae* more vulnerable to incidents of vandalism or collection and, therefore, contribute to its decline and make recovery more difficult (61 FR 53089).

For *Pritchardia kaalae*, we believe that the benefits of designating critical habitat do not outweigh the potential increased threats from vandalism or collection. Given all of the above considerations, we determine that designation of critical habitat for *Pritchardia kaalae* is not prudent.

In the final rule designating critical habitat for plants on Lanai, published on January 9, 2003 (68 FR 1220), we explained why we believe that critical habitat was prudent for the following 17 multi-island species that also occur on Oahu: *Adenophorus periers*, *Bonamia menziesii*, *Cenchrus agrimonoides*, *Centaurium sebaeoides*, *Ctenitis squamigera*, *Cyanea grimesiana* ssp. *grimesiana*, *Cyperus trachysanthos*,

Diellia erecta, *Diplazium molokaiense*, *Hesperomannia arborescens*, *Hibiscus brackenridgei*, *Isodendron pyrifolium*, *Sesbania tomentosa*, *Silene lanceolata*, *Spermolepis hawaiiensis*, *Tetramolopium lepidotum* ssp. *lepidotum*, and *Vigna o-wahuensis*. In the final rule designating critical habitat for plants on Kauai and Niihau, published on February 27, 2003 (68 FR 9116), we explained why that critical habitat was prudent for the following 16 multi-island species that are also found on Oahu: *Alectryon macrococcus*, *Euphorbia haelealeana*, *Flueggea neowawraea*, *Gouania meyenii*, *Isodendron laurifolium*, *Isodendron longifolium*, *Lobelia niihauensis*, *Lysimachia filifolia*, *Mariscus pennatifolius*, *Melicope pallida*, *Peucedanum sandwicense*, *Phlegmariurus nutans*, *Plantago princeps*, *Platanthera holochila*, *Schiedea nuttallii*, and *Solanum sandwicense*. In the final rule designating critical habitat for plants on Molokai, published on March 19, 2003 (68 FR 12982), we indicated why that critical habitat was prudent for the following four multi-island species that are also found on Oahu: *Eugenia koolauensis*, *Marsilea villosa*, *Phyllostegia mollis*, and *Pteris lidgatei*. In the final rule designating critical habitat for plants on Maui and Kahoolawe, published on May 14, 2003 (68 FR 25934) we indicated why we believe that critical habitat was prudent for the following eight multi-island species that are also found on Oahu: *Colubrina oppositifolia*, *Gouania vitifolia*, *Hedyotis coriacea*, *Hesperomannia arbuscula*, *Nototrichium humile*, *Phyllostegia parviflora*, *Sanicula purpurea*, and *Schiedea hookeri*.

We examined the potential threats and benefits for the other 54 taxa and have not, at this time, found specific evidence of taking, vandalism, collection, or trade of these taxa or of similarly situated species. Consequently, while we remain concerned that these activities could potentially threaten these 54 plant species in the future, consistent with applicable regulations (50 CFR 424.12(a)(1)(i)) and the court's discussion of these regulations, we do not find that any of these species are currently threatened by taking or other human activity. None of these threats would be exacerbated by the designation of critical habitat.

In the absence of finding that critical habitat would increase threats to a species, if there are any benefits to critical habitat designation, then a prudent finding is warranted. The

potential benefits of designation of critical habitat for these 54 species include: (1) Triggering section 7 consultation in new areas where it would not otherwise occur because, for example, it is or has become unoccupied or the occupancy is in question; (2) focusing conservation activities on the most essential areas; (3) providing educational benefits to State or county governments or private entities; and 4) preventing people from causing inadvertent harm to the species.

In the case of these 54 species, there would be some benefits to critical habitat. The primary regulatory effect of critical habitat is the section 7 requirement that Federal agencies refrain from taking any action that is likely to destroy or adversely affect critical habitat. Thirty-seven of these species are reported on or near Federal lands (see Table 1), where actions are subject to section 7 consultation. Although a majority of the species considered in this rule are located exclusively on non-Federal lands with limited Federal activities, there could be Federal actions affecting these lands in the future. While a critical habitat designation for habitat currently occupied by these species would not likely change the section 7 consultation outcome, since an action that destroys or adversely modifies such critical habitat would also be likely to result in jeopardy to the species, there may be instances where section 7 consultation would be triggered only if critical habitat were designated. There would also be some educational or informational benefits to the designation of critical habitat. Benefits of designation would include the notification of land owners, land managers, and the general public of the importance of protecting the habitat of these species and dissemination of information regarding their essential habitat requirements.

Therefore, designation of critical habitat is prudent for these 54 plant species: *Abutilon sandwicense*, *Alsinidendron obovatum*, *Alsinidendron trinerve*, *Chamaesyce celastroides* var. *kaenana*, *Chamaesyce deppeana*, *Chamaesyce herbstii*, *Chamaesyce kuwaleana*, *Chamaesyce rockii*, *Cyanea acuminata*, *Cyanea crispa*, *Cyanea grimesiana* ssp. *obatae*, *Cyanea humboltiana*, *Cyanea koolauensis*, *Cyanea longiflora*, *Cyanea pinnatifida*, *Cyanea st.-johnii*, *Cyanea superba*, *Cyanea truncata*, *Cyrtandra dentata*, *Cyrtandra polyantha*, *Cyrtandra subumbellata*, *Cyrtandra viridiflora*, *Delissea subcordata*, *Diellia falcata*, *Diellia unisora*, *Dubautia herbstobatae*, *Eragrostis fosbergii*,

Gardenia mannii, *Hedyotis degeneri*, *Hedyotis parvula*, *Labordia cyrtandrae*, *Lepidium arbuscula*, *Lipochaeta lobata* var. *leptophylla*, *Lipochaeta tenuifolia*, *Lobelia gaudichaudii* ssp. *koolauensis*, *Lobelia monostachya*, *Lobelia oahuensis*, *Melicope lydgatei*, *Melicope saint-johnii*, *Myrsine juddii*, *Neraudia angulata*, *Phyllostegia hirsuta*, *Phyllostegia kaalaensis*, *Sanicula mariversa*, *Schiedea kaalae*, *Schiedea kealiae*, *Silene perlmanii*, *Stenogyne kanehoana*, *Tetramolopium filiforme*, *Tetraplasandra gymnocarpa*, *Trematolobelia singularis*, *Urena kaalae*, *Viola chamissoniana* ssp. *chamissoniana*, and *Viola oahuensis* because the potential benefits of critical habitat designation outweigh the potential threats.

B. Methods

As required by the Act and regulations (section 4(b)(2) and 50 CFR 424.12), we used the best scientific information available to determine areas that contain the physical and biological features that are essential for the conservation of *Abutilon sandwicense*, *Adenophorus periens*, *Alectryon macrococcus*, *Alsinidendron obovatum*, *Alsinidendron trinerve*, *Bonamia menziesii*, *Cenchrus agrimonoides*, *Centaurium sebaeoides*, *Chamaesyce celastroides* var. *kaenana*, *Chamaesyce deppeana*, *Chamaesyce herbstii*, *Chamaesyce kuwaleana*, *Chamaesyce rockii*, *Colubrina oppositifolia*, *Ctenitis squamigera*, *Cyanea acuminata*, *Cyanea crispa*, *Cyanea grimesiana* ssp. *grimesiana*, *Cyanea grimesiana* ssp. *obatae*, *Cyanea humboltiana*, *Cyanea koolauensis*, *Cyanea longiflora*, *Cyanea pinnatifida*, *Cyanea st.-johnii*, *Cyanea superba*, *Cyanea truncata*, *Cyperus trachysanthos*, *Cyrtandra dentata*, *Cyrtandra polyantha*, *Cyrtandra subumbellata*, *Cyrtandra viridiflora*, *Delissea subcordata*, *Diellia erecta*, *Diellia falcata*, *Diellia unisora*, *Diplazium molokaiense*, *Dubautia herbstobatae*, *Eragrostis fosbergii*, *Eugenia koolauensis*, *Euphorbia haeleeleana*, *Flueggea neowawraea*, *Gardenia mannii*, *Gouania meyenii*, *Gouania vitifolia*, *Hedyotis coriacea*, *Hedyotis degeneri*, *Hedyotis parvula*, *Hesperomannia arborescens*, *Hesperomannia arbuscula*, *Hibiscus brackenridgei*, *Isodendron laurifolium*, *Isodendron longifolium*, *Isodendron pyriformis*, *Labordia cyrtandrae*, *Lepidium arbuscula*, *Lipochaeta lobata* var. *leptophylla*, *Lipochaeta tenuifolia*, *Lobelia gaudichaudii* ssp. *koolauensis*, *Lobelia monostachya*, *Lobelia niihauensis*, *Lobelia oahuensis*, *Lysimachia filifolia*, *Mariscus pennatifolius*, *Marsilea villosa*,

Melicope lydgatei, *Melicope pallida*, *Melicope saint-johnii*, *Myrsine juddii*, *Neraudia angulata*, *Nototrichium humile*, *Peucedanum sandwicense*, *Phlegmariurus nutans*, *Phyllostegia hirsuta*, *Phyllostegia kaalaensis*, *Phyllostegia mollis*, *Phyllostegia parviflora*, *Plantago princeps*, *Platanthera holochila*, *Pteris lidgatei*, *Sanicula mariversa*, *Sanicula purpurea*, *Schiedea hookeri*, *Schiedea kaalae*, *Schiedea kealiae*, *Schiedea nuttallii*, *Sesbania tomentosa*, *Silene lanceolata*, *Silene perlmanii*, *Solanum sandwicense*, *Spermolepis hawaiiensis*, *Stenogyne kanehoana*, *Tetramolopium filiforme*, *Tetramolopium lepidotum* ssp. *lepidotum*, *Tetraplasandra gymnocarpa*, *Trematolobelia singularis*, *Urena kaalae*, *Vigna o-wahuensis*, *Viola chamissoniana* ssp. *chamissoniana*, and *Viola oahuensis*. This information included the known locations; site-specific species information from the HINHP database and our own rare plant database; species information from the Center for Plant Conservation's (CPC's) rare plant monitoring database housed at the University of Hawaii's Lyon Arboretum; island-wide Geographic Information System (GIS) coverages (e.g., vegetation, soils, annual rainfall, elevation contours, landownership); the final listing rules for these 99 species; the May 28, 2002, proposal; information received during the public comment periods and public hearings; recent biological surveys and reports; our recovery plans for these species; discussions with botanical experts; and recommendations from the Hawaii and Pacific Plant Recovery Coordinating Committee (HPPRCC) (see also the discussion below) (CPC in litt. 1999; GDSI 2000; HINHP Database 2000; HPPRCC 1998; Service 1994, 1995a, 1995b, 1996a, 1996b, 1996c, 1996d, 1997, 1998a, 1998b, 1999; 67 FR 37108).

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

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

species of concern to determine if essential habitat areas would provide for their habitat needs. However, the HPPRCC's mapping of habitat is distinct from the regulatory designation of critical habitat as defined by the Act. More data have been collected since the recommendations made by the HPPRCC in 1998. Much of the area that was identified by the HPPRCC as inadequately surveyed has now been surveyed to some degree. New location data for many species have been gathered. Also, the HPPRCC identified areas as essential based on species clusters (areas that included listed species as well as candidate species and species of concern), while we have only delineated areas that are essential for the conservation of the 99 listed species at issue. As a result, the critical habitat designations in this rule include not only some habitat that was identified as essential in the 1998 recommendations but also habitat that was not identified as essential in those recommendations.

C. Primary Constituent Elements

In accordance with section 3(5)(A)(i) of the Act and regulations at 50 CFR 424.12, in determining which areas to propose as critical habitat, we are required to base critical habitat determinations on the best scientific and commercial data available and to consider those physical and biological features (primary constituent elements) that are essential to the conservation of the species. These features include, but are not limited to: Space for individual and population growth, and for normal behavior; food, water, air, light, minerals, or other nutritional or physiological requirements; cover or shelter; sites for breeding, reproduction, or rearing of offspring, germination, or seed dispersal; and habitats that are protected from disturbance or are representative of the historic geographical and ecological distributions of a species.

Much of what is known about the specific physical and biological requirements of *Abutilon sandwicense*, *Adenophorus periens*, *Alectryon macrococcus*, *Alsinidendron obovatum*, *Alsinidendron trinerve*, *Bonamia menziesii*, *Cenchrus agrimonoides*, *Centaurium sebaeoides*, *Chamaesyce celastroides* var. *kaenana*, *Chamaesyce deppeana*, *Chamaesyce herbstii*, *Chamaesyce kuwaleana*, *Chamaesyce rockii*, *Colubrina oppositifolia*, *Ctenitis squamigera*, *Cyanea acuminata*, *Cyanea crispa*, *Cyanea grimesiana* ssp. *grimesiana*, *Cyanea grimesiana* ssp. *obatae*, *Cyanea humboltiana*, *Cyanea koolauensis*, *Cyanea longiflora*, *Cyanea pinnatifida*, *Cyanea st.-johnii*, *Cyanea*

superba, *Cyanea truncata*, *Cyperus trachysanthos*, *Cyrtandra dentata*, *Cyrtandra polyantha*, *Cyrtandra subumbellata*, *Cyrtandra viridiflora*, *Delissea subcordata*, *Diellia erecta*, *Diellia falcata*, *Diellia unisora*, *Diplazium molokaiense*, *Dubautia herbstobatae*, *Eragrostis fosbergii*, *Eugenia koolauensis*, *Euphorbia haeleleana*, *Flueggea neowawraea*, *Gardenia mannii*, *Gouania meyenii*, *Gouania vitifolia*, *Hedyotis coriacea*, *Hedyotis degeneri*, *Hedyotis parvula*, *Hesperomannia arborescens*, *Hesperomannia arbuscula*, *Hibiscus brackenridgei*, *Isodendron laurifolium*, *Isodendron longifolium*, *Isodendron pyriforme*, *Labordia cyrtandrae*, *Lepidium arbuscula*, *Lipochaeta lobata* var. *leptophylla*, *Lipochaeta tenuifolia*, *Lobelia gaudichaudii* ssp. *koolauensis*, *Lobelia monostachya*, *Lobelia niihauensis*, *Lobelia oahuensis*, *Lysimachia filifolia*, *Mariscus pennatifolius*, *Marsilea villosa*, *Melicope lydgatei*, *Melicope pallida*, *Melicope saint-johnii*, *Myrsine juddii*, *Neraudia angulata*, *Nototrichium humile*, *Peucedanum sandwicense*, *Phlegmariurus nutans*, *Phyllostegia hirsuta*, *Phyllostegia kaalaensis*, *Phyllostegia mollis*, *Phyllostegia parviflora*, *Plantago princeps*, *Platanthera holochila*, *Pteris lidgatei*, *Sanicula mariversa*, *Sanicula purpurea*, *Schiedea hookeri*, *Schiedea kaalae*, *Schiedea kealiae*, *Schiedea nuttallii*, *Sesbania tomentosa*, *Silene lanceolata*, *Silene perlmanii*, *Solanum sandwicense*, *Spermolepis hawaiiensis*, *Stenogyne kanehoana*, *Tetramolopium filiforme*, *Tetramolopium lepidotum* ssp. *lepidotum*, *Tetraplasandra gymnocarpa*, *Trematolobelia singularis*, *Urera kaalae*, *Vigna o-wahuensis*, *Viola chamissoniana* ssp. *chamissoniana*, and *Viola oahuensis* is described in the "Background" section of this final rule.

All areas designated as critical habitat are within the historical range of the 99 species at issue and contain one or more of the physical or biological features (primary constituent elements) essential for the conservation of the species.

As described in the discussions for each of the 99 species for which we are designating critical habitat, we are defining the primary constituent elements on the basis of the habitat features of the areas from which the plant species are reported, as described by the type of plant community (e.g., mesic *Metrosideros polymorpha* forest), associated native plant species, locale information (e.g., steep rocky cliffs, talus slopes, gulches, stream banks), and elevation. The habitat features provide the ecological components required by the plant. The type of plant community

and associated native plant species indicate specific microclimate (localized climatic) conditions, retention and availability of water in the soil, soil microorganism community, and nutrient cycling and availability. The locale indicates information on soil type, elevation, rainfall regime, and temperature. Elevation indicates information on daily and seasonal temperature and sun intensity. Therefore, the descriptions of the physical elements of the locations of each of these species, including habitat type, plant communities associated with the species, location, and elevation, as described in the "SUPPLEMENTARY INFORMATION: Discussion of the Plant Taxa" section above, constitute the primary constituent elements for these species on the island of Oahu.

D. Criteria Used To Identify Critical Habitat

The lack of detailed scientific data on the life history of these plant species makes it impossible for us to develop a robust quantitative model (e.g., population viability analysis (National Research Council 1995)) to identify the optimal number, size, and location of critical habitat units to achieve recovery (Beissinger and Westphal 1998; Burgman *et al.* 2001; Ginzburg *et al.* 1990; Karieva and Wennergren 1995; Menges 1990; Murphy *et al.* 1990; Taylor 1995). However, based on the best information available at this time, including information on which the listing of and recovery plans for these species were based, we have concluded that the current size and distribution of the extant populations are not sufficient to expect a reasonable probability of long-term survival and recovery of these plant species.

For each of these species, the overall recovery strategy outlined in the approved recovery plans includes: (1) Stabilization of existing wild populations, (2) protection and management of habitat, (3) enhancement of existing small populations and reestablishment of new populations within historic range, and (4) research on species biology and ecology (Service 1994, 1995a, 1995b, 1996a, 1996b, 1996c, 1996d, 1997, 1998a, 1998b, 1999). Thus, the long-term recovery of these species is dependent upon the protection of existing population sites and suitable unoccupied habitat within their historic range.

The overall recovery goal stated in the recovery plans for each of these species includes the establishment of 8 to 10 populations with a minimum of 100 mature, reproducing individuals per population for long-lived perennials;

300 mature, reproducing individuals per population for short-lived perennials; and 500 mature, reproducing individuals per population for the annual. (Please note that there are some specific exceptions to this general recovery goal of 8 to 10 populations for species that are believed to be very narrowly distributed.) To be considered recovered, the populations of a multi-island species should be distributed among the islands of its known historic range (Service 1994, 1995a, 1995b, 1996a, 1996b, 1996c, 1996d, 1997, 1998a, 1998b, 1999). A population, for the purposes of this discussion and as defined in the recovery plans for these species, is a unit in which the individuals could be regularly cross-pollinated and influenced by the same small-scale events (such as landslides), and which contains a minimum of 100, 300, or 500 mature, reproducing individuals, depending on whether the species is a long-lived perennial, short-lived perennial, or annual.

Marsilea villosa, a short-lived perennial aquatic fern, was historically known from six populations on three different islands, Molokai, Oahu, and Niihau. This species is now extant only on Oahu and Molokai. Delisting objectives for this species include protection and stabilization of at least six (rather than 8 to 10) geographically distinct, self-sustaining populations (either three on Oahu and three on Molokai or three on Oahu, two on Molokai, and one on Niihau), stable or increasing population sizes, no active management needed, and self-maintenance of each population through two successive floods resulting in sexual reproduction. Delisting objectives for *Marsilea villosa* do not include a specific number of mature individuals per population because of its clonal nature, as it is extremely difficult to distinguish between individuals in clonal plant species (Service 1996a).

By adopting the specific recovery objectives enumerated above, the adverse effects of genetic inbreeding and random environmental events and catastrophes, such as landslides, hurricanes or tsunamis, which could destroy a large percentage of a species at any one time, may be reduced (Menges 1990; Podolsky 2001). These recovery objectives were initially developed by the HPPRCC and are found in all of the recovery plans for these species. While they are expected to be further refined as more information on the population biology of each species becomes available, the justification for these objectives is found in the current conservation biology

literature addressing the conservation of rare and endangered plants and animals (Beissinger and Westphal 1998; Burgman *et al.* 2001; Falk *et al.* 1996; Ginzburg *et al.* 1990; Hendrix and Kyhl 2000; Karieva and Wennergren 1995; Luijten *et al.* 2000; Meffe and Carroll 1996; Menges 1990; Murphy *et al.* 1990; Podolsky 2001; Quintana-Ascencio and Menges 1996; Taylor 1995; Tear *et al.* 1995; Wolf and Harrison 2001). The overall goal of recovery in the short-term is a successful population that can carry on basic life history processes, such as establishment, reproduction, and dispersal, at a level where the probability of extinction is low. In the long-term, the species and its populations should be at a reduced risk of extinction and be adaptable to environmental change through evolution and migration.

Many aspects of a species' life history are typically considered to determine guidelines for its interim stability and recovery, including longevity, breeding system, growth form, fecundity, ramet (a plant that is an independent member of a clone) production, survivorship, seed longevity, environmental variation, and successional stage of the habitat. Hawaiian species are poorly studied, and the only one of these characteristics that can be uniformly applied to all Hawaiian plant species is longevity (*i.e.*, long-lived perennial, short-lived perennial, and annual). In general, long-lived woody perennial species would be expected to be viable at population levels of 50 to 250 individuals per population, while short-lived perennial species would be viable at population levels of 1,500 to 2,500 individuals or more per population. These population numbers were refined for Hawaiian plant species by the HPPRCC (1994) due to the restricted distribution of suitable habitat typical of Hawaiian plants and the likelihood of smaller genetic diversity of several species that evolved from a single introduction. For recovery of Hawaiian plants, the HPPRCC recommended a general recovery guideline of 100 mature, reproducing individuals per population for long-lived perennial species; 300 mature, reproducing individuals per population for short-lived perennial species; and 500 mature, reproducing individuals per population for annual species.

The HPPRCC also recommended the conservation and establishment of 8 to 10 populations to address the numerous risks to the long-term survival and conservation of Hawaiian plant species. Although absent the detailed information inherent to the types of population viability analysis models described above (Burgman *et al.* 2001),

this approach employs two widely recognized and scientifically accepted goals for promoting viable populations of listed species—(1) creation or maintenance of multiple populations so that a single or series of catastrophic events cannot destroy the entire listed species (Luijten *et al.* 2000; Menges 1990; Quintana-Ascencio and Menges 1996); and (2) increasing the size of each population in the respective critical habitat units to a level where the threats of genetic, demographic, and normal environmental uncertainties are diminished (Hendrix and Kyhl 2000; Luijten *et al.* 2000; Meffe and Carroll 1996; Podolsky 2001; Service 1997; Tear *et al.* 1995; Wolf and Harrison 2001). In general, the larger the number of populations and the larger the size of each population, the lower the probability of extinction (Meffe and Carroll 1996; Raup 1991). This basic conservation principle of redundancy applies to Hawaiian plant species. By maintaining 8 to 10 viable populations in several critical habitat units, the threats represented by a fluctuating environment are alleviated and the species has a greater likelihood of achieving long-term survival and recovery. Conversely, loss of one or more of the plant populations within any critical habitat unit could result in an increase in the risk that the entire listed species may not survive and recover.

Due to the reduced size of suitable habitat areas for these Hawaiian plant species, they are now more susceptible to the variations and weather fluctuations affecting quality and quantity of available habitat, as well as direct pressure from hundreds of species of nonnative plants and animals. Establishing and conserving 8 to 10 viable populations on one or more islands within the historic range of the species will provide each species with a reasonable expectation of persistence and eventual recovery, even with the high potential that one or more of these populations will be eliminated by normal or random adverse events, such as the hurricanes that occurred in 1982 and 1992 on Kauai, fires, and nonnative plant invasions (HPPRCC 1998; Luijten *et al.* 2000; Mangel and Tier 1994; Pimm *et al.* 1998; Stacey and Taper 1992). We conclude that designation of adequate suitable habitat for 8 to 10 populations as critical habitat is essential to give the species a reasonable likelihood of long-term survival and conservation, based on currently available information.

In summary, the long-term survival and conservation of Hawaiian plant species requires the designation of critical habitat units on one or more of

the Hawaiian islands with suitable habitat for 8 to 10 populations of each plant species. Some of this habitat is currently not known to be occupied by these species. To recover the species, it is essential to conserve suitable habitat in these unoccupied units, which in turn will allow for the establishment of additional populations through natural recruitment or managed reintroductions. Establishment of these additional populations will increase the likelihood that the species will survive and recover in the face of normal and stochastic events (*e.g.*, hurricanes, fire, and nonnative species introductions) (Mangel and Tier 1994; Pimm *et al.* 1998; Stacey and Taper 1992).

In this rule, we have defined the primary constituent elements based on the general habitat features of the areas from which the plants are reported, such as the type of plant community, the associated native plant species, the physical location (*e.g.*, steep rocky cliffs, talus slopes, stream banks), and elevation. The areas we are designating as critical habitat provide some or all of the habitat components essential for the conservation of the 99 plant species as discussed in the individual unit descriptions.

Our approach to delineating critical habitat units was applied in the following manner:

1. Critical habitat was proposed and has been designated on an island by island basis for ease of understanding for landowners and the public, for ease of conducting the public hearing process, and for ease of conducting public outreach. In Hawaii, landowners and the public are most interested and affected by issues centered on the island on which they reside.

2. We focused on designating units representative of the known current and historical geographic and elevational range of each species; and

3. We designed critical habitat units to allow for expansion of existing wild populations and reestablishment of wild populations within the historic range, as recommended by the recovery plans for each species.

The proposed critical habitat units were delineated by creating rough units for each species by screen digitizing polygons (map units) using ArcView (Environmental Systems Research Institute, Inc.), a computer GIS program. We created polygons by overlaying current and historic plant location points onto digital topographic maps of each of the islands.

We then evaluated the resulting shape files (delineating historic elevational range and potentially suitable habitat). We refined elevation ranges, and we

avoided areas identified as not suitable for a particular species (*i.e.*, not containing the primary constituent elements). We then considered the resulting shape files for each species to define all suitable habitat on the island, including occupied and unoccupied habitat.

We further evaluated these shape files of suitable habitat. We used several factors to delineate the proposed critical habitat units from these land areas. We reviewed the recovery objectives, as described above and in recovery plans for each of the species, to determine if the number of populations and population size requirements needed for conservation would be available within the suitable habitat units identified as containing the appropriate primary constituent elements for each species. If more than the area needed for the number of recovery populations was identified as potentially suitable, only those areas within the least disturbed suitable habitat were included as proposed critical habitat. A population for this purpose is defined as a discrete aggregation of individuals located a sufficient distance from a neighboring aggregation such that the two are not affected by the same small-scale events and are not believed to be consistently cross-pollinated. In the absence of more specific information indicating the appropriate distance to assure limited cross-pollination, we are using a distance of 1,000 m (3,280 ft) based on our review of current literature on gene flow (Barret and Kohn 1991; Fenster and Dudash 1994; Havens 1998; Schierup and Christiansen 1996). We further refined the resulting critical habitat units by using satellite imagery and parcel data to eliminate areas that did not contain the appropriate vegetation or associated native plant species, as well as features such as cultivated agriculture fields, housing developments, and other areas that are unlikely to contribute to the conservation of one or more of the 99 plant species for which critical habitat was proposed on May 28, 2002. We used geographic features (ridge lines, valleys, streams, coastlines, etc.) or manmade features (roads or obvious land use) that created an obvious boundary for a unit as unit area boundaries.

Following publication of the proposed critical habitat rules, some of which were revised, for 255 Hawaiian plants (67 FR 3940, 67 FR 9806, 67 FR 15856, 67 FR 16492, 67 FR 34522, 67 FR 36968, 67 FR 37108), we reevaluated proposed critical habitat. State-wide, for each species using the applicable recovery guidelines (generally 8 to 10

populations with a minimum of 100 mature, reproducing individuals per population for long-lived perennial species; 300 mature, reproducing individuals per population for short-lived perennial species; and 500 mature, reproducing individuals per population for annual species) to determine if we had inadvertently proposed for designation too much or too little habitat to meet the essential recovery goals (HINHP Database 2000, 2001; Wagner *et al.* 1990, 1999).

Based on comments and information we received during the comment periods, we assessed the proposed critical habitat in order to ascertain which areas contained the highest quality habitat, had the highest likelihood of species conservation, were geographically distributed within the species' historical range, and were located a sufficient distance from each other such that populations of a single species are unlikely to be impacted by a single catastrophic event. We ranked areas of the proposed critical habitat by the quality of the primary constituent elements (*e.g.*, intact native plant communities, predominance of associated native plants versus nonnative plants), potential as a conservation area (*e.g.*, whether the land is zoned for conservation or whether the landowner is already participating in plant conservation actions), and current or expected management of known threats (*e.g.*, ungulate control; weed control; nonnative insect, slug, and snail control). Of these most essential areas, we selected adequate area to provide for 8 to 10 populations distributed among the islands of each species' historical range.

Areas that contain high quality primary constituent elements and conservation potential (*e.g.*, are zoned for conservation and have ongoing or expected threat abatement actions) were ranked the most essential. This ranking process also included determining which habitats were representative of the historic geographical and ecological distributions of the species (see "Primary Constituent Elements"). Of the proposed critical habitat for a species, areas that were not ranked most essential and that may provide habitat for populations above the recovery goal of 8 to 10 populations were determined not essential for the conservation of the species and were excluded from the final designation. Areas that were excluded because the benefits of exclusion outweigh the benefits of inclusion under 4(b)(2) of the Act are included in the total count of habitat for 8 to 10 populations.

In selecting areas of designated critical habitat, we made an effort to avoid developed areas, such as towns and other similar lands, that are unlikely to contribute to the conservation of the 99 species. However, the minimum mapping unit that we used to approximate our delineation of critical habitat for these species did not allow us to exclude all such developed areas from the maps. Existing manmade features and structures within the boundaries of the mapped areas, such as buildings; roads; aqueducts and other water system features, including, but not limited to pumping stations, irrigation ditches, pipelines, siphons, tunnels, water tanks, gaging stations, intakes, reservoirs, diversions, flumes, and wells; existing trails; campgrounds and their immediate surrounding landscaped area; scenic overlooks; remote helicopter landing sites; existing fences; telecommunications towers and associated structures and equipment; electrical power transmission lines and distribution, and communication facilities and regularly maintained associated rights-of-way and access ways; radars; telemetry antennas; missile launch sites; arboreta and gardens; heiau (indigenous places of worship or shrines) and other archaeological sites; airports; other paved areas; lawns and other rural residential landscaped areas do not contain one or more of the primary constituent elements and are therefore excluded from critical habitat designation under the terms of this regulation. Federal actions limited to those areas would not trigger a section 7 consultation unless they affect the species or primary constituent elements in adjacent critical habitat.

In summary, for these species, we utilized the approved recovery plan guidance to identify appropriately sized land units containing essential occupied and unoccupied habitat. Based on the best available information, we believe these areas constitute the essential habitat on Oahu to provide for the recovery of these 99 species.

The critical habitat areas described below constitute our best assessment of the physical and biological features needed for the conservation and special management needs of the 99 plant species, and are based on the best scientific and commercial information available (as described above). We publish this final rule acknowledging that we have incomplete information regarding many of the primary biological and physical requirements for these species. However, both the Act and the relevant court orders require us

to proceed with designation at this time based on the best information available. As new information accrues, we may consider reevaluating the boundaries of

areas that warrant critical habitat designation.

Descriptions of Critical Habitat Units

The approximate areas of proposed critical habitat by landownership or

jurisdiction are shown in Table 3. The approximate final critical habitat area (ha (ac)), essential area, and excluded area, are shown in Table 4.

TABLE 3.—APPROXIMATE CRITICAL HABITAT DESIGNATED AREA BY UNIT AND LANDOWNERSHIP OR JURISDICTION, OAHU, CITY AND COUNTY OF HONOLULU, HAWAII¹

Unit name	State/local	Private	Federal	Total
Oahu 4— <i>Abutilon sandwicense</i> —a	453 ha (1,120 ac)	151 ha (372 ac)		604 ha (1,492 ac)
Oahu 4— <i>Abutilon sandwicense</i> —b	26 ha (65 ac)			26 ha (65 ac)
Oahu 4— <i>Abutilon sandwicense</i> —c	41 ha (102 ac)			41 ha (102 ac)
Oahu 15— <i>Abutilon sandwicense</i> —d			49 ha (121 ac)	49 ha (121 ac)
Oahu 15— <i>Abutilon sandwicense</i> —e	1 ha (2 ac)		32 ha (80 ac)	33 ha (81 ac)
Oahu 17— <i>Abutilon sandwicense</i> —f	30 ha (74 ac)			30 ha (74 ac)
Oahu 20— <i>Adenophorus periens</i> —a	606 ha (1,500 ac)	105 ha (259 ac)		711 ha (1,759 ac)
Oahu 4— <i>Alectryon macrococcus</i> —a	23 ha (58 ac)			23 ha (58 ac)
Oahu 15— <i>Alectryon macrococcus</i> —b		112 ha (278 ac)		112 ha (278 ac)
Oahu 4— <i>Alsinidendron obovatum</i> —a	176 ha (436 ac)			176 ha (436 ac)
Oahu 4— <i>Alsinidendron obovatum</i> —b	25 ha (62 ac)			25 ha (62 ac)
Oahu 15— <i>Alsinidendron obovatum</i> —c	1 ha (2 ac)	31 ha (75 ac)		32 ha (76 ac)
Oahu 4— <i>Alsinidendron trinerve</i> —a	60 ha (149 ac)			60 ha (149 ac)
Oahu 2— <i>Bonamia menziesii</i> —a	21 ha (51 ac)			21 ha (51 ac)
Oahu 3— <i>Bonamia menziesii</i> —b	42 ha (104 ac)			42 ha (104 ac)
Oahu 4— <i>Bonamia menziesii</i> —c	3 ha (8 ac)	91 ha (225 ac)		94 ha (233 ac)
Oahu 17— <i>Bonamia menziesii</i> —d	77 ha (191 ac)			77 ha (191 ac)
Oahu 35— <i>Bonamia menziesii</i> —e	121 ha (300 ac)	253 ha (624 ac)		374 ha (924 ac)
Oahu 4— <i>Cenchrus agrimonoides</i> —a	529 ha (1,306 ac)			529 ha (1,306 ac)
Oahu 4— <i>Cenchrus agrimonoides</i> —b	40 ha (99 ac)			40 ha (99 ac)
Oahu 15— <i>Cenchrus agrimonoides</i> —c		200 ha (495 ac)		200 ha (495 ac)
Oahu 15— <i>Cenchrus agrimonoides</i> —d		117 ha (290 ac)		117 ha (290 ac)
Oahu 1— <i>Centaurium sebaeoides</i> —a	61 ha (149 ac)	<1 ha (<1 ac)	<1 ha (<1 ac)	61 ha (149 ac)
Oahu 27— <i>Centaurium sebaeoides</i> —b	30 ha (74 ac)			30 ha (74 ac)
Oahu 1— <i>Chamaesyce celastroides</i> var. <i>kaenana</i> —a	233 ha (571 ac)			233 ha (571 ac)
Oahu 3— <i>Chamaesyce celastroides</i> var. <i>kaenana</i> —b	4 ha (11 ac)			4 ha (11 ac)
Oahu 4— <i>Chamaesyce celastroides</i> var. <i>kaenana</i> —c	43 ha (107 ac)			43 ha (107 ac)
Oahu 5— <i>Chamaesyce celastroides</i> var. <i>kaenana</i> —d	32 ha (80 ac)	4 ha (9 ac)		36 ha (89 ac)
Oahu 35— <i>Chamaesyce celastroides</i> var. <i>kaenana</i> —e	1 ha (2 ac)	237 ha (585 ac)		238 ha (587 ac)
Oahu 20— <i>Chamaesyce deppeana</i> —a	3 ha (8 ac)	14 ha (33 ac)		17 ha (41 ac)
Oahu 35— <i>Chamaesyce deppeana</i> —b	16 ha (40 ac)	2 ha (6 ac)		18 ha (46 ac)
Oahu 4— <i>Chamaesyce herbstii</i> —a	429 ha (1,059 ac)			429 ha (1,059 ac)
Oahu 15— <i>Chamaesyce herbstii</i> —b		47 ha (116 ac)		47 ha (116 ac)
Oahu 15— <i>Chamaesyce herbstii</i> —c		21 ha (53 ac)		21 ha (53 ac)
Oahu 9— <i>Chamaesyce kuwaleana</i> —a			27 ha (68 ac)	27 ha (68 ac)
Oahu 11— <i>Chamaesyce kuwaleana</i> —b	19 ha (47 ac)		34 ha (83 ac)	53 ha (130 ac)
Oahu 12— <i>Chamaesyce kuwaleana</i> —c	37 ha (92 ac)			37 ha (92 ac)
Oahu 15— <i>Chamaesyce kuwaleana</i> —d	117 ha (288 ac)	67 ha (166 ac)		184 ha (454 ac)
Oahu 22— <i>Chamaesyce kuwaleana</i> —e	1 ha (3 ac)			1 ha (3 ac)
Oahu 23— <i>Chamaesyce kuwaleana</i> —f	6 ha (15 ac)			6 ha (15 ac)
Oahu 26— <i>Chamaesyce kuwaleana</i> —g	26 ha (63 ac)			26 ha (63 ac)
Oahu 20— <i>Chamaesyce rockii</i> —a	612 ha (1,512 ac)	214 ha (527 ac)		826 ha (2,039 ac)
Oahu 20— <i>Chamaesyce rockii</i> —b	8 ha (20 ac)	25 ha (63 ac)	164 ha (405 ac)	197 ha (488 ac)
Oahu 20— <i>Chamaesyce rockii</i> —c	85 ha (210 ac)	173 ha (429 ac)		258 ha (639 ac)
Oahu 4— <i>Colubrina oppositifolia</i> —a	766 ha (1,894 ac)	16 ha (41 ac)		782 ha (1,935 ac)
Oahu 4— <i>Ctenitis squamigera</i> —a	120 ha (297 ac)			120 ha (297 ac)
Oahu 4— <i>Cyanea acuminata</i> —a	82 ha (205 ac)			82 ha (205 ac)
Oahu 20— <i>Cyanea acuminata</i> —b	916 ha (2,260 ac)	1,022 ha (2,525 ac)	585 ha (1,446 ac)	2,522 ha (6,231 ac)
Oahu 20— <i>Cyanea crispa</i> —a	958 ha (2,367 ac)	873 ha (2,158 ac)		1,831 ha (4,525 ac)
Oahu 20— <i>Cyanea crispa</i> —b	597 ha (1,475 ac)	3,243 ha (8,010 ha)	20 ha (49 ac)	3,860 ha (9,534 ac)
Oahu 21— <i>Cyanea crispa</i> —c	114 ha (282 ac)	188 ha (465 ac)		302 ha (747 ac)
Oahu 35— <i>Cyanea crispa</i> —d	1,041 ha (2,573 ac)	295 ha (728 ac)		1,336 ha (3,301 ac)
Oahu 20— <i>Cyanea grimesiana</i> ssp. <i>grimesiana</i> —a	342 ha (845 ac)	2,292 ha (5,661 ac)		2,634 ha (6,506 ac)
Oahu 35— <i>Cyanea grimesiana</i> ssp. <i>grimesiana</i> —b	149 ha (367 ac)	181 ha (447 ac)		330 ha (814 ac)
Oahu 4— <i>Cyanea grimesiana</i> ssp. <i>obatae</i> —a	523 ha (1,289 ac)			523 ha (1,289 ac)
Oahu 15— <i>Cyanea grimesiana</i> ssp. <i>obatae</i> —b	1 ha (1 ac)	184 ha (454 ac)	<1 ha (<1 ac)	185 ha (455 ac)

TABLE 3.—APPROXIMATE CRITICAL HABITAT DESIGNATED AREA BY UNIT AND LANDOWNERSHIP OR JURISDICTION, OAHU, CITY AND COUNTY OF HONOLULU, HAWAII ¹—Continued

Unit name	State/local	Private	Federal	Total
Oahu 15— <i>Cyanea grimesiana</i> ssp. <i>obatae</i> —c.	.....	34 ha (84 ac) .....	.....	34 ha (84 ac)
Oahu 15— <i>Cyanea grimesiana</i> ssp. <i>obatae</i> —d.	<1 ha (1 ac)	83 ha (204 ac) .....	.....	83 ha (205 ac)
Oahu 20— <i>Cyanea humboltiana</i> —a	398 ha (982 ac)	105 ha (259 ac) .....	.....	503 ha (1,241 ac)
Oahu 20— <i>Cyanea humboltiana</i> —b	24 ha (61 ac)	103 ha (254 ac) .....	.....	127 ha (315 ac)
Oahu 20— <i>Cyanea humboltiana</i> —c	88 ha (219 ac)	212 ha (522 ac) .....	.....	300 ha (741 ac)
Oahu 20— <i>Cyanea humboltiana</i> —d	20 ha (48 ac)	137 ha (340 ac)	3 ha (5 ac)	160 ha (393 ac)
Oahu 35— <i>Cyanea humboltiana</i> —e	493 ha (1,221 ac)	45 ha (110 ac) .....	.....	538 ha (1,331 ac)
Oahu 20— <i>Cyanea koolauensis</i> —a	94 ha (233 ac)	374 ha (924 ac) .....	.....	468 ha (1,157 ac)
Oahu 20— <i>Cyanea koolauensis</i> —b	68 ha (170 ac)	254 ha (629 ac) .....	.....	322 ha (799 ac)
Oahu 35— <i>Cyanea koolauensis</i> —c	209 ha (517 ac) .....	.....	.....	209 ha (517 ac)
Oahu 35— <i>Cyanea koolauensis</i> —d	181 ha (448 ac)	131 ha (322 ac) .....	.....	312 ha (770 ac)
Oahu 4— <i>Cyanea longiflora</i> —a	362 ha (894 ac) .....	.....	.....	362 ha (894 ac)
Oahu 4— <i>Cyanea longiflora</i> —b	61 ha (150 ac) .....	.....	.....	61 ha (150 ac)
Oahu 19— <i>Cyanea longiflora</i> —c	243 ha (602 ac)	81 ha (199 ac) .....	.....	324 ha (801 ac)
Oahu 15— <i>Cyanea pinnatifida</i> —a .....	.....	154 ha (380 ac) .....	.....	154 ha (380 ac)
Oahu 15— <i>Cyanea pinnatifida</i> —b .....	.....	42 ha (104 ac) .....	.....	42 ha (104 ac)
Oahu 15— <i>Cyanea pinnatifida</i> —c	<1 ha (<1 ac)	129 ha (318 ac) .....	.....	129 ha (318 ac)
Oahu 20— <i>Cyanea st. johnii</i> —a	240 ha (593 ac)	414 ha (1,023 ac)	43 ha (107 ac)	697 ha (1,723 ac)
Oahu 35— <i>Cyanea st. johnii</i> —b	123 ha (305 ha)	12 ha (29 ac) .....	.....	135 ha (334 ac)
Oahu 4— <i>Cyanea superba</i> —a	303 ha (747 ac) .....	.....	.....	303 ha (747 ac)
Oahu 4— <i>Cyanea superba</i> —b	115 ha (286 ac) .....	.....	.....	115 ha (286 ac)
Oahu 4— <i>Cyanea superba</i> —c	183 ha (453 ac)	1 ha (3 ac) .....	.....	184 ha (456 ac)
Oahu 35— <i>Cyanea superba</i> —d	170 ha (420 ac)	111 ha (277 ac) .....	.....	281 ha (697 ac)
Oahu 20— <i>Cyanea truncata</i> —a	900 ha (2,226 ac)	1,129 ha (2,793 ac) .....	.....	2,029 ha (5,019 ac)
Oahu 21— <i>Cyanea truncata</i> —b	59 ha (146 ac)	151 ha (374 ac) .....	.....	210 ha (520 ac)
Oahu 1— <i>Cyperus trachysanthos</i> —a	78 ha (194 ac) .....	.....	.....	78 ha (194 ac)
Oahu 28— <i>Cyperus trachysanthos</i> —b	8 ha (20 ac) .....	.....	.....	8 ha (20 ac)
Oahu 29— <i>Cyperus trachysanthos</i> —c	4 ha (10 ac) .....	.....	.....	4 ha (10 ac)
Oahu 36— <i>Cyperus trachysanthos</i> —d	5 ha (13 ac) .....	.....	.....	5 ha (13 ac)
Oahu 4— <i>Cyrtandra dentata</i> —a	307 ha (758 ac) .....	.....	.....	307 ha (758 ac)
Oahu 35— <i>Cyrtandra polyantha</i> —a	112 ha (277 ac)	78 ha (192 ac) .....	.....	190 ha (469 ac)
Oahu 20— <i>Cyrtandra subumbellata</i> —a	589 ha (1,455 ac)	240 ha (593 ac) .....	.....	829 ha (2,048 ac)
Oahu 20— <i>Cyrtandra subumbellata</i> —b .....	.....	.....	67 ha (167 ac)	67 ha (167 ac)
Oahu 20— <i>Cyrtandra viridiflora</i> —a	505 ha (1,247 ac)	206 ha (509 ac)	71 ha (176 ac)	782 ha (1,932 ac)
Oahu 4— <i>Delissea subcordata</i> —a	762 ha (1,879 ac)	2 ha (6 ac) .....	.....	764 ha (1,885 ac)
Oahu 15— <i>Delissea subcordata</i> —b .....	.....	220 ha (545 ac) .....	.....	220 ha (545 ac)
Oahu 15— <i>Delissea subcordata</i> —c .....	.....	32 ha (78 ac) .....	.....	32 ha (78 ac)
Oahu 15— <i>Delissea subcordata</i> —d .....	.....	81 ha (200 ac) .....	.....	81 ha (200 ac)
Oahu 35— <i>Delissea subcordata</i> —e	88 ha (217 ac)	204 ha (504 ac) .....	.....	292 ha (721 ac)
Oahu 35— <i>Delissea subcordata</i> —f	1 ha (3 ac)	128 ha (314 ac) .....	.....	129 ha (317 ac)
Oahu 35— <i>Diellia erecta</i> —a	173 ha (430 ac)	120 ha (301 ac) .....	.....	293 ha (731 ha)
Oahu 4— <i>Diellia falcata</i> —a	59 ha (148 ac) .....	.....	.....	59 ha (148 ac)
Oahu 4— <i>Diellia falcata</i> —b	22 ha (54 ac) .....	.....	.....	22 ha (54 ac)
Oahu 15— <i>Diellia falcata</i> —c	23 ha (58 ac)	314 ha (776 ac)	4 ha (10 ac)	341 ha (844 ac)
Oahu 15— <i>Diellia falcata</i> —d	7 ha (17 ac)	170 ha (419 ac)	<1 ha (<1 ac)	178 ha (437 ac)
Oahu 15— <i>Diellia unisora</i> —a	68 ha (167 ac)	253 ha (626 ac)	41 ha (101 ac)	362 ha (894 ac)
Oahu 4— <i>Diplazium molokaiense</i> —a	139 ha (340 ac) .....	.....	.....	139 ha (340 ac)
Oahu 4— <i>Dubautia herbstobatae</i> —a	12 ha (29 ac) .....	.....	.....	12 ha (29 ac)
Oahu 4— <i>Dubautia herbstobatae</i> —b	76 ha (191 ac)	<1 ha (<1 ac) .....	.....	76 ha (191 ac)
Oahu 7— <i>Dubautia herbstobatae</i> —c	3 ha (7 ac) .....	.....	.....	3 ha (7 ac)
Oahu 4— <i>Eragrostis fosbergii</i> —a	81 ha (199 ac) .....	.....	.....	81 ha (199 ac)
Oahu 4— <i>Eugenia koolauensis</i> —a	114 ha (280 ac) .....	.....	.....	114 ha (280 ac)
Oahu 19— <i>Eugenia koolauensis</i> —b	38 ha (94 ac)	111 ha (275 ac) .....	.....	149 ha (369 ac)
Oahu 20— <i>Eugenia koolauensis</i> —c	71 ha (176 ac)	51 ha (127 ac) .....	.....	122 ha (303 ac)
Oahu 3— <i>Euphorbia haeleeleana</i> —a	14 ha (38 ac) .....	.....	.....	14 ha (38 ac)
Oahu 4— <i>Euphorbia haeleeleana</i> —b	94 ha (233 ac)	262 ha (648 ac) .....	.....	356 ha (881 ac)
Oahu 4— <i>Flueggea neowawraea</i> —a	845 ha (2,087 ac) .....	.....	.....	845 ha (2,087 ac)
Oahu 15— <i>Gardenia mannii</i> —a .....	.....	266 ha (658 ac) .....	.....	266 ha (658 ac)
Oahu 20— <i>Gardenia mannii</i> —b .....	.....	206 ha (510 ac) .....	.....	206 ha (510 ac)
Oahu 20— <i>Gardenia mannii</i> —c .....	.....	.....	1,311 ha (3,239 ac)	1,311 ha (3,239 ac)
Oahu 4— <i>Gouania meyenii</i> —a	47 ha (118 ac) .....	.....	.....	47 ha (118 ac)
Oahu 4— <i>Gouania meyenii</i> —b	39 ha (96 ac) .....	.....	.....	39 ha (96 ac)
Oahu 15— <i>Gouania meyenii</i> —c	2 ha (6 ac)	206 ha (509 ac)	<1 ha (<1 ac)	208 ha (515 ac)
Oahu 31— <i>Gouania meyenii</i> —d	116 ha (286 ac) .....	.....	.....	116 ha (286 ac)
Oahu 2— <i>Gouania vitifolia</i> —a	20 ha (49 ac) .....	.....	.....	20 ha (49 ac)
Oahu 3— <i>Gouania vitifolia</i> —b	48 ha (120 ac) .....	.....	.....	48 ha (120 ac)
Oahu 5— <i>Gouania vitifolia</i> —c	176 ha (434 ac)	20 ha (48 ac) .....	.....	196 ha (482 ac)
Oahu 4— <i>Gouania vitifolia</i> —d	85 ha (208 ac) .....	.....	.....	85 ha (208 ac)
Oahu 4— <i>Gouania vitifolia</i> —e	102 ha (252 ac) .....	.....	.....	102 ha (252 ac)

TABLE 3.—APPROXIMATE CRITICAL HABITAT DESIGNATED AREA BY UNIT AND LANDOWNERSHIP OR JURISDICTION, OAHU, CITY AND COUNTY OF HONOLULU, HAWAII ¹—Continued

Unit name	State/local	Private	Federal	Total
Oahu 4— <i>Gouania vitifolia</i> —f	27 ha (67 ac) .....	.....	.....	27 ha (67 ac)
Oahu 4— <i>Gouania vitifolia</i> —g	17 ha (42 ac)	<1 ha (1 ac) .....	.....	17 ha (43 ac)
Oahu 8— <i>Gouania vitifolia</i> —h	41 ha (101 ac)	23 ha (57 ac) .....	.....	64 ha (158 ac)
Oahu 15— <i>Hedyotis coriacea</i> —a .....	.....	185 ha (458 ac) .....	.....	185 ha (458 ac)
Oahu 35— <i>Hedyotis coriacea</i> —b	9 ha (22 ac)	155 ha (382 ac) .....	.....	164 ha (404 ac)
Oahu 4— <i>Hedyotis degeneri</i> —a	917 ha (2,265 ac) .....	.....	.....	917 ha (2,265 ac)
Oahu 4— <i>Hedyotis degeneri</i> —b	12 ha (29 ac) .....	.....	.....	12 ha (29 ac)
Oahu 4— <i>Hedyotis parvula</i> —a	387 ha (956 ac) .....	.....	.....	387 ha (956 ac)
Oahu 15— <i>Hedyotis parvula</i> —b .....	.....	.....	8 ha (19 ac)	8 ha (19 ac)
Oahu 15— <i>Hedyotis parvula</i> —c	42 ha (105 ac)	22 ha (54 ac)	31 ha (77 ac)	95 ha (236 ac)
Oahu 15— <i>Hedyotis parvula</i> —d	20 ha (48 ac) .....	.....	30 ha (74 ac)	50 ha (122 ac)
Oahu 4— <i>Hesperomannia arborescens</i> —a	122 ha (301 ac)	3 ha (7 ac) .....	.....	125 ha (308 ac)
Oahu 20— <i>Hesperomannia arborescens</i> —b	405 ha (1,001 ac)	184 ha (455 ac) .....	.....	589 ha (1,456 ac)
Oahu 4— <i>Hesperomannia arbuscula</i> —a	597 ha (1,472 ac) .....	.....	.....	597 ha (1,472 ac)
Oahu 4— <i>Hesperomannia arbuscula</i> —b	32 ha (78 ac) .....	.....	.....	32 ha (78 ac)
Oahu 15— <i>Hesperomannia arbuscula</i> —c	2 ha (4 ac)	161 ha (398 ac)	<1 ha (<1 ac)	163 ha (402 ac)
Oahu 15— <i>Hesperomannia arbuscula</i> —d	2 ha (4 ac)	23 ha (56 ac) .....	.....	25 ha (60 ac)
Oahu 15— <i>Hesperomannia arbuscula</i> —e	3 ha (5 ac)	67 ha (167 ac) .....	.....	70 ha (172 ac)
Oahu 1— <i>Hibiscus brackenridgei</i> —a	20 ha (49 ac)	58 ha (144 ac) .....	.....	78 ha (193 ac)
Oahu 4— <i>Hibiscus brackenridgei</i> —b	75 ha (185 ac)	485 ha (1,200 ac) .....	.....	560 ha (1,385 ac)
Oahu 5— <i>Hibiscus brackenridgei</i> —c	23 ha (56 ac)	<1 ha (<1 ac) .....	.....	23 ha (56 ac)
Oahu 4— <i>Isodendron laurifolium</i> —a	616 ha (1,524 ) .....	.....	.....	616 ha (1,524 ac)
Oahu 4— <i>Isodendron laurifolium</i> —b	62 ha (154 ac) .....	.....	.....	62 ha (154 ac)
Oahu 35— <i>Isodendron laurifolium</i> —c	109 ha (270 ac)	168 ha (414 ac) .....	.....	277 ha (684 ac)
Oahu 4— <i>Isodendron longifolium</i> —a	529 ha (1,306 ac)	23 ha (57 ac) .....	.....	552 ha (1,363 ac)
Oahu 20— <i>Isodendron longifolium</i> —b .....	.....	.....	162 ha (399 ac)	162 ha (399 ac)
Oahu 5— <i>Isodendron pyriform</i> —a	29 ha (71 ac)	1 ha (3 ac) .....	.....	30 ha (74 ac)
Oahu 16— <i>Isodendron pyriform</i> —b	129 ha (317 ac)	1 ha (1 ac) .....	.....	130 ha (318 ac)
Oahu 17— <i>Isodendron pyriform</i> —c	73 ha (181 ac) .....	.....	.....	73 ha (181 ac)
Oahu 4— <i>Labordia cyrtandrae</i> —a	161 ha (397 ac) .....	.....	.....	161 ha (397 ac)
Oahu 20— <i>Labordia cyrtandrae</i> —b	472 ha (1,168 ac)	123 ha (305 ac) .....	.....	595 ha (1,473 ac)
Oahu 20— <i>Labordia cyrtandrae</i> —c	205 ha (508 ac)	412 ha (1,017 ac) .....	.....	617 ha (1,525 ac)
Oahu 4— <i>Lepidium arbuscula</i> —a	330 ha (813 ac) .....	.....	.....	330 ha (813 ac)
Oahu 15— <i>Lepidium arbuscula</i> —b	38 ha (94 ac)	6 ha (16 ac)	74 ha (183 ac)	118 ha (293 ac)
Oahu 15— <i>Lepidium arbuscula</i> —c	38 ha (93 ac) .....	.....	61 ha (151 ha)	99 ha (244 ac)
Oahu 4— <i>Lipochaeta lobata</i> var. <i>leptophylla</i> —a	139 ha (345 ac) .....	.....	.....	139 ha (345 ac)
Oahu 15— <i>Lipochaeta lobata</i> var. <i>leptophylla</i> —b	207 ha (514 ac)	53 ha (131 ac)	274 ha (676 ac)	534 ha (1,321 ac)
Oahu 4— <i>Lipochaeta tenuifolia</i> —a	23 ha (57 ac) .....	.....	.....	23 ha (57 ac)
Oahu 4— <i>Lipochaeta tenuifolia</i> —b	66 ha (167 ac) .....	.....	.....	66 ha (167 ac)
Oahu 4— <i>Lipochaeta tenuifolia</i> —c	118 ha (292 ac) .....	.....	.....	118 ha (292 ac)
Oahu 20— <i>Lobelia guadalupe</i> ssp. <i>koolauensis</i> —a	371 ha (915 ac)	458 ha (1,132 ac)	97 ha (241 ac)	926 ha (2,288 ac)
Oahu 30— <i>Lobelia monostachya</i> —a	48 ha (118 ac)	11 ha (32 ac) .....	.....	59 ha (150 ac)
Oahu 22— <i>Lobelia monostachya</i> —b	1 ha 2 (ac)	46 ha (113 ac) .....	.....	47 ha (115 ac)
Oahu 33— <i>Lobelia monostachya</i> —c	70 ha (173 ac)	<1 ha (1 ac) .....	.....	70 ha (174 ac)
Oahu 35— <i>Lobelia monostachya</i> —d	123 ha (303 ac)	367 ha (906 ac)	3 ha (8 ac)	493 ha (1,217 ac)
Oahu 4— <i>Lobelia niihauensis</i> —a	44 ha (108 ac) .....	.....	.....	44 ha (108 ac)
Oahu 17— <i>Lobelia niihauensis</i> —b	41 ha (102 ac) .....	.....	.....	41 ha (102 ac)
Oahu 20— <i>Lobelia oahuensis</i> —a	204 ha (504 ac)	240 ha (593 ac)	46 ha (114 ac)	490 ha (1,211 ac)
Oahu 35— <i>Lobelia oahuensis</i> —b	139 ha (342 ac)	13 ha (32 ac) .....	.....	152 ha (374 ac)
Oahu 20— <i>Lysimachia filifolia</i> —a	992 ha (2,450 ac)	512 ha (1,263 ac)	8 ha (21 ac)	1,512 ha (3,734 ac)
Oahu 4— <i>Mariscus pennatifolius</i> —a	166 ha (410 ac) .....	.....	.....	166 ha (410 ac)
Oahu 4— <i>Mariscus pennatifolius</i> —b	171 ha (421 ac) .....	.....	.....	171 ha (421 ac)
Oahu 13— <i>Marsilea villosa</i> —a .....	.....	.....	10 ha (25 ac)	10 ha (25 ac)
Oahu 14— <i>Marsilea villosa</i> —b .....	.....	.....	7 ha (18 ac)	7 ha (18 ac)
Oahu 28— <i>Marsilea villosa</i> —c	7 ha (18 ac) .....	.....	.....	7 ha (18 ac)
Oahu 29— <i>Marsilea villosa</i> —d	5 ha (11 ac) .....	.....	.....	5 ha (11 ac)
Oahu 36— <i>Marsilea villosa</i> —e	6 ha (14 ac) .....	.....	.....	6 ha (14 ac)
Oahu 20— <i>Melicope lydgatei</i> —a	351 ha (864 ac)	2,613 ha (6,458 ac)	535 ha (1,323 ac)	3,499 ha (8,645 ac)
Oahu 4— <i>Melicope pallida</i> —a	846 ha (2,089 ac)	9 ha (21 ac) .....	.....	855 ha (2,110 ac)
Oahu 15— <i>Melicope pallida</i> —b .....	.....	174 ha (431 ac) .....	.....	174 ha (431 ac)
Oahu 15— <i>Melicope pallida</i> —c	2 ha (5 ac) .....	.....	27 ha (66 ac)	29 ha (71 ac)
Oahu 15— <i>Melicope pallida</i> —d	10 ha (25 ac) .....	.....	10 ha (26 ac)	20 ha (51 ac)
Oahu 15— <i>Melicope pallida</i> —e .....	.....	243 ha (602 ac) .....	.....	243 ha (602 ac)
Oahu 15— <i>Melicope saint-johnii</i> —a	2 ha (6 ac)	242 ha (598 ac)	<1 ha (<1 ac)	244 ha (604 ac)
Oahu 15— <i>Melicope saint-johnii</i> —b	28 ha (69 ac)	149 ha (368 ac)	37 ha (92 ac)	214 ha (529 ac)
Oahu 20— <i>Myrsine juddii</i> —a	386 ha (954 ac)	291 ha (719 ac)	273 ha (674 ac)	950 ha (2,347 ac)
Oahu 3— <i>Neraudia angulata</i> —a	39 ha (97 ac) .....	.....	.....	39 ha (97 ac)
Oahu 4— <i>Neraudia angulata</i> —b	83 ha (205 ac)	7 ha (17 ac) .....	.....	90 ha (222 ac)

TABLE 3.—APPROXIMATE CRITICAL HABITAT DESIGNATED AREA BY UNIT AND LANDOWNERSHIP OR JURISDICTION, OAHU, CITY AND COUNTY OF HONOLULU, HAWAII ¹—Continued

Unit name	State/local	Private	Federal	Total
Oahu 4— <i>Neraudia angulata</i> —c	298 ha (736 ac)			298 ha (736 ac)
Oahu 4— <i>Neraudia angulata</i> —d	33 ha (81 ac)			33 ha (81 ac)
Oahu 4— <i>Neraudia angulata</i> —e	40 ha (98 ac)			40 ha (98 ac)
Oahu 15— <i>Neraudia angulata</i> —f	17 ha (44 ac)		66 ha (163 ac)	83 ha (207 ac)
Oahu 3— <i>Nototrichium humile</i> —a	20 ha (51 ac)			20 ha (51 ac)
Oahu 4— <i>Nototrichium humile</i> —b	168 ha (416 ac)	61 ha (152 ac)		229 ha (568 ac)
Oahu 4— <i>Nototrichium humile</i> —c	55 ha (138 ac)	181 ha (448 ac)		236 ha (586 ac)
Oahu 4— <i>Nototrichium humile</i> —d	30 ha (75 ac)			30 ha (75 ac)
Oahu 4— <i>Peucedanum sandwicense</i> —a	76 ha (186 ac)			76 ha (186 ac)
Oahu 20— <i>Phlegmariurus nutans</i> —a	713 ha (1,762 ac)	514 ha (1,269 ac)	398 ha (983 ac)	1,625 ha (4,014 ac)
Oahu 4— <i>Phyllostegia hirsuta</i> —a	113 ha (282 ac)			113 ha (282 ac)
Oahu 15— <i>Phyllostegia hirsuta</i> —b	1 ha (2 ac)	130 ha (322 ac)	<1 ha (<1 ac)	131 ha (324 ac)
Oahu 15— <i>Phyllostegia hirsuta</i> —c		69 ha (171 ac)		69 ha (171 ac)
Oahu 20— <i>Phyllostegia hirsuta</i> —d	719 ha (1,777 ac)	285 ha (706 ac)		1,004 ha (2,483 ac)
Oahu 4— <i>Phyllostegia kaalaensis</i> —a	57 ha (141 ac)			57 ha (141 ac)
Oahu 4— <i>Phyllostegia kaalaensis</i> —b	589 ha (1,456 ac)			589 ha (1,456 ac)
Oahu 4— <i>Phyllostegia kaalaensis</i> —c	119 ha (295 ac)	3 ha (9 ac)		122 ha (304 ac)
Oahu 4— <i>Phyllostegia kaalaensis</i> —d	28 ha (69 ac)			28 ha (69 ac)
Oahu 4— <i>Phyllostegia kaalaensis</i> —e	16 ha (39 ac)			16 ha (39 ac)
Oahu 15— <i>Phyllostegia kaalaensis</i> —f		30 ha (74 ac)		30 ha (74 ac)
Oahu 15— <i>Phyllostegia mollis</i> —a		152 ha (376 ac)		152 ha (376 ac)
Oahu 15— <i>Phyllostegia mollis</i> —b		85 ha (210 ac)		85 ha (210 ac)
Oahu 15— <i>Phyllostegia parviflora</i> —a		70 ha (173 ac)		70 ha (173 ac)
Oahu 15— <i>Phyllostegia parviflora</i> —b		21 ha (51 ac)		21 ha (51 ac)
Oahu 15— <i>Phyllostegia parviflora</i> —c		69 ha (171 ac)		69 ha (171 ac)
Oahu 20— <i>Phyllostegia parviflora</i> —d	806 ha (1,992 ac)	436 ha (1,078 ac)	188 ha (463 ac)	1,430 ha (3,533 ac)
Oahu 4— <i>Plantago princeps</i> —a	15 ha (37 ac)			15 ha (37 ac)
Oahu 4— <i>Plantago princeps</i> —b	52 ha (131 ac)			52 ha (131 ac)
Oahu 15— <i>Plantago princeps</i> —c		63 ha (157 ac)		63 ha (157 ac)
Oahu 20— <i>Plantago princeps</i> —d	99 ha (246 ac)	733 ha (1,810 ac)	160 ha (394 ac)	992 ha (2,450 ac)
Oahu 20— <i>Plantago princeps</i> —e	194 ha (477 ac)	103 ha (252 ac)		297 ha (729 ac)
Oahu 20— <i>Platanthera holochila</i> —a		35 ha (86 ac)		35 ha (86 ac)
Oahu 20— <i>Platanthera holochila</i> —b	<1 ha (<1 ac)	4 ha (9 ac)	161 ha (397 ac)	165 ha (407 ac)
Oahu 20— <i>Pteris lidgatei</i> —a	847 ha (2,091 ac)	386 ha (953 ac)		1,233 ha (3,044 ac)
Oahu 20— <i>Pteris lidgatei</i> —b	153 ha (377 ac)	25 ha (61 ac)	111 ha (273 ac)	289 ha (711 ac)
Oahu 20— <i>Pteris lidgatei</i> —c	267 ha (660 ac)	577 ha (1,424 ac)		844 ha (2,084 ac)
Oahu 4— <i>Sanicula mariversa</i> —a	7 ha (17 ac)			7 ha (17 ac)
Oahu 4— <i>Sanicula mariversa</i> —b	6 ha (15 ac)			6 ha (15 ac)
Oahu 4— <i>Sanicula mariversa</i> —c	25 ha (61 ac)			25 ha (61 ac)
Oahu 6— <i>Sanicula mariversa</i> —d	3 ha (8 ac)			3 ha (8 ac)
Oahu 15— <i>Sanicula mariversa</i> —e		14 ha (34 ac)		14 ha (34 ac)
Oahu 15— <i>Sanicula mariversa</i> —f	19 ha (46 ac)	20 ha (49 ac)		39 ha (95 ac)
Oahu 20— <i>Sanicula purpurea</i> —a	366 ha (903 ac)	289 ha (715 ac)	46 ha (114 ac)	701 ha (1,732 ac)
Oahu 3— <i>Schiedea hookeri</i> —a	22 ha (56 ac)			22 ha (56 ac)
Oahu 4— <i>Schiedea hookeri</i> —b	710 ha (1,755 ac)			710 ha (1,755 ac)
Oahu 4— <i>Schiedea hookeri</i> —c	248 ha (612 ac)			248 ha (612 ac)
Oahu 4— <i>Schiedea hookeri</i> —d	31 ha (78 ac)			31 ha (78 ac)
Oahu 15— <i>Schiedea hookeri</i> —e			14 ha (34 ac)	14 ha (34 ac)
Oahu 15— <i>Schiedea hookeri</i> —f		10 ha (25 ac)		10 ha (25 ac)
Oahu 15— <i>Schiedea hookeri</i> —g	33 ha (81 ac)	<1 ha (<1 ac)	50 ha (123 ac)	83 ha (204 ac)
Oahu 4— <i>Schiedea kaalae</i> —a	426 ha (1,051 ac)			426 ha (1,051 ac)
Oahu 15— <i>Schiedea kaalae</i> —b		134 ha (331 ac)		134 ha (331 ac)
Oahu 15— <i>Schiedea kaalae</i> —c		22 ha (53 ac)		22 ha (53 ac)
Oahu 15— <i>Schiedea kaalae</i> —d		39 ha (97 ac)		39 ha (97 ac)
Oahu 20— <i>Schiedea kaalae</i> —e	371 ha (915 ac)	8 ha (19 ac)		379 ha (934 ac)
Oahu 21— <i>Schiedea kaalae</i> —f	6 ha (15 ac)	99 ha (245 ac)		105 ha (260 ac)
Oahu 1— <i>Schiedea kealiae</i> —a	145 ha (357 ac)	49 ha (121 ac)		194 ha (478 ac)
Oahu 4— <i>Schiedea nuttallii</i> —a	527 ha (1,304 ac)			527 ha (1,304 ac)
Oahu 15— <i>Schiedea nuttallii</i> —b	1 ha (1 ac)	140 ha (346 ac)		141 ha (347 ac)
Oahu 15— <i>Schiedea nuttallii</i> —c		41 ha (102 ac)		41 ha (102 ac)
Oahu 1— <i>Sesbania tomentosa</i> —a	101 ha (250 ac)	<1 ha (<1 ac)	<1 ha (<1 ac)	101 ha (250 ac)
Oahu 18— <i>Sesbania tomentosa</i> —b	5 ha (12 ac)			5 ha (12 ac)
Oahu 4— <i>Silene lanceolata</i> —a	113 ha (281 ac)			113 ha (281 ac)
Oahu 15— <i>Silene perlmantii</i> —a	29 ha (73 ac)		36 ha (89 ac)	65 ha (162 ac)
Oahu 15— <i>Silene perlmantii</i> —b		5 ha (12 ac)		5 ha (12 ac)
Oahu 15— <i>Silene perlmantii</i> —c	18 ha (46 ac)		31 ha (78 ac)	49 ha (124 ac)
Oahu 15— <i>Silene perlmantii</i> —d		52 ha (130 ac)		52 ha (130 ac)
Oahu 4— <i>Solanum sandwicense</i> —a	104 ha (258 ac)			104 ha (258 ac)
Oahu 15— <i>Solanum sandwicense</i> —b	<1 ha (<1 ac)	146 ha (361 ac)		146 ha (361 ac)
Oahu 15— <i>Solanum sandwicense</i> —c	<1 ha (<1 ac)	78 ha (192 ac)		78 ha (192 ac)
Oahu 5— <i>Spermolepis hawaiiensis</i> —a	20 ha (51 ac)	1 ha (2 ac)		21 ha (53 ac)

TABLE 3.—APPROXIMATE CRITICAL HABITAT DESIGNATED AREA BY UNIT AND LANDOWNERSHIP OR JURISDICTION, OAHU, CITY AND COUNTY OF HONOLULU, HAWAII ¹—Continued

Unit name	State/local	Private	Federal	Total
Oahu 31— <i>Spermolepis hawaiiensis</i> —b	116 ha (286 ac) .....	.....	.....	116 ha (286 ac)
Oahu 15— <i>Stenogyne kanehoana</i> —a	1 ha (2 ac)	138 ha (342 ac)	1 ha (3 ac)	140 ha (347 ac)
Oahu 15— <i>Stenogyne kanehoana</i> —b	1 ha (2 ac)	42 ha (105 ac) .....	.....	43 ha (107 ac)
Oahu 4— <i>Tetramolopium filiforme</i> —a	111 ha (273 ac) .....	.....	.....	111 ha (273 ac)
Oahu 4— <i>Tetramolopium lepidotum</i> ssp. <i>lepidotum</i> —a	167 ha (413 ac) .....	.....	.....	167 ha (413 ac)
Oahu 4— <i>Tetramolopium lepidotum</i> ssp. <i>lepidotum</i> —b	23 ha (56 ac) .....	.....	.....	23 ha (56 ac)
Oahu 15— <i>Tetramolopium lepidotum</i> ssp. <i>lepidotum</i> —c .....	.....	.....	11 ha (28 ac)	11 ha (28 ac)
Oahu 15— <i>Tetramolopium lepidotum</i> ssp. <i>lepidotum</i> —d	34 ha (84 ac)	12 ha (29 ac)	48 ha (120 ac)	94 ha (233 ac)
Oahu 15— <i>Tetramolopium lepidotum</i> ssp. <i>lepidotum</i> —e	<1 ha (1 ac)	1 ha (2 ac) .....	.....	1 ha (3 ac)
Oahu 15— <i>Tetramolopium lepidotum</i> ssp. <i>lepidotum</i> —f	37 ha (92 ac)	182 ha (450 ac)	40 ha (99 ac)	259 ha (641 ac)
Oahu 20— <i>Tetraplasandra gymnocarpa</i> —a ...	454 ha (1,122 ac)	3 ha (7 ac) .....	.....	457 ha (1,129 ac)
Oahu 20— <i>Tetraplasandra gymnocarpa</i> —b ...	71 ha (175 ac)	32 ha (79 ac)	132 ha (327 ac)	235 ha (581 ac)
Oahu 20— <i>Tetraplasandra gymnocarpa</i> —c ...	119 ha (295 ac)	292 ha (723 ac) .....	.....	411 ha (1,018 ac)
Oahu 20— <i>Tetraplasandra gymnocarpa</i> —d ...	121 ha (299 ac)	231 ha (571 ac)	10 ha (24 ac)	362 ha (894 ac)
Oahu 35— <i>Tetraplasandra gymnocarpa</i> —e ...	152 ha (377 ac) .....	.....	.....	152 ha (377 ac)
Oahu 35— <i>Tetraplasandra gymnocarpa</i> —f ...	131 ha (323 ac)	82 ha (205 ac) .....	.....	213 ha (528 ac)
Oahu 20— <i>Trematolobelia singularis</i> —a	58 ha (147 ac)	27 ha (69 ac)	1 ha (3 ac)	86 ha (219 ac)
Oahu 20— <i>Trematolobelia singularis</i> —b	1 ha (3 ac)	9 ha (22 ac)	<1 ha (1 ac)	10 ha (26 ac)
Oahu 34— <i>Trematolobelia singularis</i> —c	<1 ha (1 ac)	2 ha (4 ac) .....	.....	2 ha (5 ac)
Oahu 35— <i>Trematolobelia singularis</i> —d	13 ha (33 ac) .....	.....	.....	13 ha (33 ac)
Oahu 35— <i>Trematolobelia singularis</i> —e	23 ha (56 ac)	3 ha (8 ac) .....	.....	26 ha (64 ac)
Oahu 4— <i>Urera kaalae</i> —a	53 ha (133 ac) .....	.....	.....	53 ha (133 ac)
Oahu 4— <i>Urera kaalae</i> —b	17 ha (43 ac) .....	.....	.....	17 ha (43 ac)
Oahu 15— <i>Urera kaalae</i> —c .....	.....	224 ha (555 ac)	<1 ha (<1 ac)	224 ha (555 ac)
Oahu 15— <i>Urera kaalae</i> —d .....	.....	35 ha (87 ac) .....	.....	35 ha (87 ac)
Oahu 15— <i>Urera kaalae</i> —e	13 ha (31 ac) .....	.....	38 ha (94 ac)	51 ha (125 ac)
Oahu 15— <i>Urera kaalae</i> —f	2 ha (5 ac)	80 ha (197 ac) .....	.....	82 ha (202 ac)
Oahu 1— <i>Vigna o-wahuensis</i> —a	180 ha (447 ac) .....	.....	.....	180 ha (447 ac)
Oahu 24— <i>Vigna o-wahuensis</i> —b	4 ha (12 ac) .....	.....	.....	4 ha (12 ac)
Oahu 25— <i>Vigna o-wahuensis</i> —c	4 ha (9 ac) .....	.....	.....	4 ha (9 ac)
Oahu 26— <i>Vigna o-wahuensis</i> —d	26 ha (63 ac) .....	.....	.....	26 ha (63 ac)
Oahu 4— <i>Viola chamissoniana</i> ssp. <i>chamissoniana</i> —a	199 ha (491 ac) .....	.....	.....	199 ha (491 ac)
Oahu 4— <i>Viola chamissoniana</i> ssp. <i>chamissoniana</i> —b	10 ha (25 ac) .....	.....	.....	10 ha (25 ac)
Oahu 4— <i>Viola chamissoniana</i> ssp. <i>chamissoniana</i> —c	22 ha (55 ac) .....	.....	.....	22 ha (55 ac)
Oahu 10— <i>Viola chamissoniana</i> ssp. <i>chamissoniana</i> —d .....	.....	.....	6 ha (15 ac)	6 ha (15 ac)
Oahu 15— <i>Viola chamissoniana</i> ssp. <i>chamissoniana</i> —e .....	.....	.....	13 ha (31 ac)	13 ha (31 ac)
Oahu 15— <i>Viola chamissoniana</i> ssp. <i>chamissoniana</i> —f .....	.....	11 ha (28 ac)	18 ha (44 ac)	29 ha (72 ac)
Oahu 20— <i>Viola oahuensis</i> —a	402 ha (994 ac)	373 ha (923 ac)	125 ha (308 ac)	900 ha (2,225 ac)
Oahu 35— <i>Viola oahuensis</i> —b	74 ha (186 ac) .....	.....	.....	74 ha (186 ac)
Grand Total *	9,035 ha (22,326 ac)	10,985 ha (27,143 ac)	2,254 ha (5,571 ac) ...	2,274 ha (55,040 ac)

¹Area differences due to digital mapping discrepancies between TMK data (GDSI 2000) and USGS coastline, or differences due to rounding.

* Totals take into consideration overlapping individual species units.

TABLE 4.—APPROXIMATE FINAL CRITICAL HABITAT AREA (HA (AC)), ESSENTIAL AREA, AND EXCLUDED AREA

Area considered essential	33,179 ha 81,987 ac
Area not included because of species management or protection/area excluded under 4(b)(2)	10,905 ha 26,946 ac
Final Critical Habitat	22,274 ha 55,040 ac

Critical habitat includes habitat for these 99 species primarily in the upland portions of Oahu, as well as some coastal and off-shore lands. Lands designated as critical habitat have been divided into a total of 304 units. A brief description of each unit is presented below.

Oahu 4—*Abutilon sandwicense*—a

This unit is critical habitat for *Abutilon sandwicense* and is 604 ha

(1,492 ac) on State (Mokuleia Forest Reserve and Kaala NAR) and private land, containing a portion of Dupont Trail. This unit provides habitat for 5 populations of 300 mature, reproducing individuals of the short-lived perennial *Abutilon sandwicense* and is currently occupied by 56 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the

expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep slopes or gulches in dry to mesic lowland forest. This unit is geographically separated from the other five units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 4—*Abutilon sandwicense*—b

This unit is critical habitat for *Abutilon sandwicense* and is 26 ha (65 ac) on State land. This unit contains no named natural features. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Abutilon sandwicense* and is currently occupied by 40 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep slopes or gulches in dry to mesic lowland forest. This unit is geographically separated from the other five units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 4—*Abutilon sandwicense*—c

This unit is critical habitat for *Abutilon sandwicense* and is 41 ha (102 ac) on State land. This unit contains no named natural features. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Abutilon sandwicense* and is currently occupied by 4 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep slopes or gulches in dry to mesic lowland forest. This unit is geographically separated from the other five units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 15—*Abutilon sandwicense*—d

This unit is critical habitat for *Abutilon sandwicense* and is 49 ha (121 ac) on Federal land (Honouliuli Preserve). This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Abutilon sandwicense* and is currently occupied by 2 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep slopes or gulches in dry to mesic lowland forest. This unit is geographically separated from the other five units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 15—*Abutilon sandwicense*—e

This unit is critical habitat for *Abutilon sandwicense* and is 33 ha (81 ac) on State and Federal land (Lualualei Naval Reservation). This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Abutilon sandwicense* and is currently occupied by 7 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep slopes or gulches in dry to mesic lowland forest. This unit is geographically separated from the other five units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 17—*Abutilon sandwicense*—f

This unit is critical habitat for *Abutilon sandwicense* and is 30 ha (74 ac) on State land (Nanakuli Forest Reserve). This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Abutilon sandwicense* and is currently occupied by 115 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species

and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep slopes or gulches in dry to mesic lowland forest. This unit is geographically separated from the other five units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 20—*Adenophorus periens*—a

This unit is critical habitat for *Adenophorus periens* and is 711 ha (1,759 ac) on State (Kaipapau Forest Reserve, Hauula Forest Reserve, Sacred Falls State Park, and Kahana Valley State Park) and private land. This unit contains portions of the Summit Trail and Puu Pauao Summit. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Adenophorus periens* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is essential to the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, tree trunks in *Metrosideros polymorpha* or *Metrosideros rugosa* wet forests. This unit is geographically separated from critical habitat designated on Kauai, Molokai, and Maui for this species in order to avoid all recovery populations being destroyed by one naturally occurring catastrophic event.

Oahu 4—*Alectryon macrococcus*—a

This is critical habitat for *Alectryon macrococcus* and is 23 ha (58 ac) on State land. This unit contains no named natural features. This unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Alectryon macrococcus* and is currently occupied by 78 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is essential for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, slopes, ridges, or gulches within mesic lowland forests. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Kauai, Molokai, and Maui for

this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 15—*Alectryon macrococcus*—b

This is critical habitat for *Alectryon macrococcus* and is 112 ha (278 ac) on private (Honouliuli Preserve) land. This unit contains no named natural features. This unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Alectryon macrococcus* and is currently occupied by 83 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is essential for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, slopes, ridges, or gulches within mesic lowland forests. This unit provides for one population within this multi-island species' historical range on Oahu that is geographically separated from critical habitat designated on Oahu and other islands for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Alsinidendron obovatum*—a

This is critical habitat for *Alsinidendron obovatum* and is 176 ha (436 ac) on State land (Mokuleia Forest Reserve and Pahole NAR). This unit provides habitat for five populations of 300 mature, reproducing individuals of the short-lived perennial *Alsinidendron obovatum* and is currently occupied by 3 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, ridges and slopes in lowland diverse mesic forest dominated by *Acacia koa* and *Metrosideros polymorpha*. Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other two units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 4—*Alsinidendron obovatum*—b

This is critical habitat for *Alsinidendron obovatum* and is 25 ha (62 ac) on State land (Waianae Kai Forest Reserve). This unit contains no named natural features. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Alsinidendron obovatum* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, ridges and slopes in lowland diverse mesic forest dominated by *Acacia koa* and *Metrosideros polymorpha*. Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other two units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 15—*Alsinidendron obovatum*—c

This is critical habitat for *Alsinidendron obovatum* and is 32 ha (76 ac) on Federal and State land (Nanakuli Forest Reserve), containing a portion of Palikea Summit. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Alsinidendron obovatum* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, ridges and slopes in lowland diverse mesic forest dominated by *Acacia koa* and *Metrosideros polymorpha*. Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other two units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 4—*Alsinidendron trinerve*—a

This unit is critical habitat for *Alsinidendron trinerve* and is 60 ha (149 ac) on State land (Mokuleia Forest

Reserve, Waianae Kai Forest Reserve, and Kaala NAR), containing a portion of Kaala Summit. This unit provides habitat for 4 populations of 300 mature, reproducing individuals of the short-lived perennial *Alsinidendron trinerve* and is currently occupied by 10 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, slopes in wet forest or the wetter portions of diverse mesic forest dominated by *Metrosideros polymorpha* or *Ilex anomala* and *Metrosideros polymorpha* montane wet forest. We do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species. However, we have identified habitat for an additional three populations on Army lands at Schofield Barracks Military Reservation (see "Analysis of Impacts Under Section 4(b)(2): Other Impacts").

Oahu 2—*Bonamia menziesii*—a

This unit is critical habitat for *Bonamia menziesii* and is 21 ha (51 ac) on State land (Kaena Point State Park). This unit, in combination with unit Oahu 3—*Bonamia menziesii*—b, provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Bonamia menziesii* and is currently occupied by 4 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep slopes or level ground in dry or mesic forest in open or closed canopy. This unit, together with unit Oahu 3—*Bonamia menziesii*—b, is geographically separated from critical habitat designated elsewhere on Oahu and on Kauai and Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 3—*Bonamia menziesii*—b

This unit is critical habitat for *Bonamia menziesii* and is 42 ha (104 ac) on State land (Kaena Point State Park and Kuaokala Forest Reserve). This unit, in combination with unit Oahu 2—*Bonamia menziesii*—a, provides habitat for one population of 300 mature,

reproducing individuals of the short-lived perennial *Bonamia menziesii* and is currently occupied by 18 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep slopes or level ground in dry or mesic forest in open or closed canopy. This unit, together with units Oahu 2—*Bonamia menziesii*—a, is geographically separated from critical habitat designated elsewhere on Oahu and on Kauai and Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Bonamia menziesii*—c

This unit is critical habitat for *Bonamia menziesii* and is 94 ha (233 ac) on State (Mokuleia Forest Reserve) and private land. This unit contains no named natural features. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Bonamia menziesii* and is currently occupied by 5 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep slopes or level ground in dry or mesic forest in open or closed canopy. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Kauai and Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 17—*Bonamia menziesii*—d

This unit is critical habitat for *Bonamia menziesii* and is 77 ha (191 ac) on State land (Nanakuli Forest Reserve). This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Bonamia menziesii* and is currently occupied by one individual. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential

for this species include, but are not limited to, steep slopes or level ground in dry or mesic forest in open or closed canopy. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Kauai and Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 35—*Bonamia menziesii*—e

This unit is critical habitat for *Bonamia menziesii* and is 374 ha (924 ac) on State (Honolulu Watershed Forest Reserve) and private land. This unit contains a portion of Kulepiamoa Ridge and Laulaupoe Gulch. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Bonamia menziesii* and is currently occupied by 5 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep slopes or level ground in dry or mesic forest in open or closed canopy. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Kauai and Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Cenchrus agrimonioides*—a

This unit is critical habitat for *Cenchrus agrimonioides* and is 529 ha (1,306 ac) on State land (Mokuleia Forest Reserve, and Pahole and Kaala NAR). This unit provides habitat for 4 populations of 300 mature, reproducing individuals of the short-lived perennial *Cenchrus agrimonioides* and is currently occupied by 3 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, dry ridges or upper slopes or ridges in lowland mixed mesic forest. It provides habitat for the westernmost range of the species. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Maui for this species in order to avoid all recovery populations being

destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Cenchrus agrimonioides*—b

This unit is critical habitat for *Cenchrus agrimonioides* and is 40 ha (99 ac) on State land (Waianae Kai Forest Reserve). This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Cenchrus agrimonioides* and is currently occupied by 9 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, dry ridges or upper slopes or ridges in lowland mixed mesic forest. It provides habitat for the westernmost range of the species. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 15—*Cenchrus agrimonioides*—c

This unit is critical habitat for *Cenchrus agrimonioides* and is 200 ha (495 ac) on private land (Honouliuli Preserve). This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Cenchrus agrimonioides* and is currently occupied by 45 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, dry ridges or upper slopes or ridges in lowland mixed mesic forest. It provides habitat for the westernmost range of the species. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 15—*Cenchrus agrimonioides*—d

This unit is critical habitat for *Cenchrus agrimonioides* and is 117 ha (290 ac) on private land (Honouliuli Preserve). This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Cenchrus agrimonioides*

and is currently occupied by 2 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, dry ridges or upper slopes or ridges in lowland mixed mesic forest. It provides habitat for the westernmost range of the species. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 1—*Centaurium sebaeoides*—a

This unit is critical habitat for *Centaurium sebaeoides* and is 61 ha (149 ac) on State (Kaena Point NAR), private, and Federal land. This unit contains no named natural features. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Centaurium sebaeoides* and is currently occupied by one plant. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, volcanic or clay soils or cliffs in arid coastal areas or on coral plains. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Kauai, Molokai, and Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 27—*Centaurium sebaeoides*—b

This unit is critical habitat for *Centaurium sebaeoides* and is 30 ha (74 ac) on State land, containing a portion of the eastern flank of Koko Head Crater. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Centaurium sebaeoides* and is currently occupied by one individual. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential

for this species include, but are not limited to, volcanic or clay soils or cliffs in arid coastal areas or on coral plains. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Kauai, Molokai, and Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 1—*Chamaesyce celastroides* var. *kaenana*—a

This unit is critical habitat for *Chamaesyce celastroides* var. *kaenana* and is 233 ha (571 ac) on State land (Kaena Point State Park). This unit provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Chamaesyce celastroides* and is currently occupied by 543 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, windward talus slopes, leeward rocky cliffs, open grassy slopes, or vegetated cliff faces in coastal dry shrubland. Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other four units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 3—*Chamaesyce celastroides* var. *kaenana*—b

This unit is critical habitat for *Chamaesyce celastroides* var. *kaenana* and is 4 ha (11 ac) on State land (Kaena Point State Park and Kuaokala Forest Reserve). This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Chamaesyce celastroides* and is currently occupied by one individual. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, windward talus slopes, leeward rocky cliffs, open grassy slopes, or vegetated cliff faces in coastal dry shrubland. Although we do not believe

that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other four units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 4—*Chamaesyce celastroides* var. *kaenana*—c

This unit is critical habitat for *Chamaesyce celastroides* var. *kaenana* and is 43 ha (107 ac) on State land (Waianae Kai Forest Reserve). This unit contains no named natural features. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Chamaesyce celastroides* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, windward talus slopes, leeward rocky cliffs, open grassy slopes, or vegetated cliff faces in coastal dry shrubland. Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other four units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 5—*Chamaesyce celastroides* var. *kaenana*—d

This unit is critical habitat for *Chamaesyce celastroides* var. *kaenana* and is 36 ha (89 ac) on State and private land, containing a portion of Ohikilolo Ridge. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Chamaesyce celastroides* and is currently occupied by 2 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, windward talus slopes, leeward rocky cliffs, open grassy slopes, or vegetated cliff faces in coastal dry shrubland. Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10

populations for this species, this unit is geographically separated from the other four units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 35—*Chamaesyce celastroides* var. *kaenana*—e

This unit is critical habitat for *Chamaesyce celastroides* var. *kaenana* and is 238 ha (587 ac) on State and private land. This unit contains a portion of Hawaii Loa Ridge, Kupaua Valley, Kuleplamo Ridge, and Pia Valley. This unit provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Chamaesyce celastroides* and is currently unoccupied. The habitat features contained in this unit that are essential for this species include, but are not limited to, windward talus slopes, leeward rocky cliffs, open grassy slopes, or vegetated cliff faces in coastal dry shrubland. Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other four units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 20—*Chamaesyce deppeana*—a

This unit is critical habitat for *Chamaesyce deppeana* and is 17 ha (41 ac) on State and private land, containing a portion of the Wilson Tunnel. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Chamaesyce deppeana* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, windward-facing ridge crests, cliff faces, and mixed native cliffs. Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other unit designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 35—*Chamaesyce deppeana*—b

This unit is critical habitat for *Chamaesyce deppeana* and is 18 ha (46 ac) on State (Honolulu Watershed Forest Reserve) and private land, containing a portion of Nuuanu Pali. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Chamaesyce deppeana* and is currently occupied by 50 individuals. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, windward-facing ridge crests, cliff faces, and mixed native cliffs. Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other unit designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 4—*Chamaesyce herbstii*—a

This unit is critical habitat for *Chamaesyce herbstii* and is 429 ha (1,059 ac) on State land (Mokuleia Forest Reserve and Pahole NAR). This unit provides habitat for 5 populations of 300 mature, reproducing individuals of the short-lived perennial *Chamaesyce herbstii* and is currently occupied by 60 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, shaded gulch bottoms and slopes in mesic *Acacia koa*-*Metrosideros polymorpha* lowland forests or diverse mesic forests. Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other two units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 15—*Chamaesyce herbstii*—b

This unit is critical habitat for *Chamaesyce herbstii* and is 47 ha (116 ac) on private land (Honouliuli

Preserve). This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Chamaesyce herbstii* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, shaded gulch bottoms and slopes in mesic *Acacia koa*-*Metrosideros polymorpha* lowland forests or diverse mesic forests. Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other two units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 15—*Chamaesyce herbstii*—c

This unit is critical habitat for *Chamaesyce herbstii* and is 21 ha (53 ac) on private land (Honouliuli Preserve). This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Chamaesyce herbstii* and is currently occupied by 2 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, shaded gulch bottoms and slopes in mesic *Acacia koa*-*Metrosideros polymorpha* lowland forests or diverse mesic forests. Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other two units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 9—*Chamaesyce kuwaleana*—a

This unit is critical habitat for *Chamaesyce kuwaleana* and is 27 ha (53 ac) on Federal land (Lualualei Naval Reservation), containing a portion of Mauna Kuwale. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Chamaesyce*

kuwaleana and is currently occupied by one individual. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, thin guano soil on basaltic rock; arid, exposed volcanic cliffs; dry or mesic rocky ridges; or sparsely vegetated slopes. Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other six units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 11—*Chamaesyce kuwaleana*—b

This unit is critical habitat for *Chamaesyce kuwaleana* and is 53 ha (130 ac) on Federal (Lualualei Naval Reservation) and State land (Waianae Kai Forest Reserve), containing a portion of Kauaopuu Summit. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Chamaesyce kuwaleana* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, thin guano soil on basaltic rock; arid, exposed volcanic cliffs; dry or mesic rocky ridges; or sparsely vegetated slopes. Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other six units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 12—*Chamaesyce kuwaleana*—c

This unit is critical habitat for *Chamaesyce kuwaleana* and is 37 ha (92 ac) on State land, containing a portion of Puu Kailio. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Chamaesyce kuwaleana* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that

is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, thin guano soil on basaltic rock; arid, exposed volcanic cliffs; dry or mesic rocky ridges; or sparsely vegetated slopes. Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other six units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 15—*Chamaesyce kuwaleana*—d

This unit is critical habitat for *Chamaesyce kuwaleana* and is 184 ha (454 ac) on State and private land, containing a portion of Puu Heleakala. This unit provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Chamaesyce kuwaleana* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, thin guano soil on basaltic rock; arid, exposed volcanic cliffs; dry or mesic rocky ridges; or sparsely vegetated slopes. Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other six units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 22—*Chamaesyce kuwaleana*—e

This unit is critical habitat for *Chamaesyce kuwaleana* and is 1 ha (3 ac) on State land (Moku Manu Island State Seabird Sanctuary). This unit, in combination with unit Oahu 23—*Chamaesyce kuwaleana*—f, provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Chamaesyce kuwaleana* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this

species include, but are not limited to, thin guano soil on basaltic rock; arid, exposed volcanic cliffs; dry or mesic rocky ridges; or sparsely vegetated slopes. This unit, together with unit 23—*Chamaesyce kuwaleana*—f, provides for one population within this island-endemic species' historical range on Oahu. Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other six units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 23—*Chamaesyce kuwaleana*—f

This unit is critical habitat for *Chamaesyce kuwaleana* and is 6 ha (15 ac) on State land (Moku Manu Island State Seabird Sanctuary). This unit, in combination with unit Oahu 22—*Chamaesyce kuwaleana*—e, provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Chamaesyce kuwaleana* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, thin guano soil on basaltic rock; arid, exposed volcanic cliffs; dry or mesic rocky ridges; or sparsely vegetated slopes. This unit, together with unit 22—*Chamaesyce kuwaleana*—e, provides for one population within this island-endemic species' historical range on Oahu. Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other six units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 26—*Chamaesyce kuwaleana*—g

This unit is critical habitat for *Chamaesyce kuwaleana* and is 26 ha (63 ac) on State land (Manana Island State Seabird Sanctuary), containing a portion of Manana Island. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Chamaesyce kuwaleana* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the

establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, thin guano soil on basaltic rock; arid, exposed volcanic cliffs; dry or mesic rocky ridges; or sparsely vegetated slopes. Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other six units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 20—*Chamaesyce rockii*—a

This unit is critical habitat for *Chamaesyce rockii* and is 826 ha (2,039 ac) on Federal (Oahu Forest National Wildlife Refuge), private, and State land (Kaipapau Forest Reserve, Hauula Forest Reserve, Sacred Falls State Park, Kahana Valley State Park, and Ewa Forest Reserve). This unit contains a portion of Puu Kainapua, Koolau Summit Trail, Puu Pauao, and Puu Kaaumakua. This unit provides habitat for 3 populations of 300 mature, reproducing individuals of the short-lived perennial *Chamaesyce rockii* and is currently occupied by 563 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present populations. The habitat features contained in this unit that are essential for this species include, but are not limited to, gulch slopes, gulch bottoms, and ridge crests in wet *Metrosideros polymorpha-Dicranopteris linearis* forest and shrubland. This unit is geographically separated from the other two units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 20—*Chamaesyce rockii*—b

This unit is critical habitat for *Chamaesyce rockii* and is 197 ha (487 ac) on private and State land (Kahana Valley State Park), containing Puu Kaaumakua. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Chamaesyce rockii* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are

essential for this species include, but are not limited to, gulch slopes, gulch bottoms, and ridge crests in wet *Metrosideros polymorpha-Dicranopteris linearis* forest and shrubland. This unit is geographically separated from the other two units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 20—*Chamaesyce rockii*—c

This unit is critical habitat for *Chamaesyce rockii* and is 258 ha (639 ac) on State (Ewa Forest Reserve) and private land, containing a portion of Eleao Summit. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Chamaesyce rockii* and is currently occupied by one individual. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, gulch slopes, gulch bottoms, and ridge crests in wet *Metrosideros polymorpha-Dicranopteris linearis* forest and shrubland. This unit is geographically separated from the other two units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 4—*Colubrina oppositifolia*—a

This unit is critical habitat for *Colubrina oppositifolia* and is 782 ha (1,935 ac) on private and State land (Mokuleia Forest Reserve and Kaala and Pahole NARs), containing a portion of Dupont Trail. This unit provides habitat for 3 populations of 100 mature, reproducing individuals of the long-lived *Colubrina oppositifolia* and is currently occupied by 53 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, lowland dry or mesic forests dominated by *Diospyros sandwicensis*. It provides habitat for the westernmost range of the species. This unit provides is geographically separated from critical

habitat designated on Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Ctenitis squamigera*—a

This unit is critical habitat for *Ctenitis squamigera* and is 120 ha (297 ac) on State land (Mokuleia Forest Reserve and Kaala NAR), containing a portion of Dupont Trail. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Colubrina oppositifolia* and is currently occupied by 12 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, gentle to steep slopes in *Metrosideros polymorpha-Diospyros sandwicensis* mesic forest or diverse mesic forest. This unit is geographically separated from critical habitat designated on Kauai, Maui, and Molokai for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Cyanea acuminata*—a

This unit is critical habitat for *Cyanea acuminata* and is 82 ha (205 ac) on State land (Mokuleia Forest Reserve, Kaala NAR, and Waianae Kai Forest Reserve). This unit provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Cyanea acuminata* and is currently occupied by 20 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, slopes, ridges, or stream banks in *Metrosideros polymorpha-Dicranopteris linearis* or *Acacia koa-Metrosideros polymorpha* wet or mesic forest or shrubland, or *Diospyros sandwicensis-Metrosideros polymorpha* lowland mesic forest. This unit is geographically separated from the other unit designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 20—*Cyanea acuminata*—b

This unit is critical habitat for *Cyanea acuminata* and is 2,522 ha (6,231 ac) on private and State land (Hauula Forest Reserve, Sacred Falls State Park, Kahana Valley State Park, Kaipapau Forest Reserve, and Waiahole Forest Reserve). This unit contains a portion of Castle Trail, Koolau Summit Trail, Puu Pauao, Puu Kaaumakua, Kipapa Trail, and Eleao Summit. This unit provides habitat for 3 populations of 300 mature, reproducing individuals of the short-lived perennial *Cyanea acuminata* and is currently occupied by 30 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, slopes, ridges, or stream banks in *Metrosideros polymorpha-Dicranopteris linearis* or *Acacia koa-Metrosideros polymorpha* wet or mesic forest or shrubland, or *Diospyros sandwicensis-Metrosideros polymorpha* lowland mesic forest. This unit is geographically separated from the other unit designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 20—*Cyanea crispa*—a

This unit is critical habitat for *Cyanea crispa* and is 1,831 ha (4,525 ac) on private and State land (Hauula Forest Reserve, Sacred Falls State Park, and Kaipapau Forest Reserve). This unit contains Sacred Falls and a portion of Castle Trail. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Cyanea crispa* and is currently occupied by 11 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, slopes, moist gullies, or stream banks in open mesic forests or closed wet forests. This unit is geographically separated from the other three units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 20—*Cyanea crispa*—b

This unit is critical habitat for *Cyanea crispa* and is 3,860 ha (9,529 ac) on private, Federal, and State land (Waiahole Forest Reserve, Kaneohe Forest Reserve, Keaiwa Heiau State Recreation Area, and Fort Shafter). This unit contains a portion of Aiea Loop Trail, Halawa Trail, Luluku Tunnel, Puu Kahuauli, Puu Kawipoo, Puu Keahiakahoe, and Puu Uau. This unit provides habitat for 3 populations of 300 mature, reproducing individuals of the short-lived perennial *Cyanea crispa* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, slopes, moist gullies, or stream banks in open mesic forests or closed wet forests. This unit is geographically separated from the other three units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 21—*Cyanea crispa*—c

This unit is critical habitat for *Cyanea crispa* and is 302 ha (747 ac) on private and State land (Kahana Valley State Park), containing a portion of Hidden Valley. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Cyanea crispa* and is currently occupied by 13 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, slopes, moist gullies, or stream banks in open mesic forests or closed wet forests. This unit is geographically separated from the other three units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 35—*Cyanea crispa*—d

This unit is critical habitat for *Cyanea crispa* and is 1,336 ha (3,301 ac) on private and State land (Honolulu Watershed Forest Reserve). This unit contains a portion of Kaau Crater, Kainawaaunui Summit, Konahuanui

Summit, Manoa Falls, Manoa Tunnel, Mount Olympus, Palikea Summit, Puu Lanipo, and Waaloa Spring. This unit provides habitat for 3 populations of 300 mature, reproducing individuals of the short-lived perennial *Cyanea crispa* and is currently occupied by 27 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, slopes, moist gullies, or stream banks in open mesic forests or closed wet forests. This unit is geographically separated from the other three units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 20—*Cyanea grimesiana* ssp. *grimesiana*—a

This unit is critical habitat for *Cyanea grimesiana* ssp. *grimesiana* and is 2,634 ha (6,506 ac) on State (Ewa Forest Reserve and Keaiwa Heiau State Recreation Area) and private land. This unit contains a portion of Aiea Loop Trail, Puu Kawipoo, Puu Uau, and Waimano Trail. This unit provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Cyanea grimesiana* ssp. *grimesiana* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, rocky or steep slopes of stream banks in mesic forest often dominated by *Metrosideros polymorpha* or *Metrosideros polymorpha* and *Acacia koa*. It provides habitat for the westernmost range of the species. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Molokai and Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 35—*Cyanea grimesiana* ssp. *grimesiana*—b

This unit is critical habitat for *Cyanea grimesiana* ssp. *grimesiana* and is 330 ha (814 ac) on private and State land (Honolulu Watershed Forest Reserve). This unit contains no named natural features. This unit provides habitat for

one population of 300 mature, reproducing individuals of the short-lived perennial *Cyanea grimesiana* ssp. *grimesiana* and is currently occupied by 6 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, rocky or steep slopes of stream banks in mesic forest often dominated by *Metrosideros polymorpha* or *Metrosideros polymorpha* and *Acacia koa*. It provides habitat for the westernmost range of the species. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Molokai and Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Cyanea grimesiana* ssp. *obatae*—a

This unit is critical habitat for *Cyanea grimesiana* ssp. *obatae* and is 523 ha (1,289 ac) on State land (Mokuleia Forest Reserve and Pahole NAR). This unit provides habitat for 3 populations of 300 mature, reproducing individuals of the short-lived perennial *Cyanea grimesiana* ssp. *obatae* and is currently occupied by 4 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep, moist, shaded slopes in diverse mesic to wet lowland forests. This unit is geographically separated from the other three units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 15—*Cyanea grimesiana* ssp. *obatae*—b

This unit is critical habitat for *Cyanea grimesiana* ssp. *obatae* and is 185 ha (455 ac) on State, private, and Federal land (Lualualei Naval Reservation). This unit contains a portion of Puu Hapapa and Puu Kanehoa. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Cyanea grimesiana* ssp. *obatae* and is currently unoccupied. This unit is essential to the

conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep, moist, shaded slopes in diverse mesic to wet lowland forests. This unit is geographically separated from the other three units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 15—*Cyanea grimesiana* ssp. *obatae*—c

This unit is critical habitat for *Cyanea grimesiana* ssp. *obatae* and is 34 ha (84 ac) on private land (Honouliuli Preserve). This unit contains no named natural features. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Cyanea grimesiana* ssp. *obatae* and is currently occupied by three individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep, moist, shaded slopes in diverse mesic to wet lowland forests. This unit is geographically separated from the other three units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 15—*Cyanea grimesiana* ssp. *obatae*—d

This unit is critical habitat for *Cyanea grimesiana* ssp. *obatae* and is 83 ha (205 ac) on State and private land (Honouliuli Preserve), containing the Palikea Summit. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Cyanea grimesiana* ssp. *obatae* and is currently occupied by 5 plants. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not

limited to, steep, moist, shaded slopes in diverse mesic to wet lowland forests. This unit is geographically separated from the other three units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 20—*Cyanea humboltiana*—a

This unit is critical habitat for *Cyanea humboltiana* and is 503 ha (1,241 ac) on private and State land (Hauula Forest Reserve, Sacred Falls State Park, and Kaipapau Forest Reserve), containing a portion of the Koolau Summit Trail. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Cyanea humboltiana* and is currently occupied by 9 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, wet *Metrosideros polymorpha-Dicranopteris linearis* lowland shrubland. This unit is geographically separated from the other four units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 20—*Cyanea humboltiana*—b

This unit is critical habitat for *Cyanea humboltiana* and is 127 ha (315 ac) on private and State land (Ewa Forest Reserve). This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Cyanea humboltiana* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, wet *Metrosideros polymorpha-Dicranopteris linearis* lowland shrubland. This unit is geographically separated from the other four units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 20—*Cyanea humboltiana*—c

This unit is critical habitat for *Cyanea humboltiana* and is 300 ha (741 ac) on private and State land (Waiahole Forest Reserve), containing a portion of Puu Kawipoo. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Cyanea humboltiana* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, wet *Metrosideros polymorpha-Dicranopteris linearis* lowland shrubland. This unit is geographically separated from the other four units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 20—*Cyanea humboltiana*—d

This unit is critical habitat for *Cyanea humboltiana* and is 160 ha (393 ac) on private, Federal, and State land (Kaneohe Forest Reserve), containing a portion of Puu Keahiakahoe. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Cyanea humboltiana* and is currently occupied by one plant. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, wet *Metrosideros polymorpha-Dicranopteris linearis* lowland shrubland. This unit is geographically separated from the other four units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 35—*Cyanea humboltiana*—e

This unit is critical habitat for *Cyanea humboltiana* and is 538 ha (1,331 ac) on private and State land (Honolulu Watershed Forest Reserve). This unit contains a portion of Kainawaunui Summit, Konahuanui Summit, Manoa Falls, Mount Olympus, Palikea Summit, and Puu Lanipo. This unit provides habitat for 4 populations of 300 mature, reproducing individuals of the short-lived perennial *Cyanea humboltiana*

and is currently occupied by 21 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, wet *Metrosideros polymorpha-Dicranopteris linearis* lowland shrubland. This unit is geographically separated from the other four units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 20—*Cyanea koolauensis*—a

This unit is critical habitat for *Cyanea koolauensis* and is 468 ha (1,157 ac) on private and State land (Sacred Falls State Park, Kaipapau Forest Reserve, and Kahuku Forest Reserve). This unit contains a portion of Kawailoa Trail, Puu Kainapuaa, and Koolau Summit Trail. This unit provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Cyanea koolauensis* and is currently occupied by 46 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, slopes, stream banks, and ridge crests in wet *Metrosideros polymorpha-Dicranopteris linearis* forest or shrubland. This unit is geographically separated from the other three units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 20—*Cyanea koolauensis*—b

This unit is critical habitat for *Cyanea koolauensis* and is 322 ha (799 ac) on private and State land (Ewa Forest Reserve and Waiahole Forest Reserve), containing a portion of Eleao Summit. This unit provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Cyanea koolauensis* and is currently occupied by 4 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population,

which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, slopes, stream banks, and ridge crests in wet *Metrosideros polymorpha-Dicranopteris linearis* forest or shrubland. This unit is geographically separated from the other three units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 35—*Cyanea koolauensis*—c

This unit is critical habitat for *Cyanea koolauensis* and is 209 ha (517 ac) on State land (Honolulu Watershed Forest Reserve). This unit contains a portion of Konahuanui Summit and Manoa Falls. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Cyanea koolauensis* and is currently occupied by 10 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, slopes, stream banks, and ridge crests in wet *Metrosideros polymorpha-Dicranopteris linearis* forest or shrubland. This unit is geographically separated from the other three units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 35—*Cyanea koolauensis*—d

This unit is critical habitat for *Cyanea koolauensis* and is 312 ha (770 ac) on private and State land (Honolulu Watershed Forest Reserve). This unit contains a portion of Kaa Crater, Kainawaunui Summit, Palikea Summit, and Puu Lanipo. This unit provides habitat for two populations of 300 mature, reproducing individuals of the short-lived perennial *Cyanea koolauensis* and is currently occupied by seven individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, slopes, stream banks, and

ridge crests in wet *Metrosideros polymorpha-Dicranopteris linearis* forest or shrubland. This unit is geographically separated from the other three units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 4—*Cyanea longiflora*—a

This unit is critical habitat for *Cyanea longiflora* and is 362 ha (894 ac) on State land (Mokuleia Forest Reserve and Pahole Kaala NARs). This unit contains a portion of Kamaohanui Summit. This unit provides habitat for 4 populations of 300 mature, reproducing individuals of the short-lived perennial *Cyanea longiflora* and is currently occupied by 3 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep slopes, bases of cliffs, or ridge crests in mesic *Acacia koa-Metrosideros polymorpha* lowland forest. This unit is geographically separated from the other two units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 4—*Cyanea longiflora*—b

This unit is critical habitat for *Cyanea longiflora* and is 61 ha (150 ac) on State land (Waianae Kai Forest Reserve). This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Cyanea longiflora* and is currently occupied by 15 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep slopes, bases of cliffs, or ridge crests in mesic *Acacia koa-Metrosideros polymorpha* lowland forest. This unit is geographically separated from the other two units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 19—*Cyanea longiflora*—c

This unit is critical habitat for *Cyanea longiflora* and is 324 ha (801 ac) on private and State land (Pupukea-Paumalu Forest Reserve). This unit provides habitat for 3 populations of 300 mature, reproducing individuals of the short-lived perennial *Cyanea longiflora* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep slopes, bases of cliffs, or ridge crests in mesic *Acacia koa-Metrosideros polymorpha* lowland forest. This unit is geographically separated from the other two units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 15—*Cyanea pinnatifida*—a

This unit is critical habitat for *Cyanea pinnatifida* and is 154 ha (380 ac) on private land (Honouliuli Preserve). This unit provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Cyanea pinnatifida* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep, wet, rocky slopes in diverse mesic forest. Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other two units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 15—*Cyanea pinnatifida*—b

This unit is critical habitat for *Cyanea pinnatifida* and is 42 ha (104 ac) on private land (Honouliuli Preserve). This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Cyanea pinnatifida* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery

goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep, wet, rocky slopes in diverse mesic forest. Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other two units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 15—*Cyanea pinnatifida*—c

This unit is critical habitat for *Cyanea pinnatifida* and is 129 ha (318 ac) on State and private land (Honouliuli Preserve). This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Cyanea pinnatifida* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep, wet, rocky slopes in diverse mesic forest. Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other two units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 20—*Cyanea st.-johnii*—a

This unit is critical habitat for *Cyanea st.-johnii* and is 697 ha (1,723 ac) on private, Federal (Oahu Forest National Wildlife Refuge), and State land (Hauula Forest Reserve, Sacred Falls State Park, Kahana Valley State Park, and Waiahole Forest Reserve). This unit contains a portion of Eleao Summit, Puu Kaaumakua Summit, and Puu Pauao Summit. This unit provides habitat for 6 populations of 300 mature, reproducing individuals of the short-lived perennial *Cyanea st.-johnii* and is currently occupied by 44 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, wet, windswept slopes and

ridges in *Metrosideros polymorpha* mixed lowland shrubland or *Metrosideros polymorpha-Dicranopteris linearis* lowland shrubland. This unit is geographically separated from the other unit designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 35—*Cyanea st.-johnii*—b

This unit is critical habitat for *Cyanea st.-johnii* and is 135 ha (334 ac) on private and State land (Honolulu Watershed Forest Reserve). This unit contains a portion of Kainawaaunui Summit, Konahuanui Summit, Mount Olympus, Palikea Summit, and Puu Lanipo Summit. This unit provides habitat for 3 populations of 300 mature, reproducing individuals of the short-lived perennial *Cyanea st.-johnii* and is currently occupied by 12 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, wet, windswept slopes and ridges in *Metrosideros polymorpha* mixed lowland shrubland or *Metrosideros polymorpha-Dicranopteris linearis* lowland shrubland. This unit is geographically separated from the other unit designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 4—*Cyanea superba*—a

This unit is critical habitat for *Cyanea superba* and is 303 ha (747 ac) on State land (Mokuleia Forest Reserve and Pahole NAR). This unit provides habitat for 4 populations of 300 mature, reproducing individuals of the short-lived perennial *Cyanea superba* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, sloping terrain on well drained rocky substrate within mesic forest. This unit is geographically separated from the other three units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from

being destroyed by one naturally occurring catastrophic event.

Oahu 4—*Cyanea superba*—b

This unit is critical habitat for *Cyanea superba* and is 115 ha (286 ac) on State land (Mokuleia Forest Reserve and Pahole NAR). This unit provides habitat for 4 populations of 300 mature, reproducing individuals of the short-lived perennial *Cyanea superba* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, sloping terrain on well drained rocky substrate within mesic forest. This unit is geographically separated from the other three units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 4—*Cyanea superba*—c

This unit is critical habitat for *Cyanea superba* and is 184 ha (456 ac) on private and State land (Mokuleia Forest Reserve and Kaala NAR). This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Cyanea superba* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, sloping terrain on well drained rocky substrate within mesic forest. This unit is geographically separated from the other three units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 35—*Cyanea superba*—d

This unit is critical habitat for *Cyanea superba* and is 281 ha (697 ac) on private and State land (Honolulu Watershed Forest Reserve). This unit provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Cyanea superba* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations

on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, sloping terrain on well drained rocky substrate within mesic forest. This unit is geographically separated from the other three units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 20—*Cyanea truncata*—a

This unit is critical habitat for *Cyanea truncata* and is 2,029 ha (5,019 ac) on private and State land (Sacred Falls State Park, Kaipapau Forest Reserve, Hauula Forest Reserve, Kahana Valley State Park, and Waiahole Forest Reserve). This unit contains a portion of Castle Trail, Puu Pauao, Sacred Falls, Sacred Falls Trail, and Waiahole Ditch Tunnel. This unit provides habitat for 9 populations of 300 mature, reproducing individuals of the short-lived perennial *Cyanea truncata* and is currently occupied by one plant. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, windward slopes and stream banks in mesic to wet forests. This unit is geographically separated from the other unit designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 21—*Cyanea truncata*—b

This unit is critical habitat for *Cyanea truncata* and is 210 ha (520 ac) on private and State land (Kahana Valley State Park), containing a portion of Hidden Valley. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Cyanea truncata* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, windward slopes and stream banks in mesic to wet forests. This unit is geographically separated from the other unit designated as critical habitat for this island-endemic species,

in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 1—*Cyperus trachysanthos*—a

This unit is critical habitat for *Cyperus trachysanthos* and is 78 ha (194 ac) on State land, containing a portion of Kaena Point. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Cyperus trachysanthos* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, seasonally wet sites (mud flats, wet clay soil, seasonal ponds, or wet cliff seeps) on seepy flats, coastal cliffs, or talus slopes. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Kauai and Niihau for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 28—*Cyperus trachysanthos*—b

This unit is critical habitat for *Cyperus trachysanthos* and is 8 ha (20 ac) on State land, containing a portion of Nonoula Crater. This unit, in combination with unit Oahu 29—*Cyperus trachysanthos*—c, provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Cyperus trachysanthos* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, seasonally wet sites (mud flats, wet clay soil, seasonal ponds, or wet cliff seeps) on seepy flats, coastal cliffs, or talus slopes. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Kauai and Niihau for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 29—*Cyperus trachysanthos*—c

This unit is critical habitat for *Cyperus trachysanthos* and is 4 ha (10 ac) on State land, containing a portion of Ihelhelauakea Crater. This unit, in combination with unit Oahu 28—

Cyperus trachysanthos—b, provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Cyperus trachysanthos* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, seasonally wet sites (mud flats, wet clay soil, seasonal ponds, or wet cliff seeps) on seepy flats, coastal cliffs, or talus slopes. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Kauai and Niihau for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 36—*Cyperus trachysanthos*—d

This unit is critical habitat for *Cyperus trachysanthos* and is 5 ha (13 ac) on State land (Diamond Head State Park), containing a portion of Diamond Head. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Cyperus trachysanthos* and is currently occupied by 40 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, seasonally wet sites (mud flats, wet clay soil, seasonal ponds, or wet cliff seeps) on seepy flats, coastal cliffs, or talus slopes. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Kauai and Niihau for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Cyrtandra dentata*—a

This unit is critical habitat for *Cyrtandra dentata* and is 307 ha (758 ac) on State land (Mokuleia Forest Reserve and Pahole NAR). This unit provides habitat for 3 populations of 300 mature, reproducing individuals of the short-lived perennial *Cyrtandra dentata* and is currently occupied by 20 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered

nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, gulches, slopes, stream banks, or ravines in mesic or wet forest. This unit is geographically separated from Army lands at Kawaihoa Training Area that provide habitat for five populations of this species, in order to avoid all populations from being destroyed by one naturally occurring catastrophic event (see “Analysis of Impacts Under Section 4(b)(2): Other Impacts”).

Oahu 35—*Cyrtandra polyantha*—a

This unit is critical habitat for *Cyrtandra polyantha* and is 190 ha (469 ac) on private and State land (Honolulu Watershed Forest Reserve and Kuliouou Forest Reserve), containing a portion of Puu o Kona. This unit provides habitat for 5 populations of 300 mature, reproducing individuals of the short-lived perennial *Cyrtandra polyantha* and is currently occupied by 3 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, ridges in *Metrosideros polymorpha* mesic or wet forests. We do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species.

Oahu 20—*Cyrtandra subumbellata*—a

This unit is critical habitat for *Cyrtandra subumbellata* and is 829 ha (1,457 ac) on private and State land (Hauula Forest Reserve, Sacred Falls State Park, Kaipapau Forest Reserve, Kahana Valley State Park, and Ewa Forest Reserve), containing a portion of Castle Trail, Puu Kaaumakua, and Puu Pauao. This unit provides habitat for 6 populations of 300 mature, reproducing individuals of the short-lived perennial *Cyrtandra subumbellata* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, moist slopes or gulch bottoms in wet forest dominated by *Metrosideros polymorpha* or a mixture of *Metrosideros polymorpha*-*Dicranopteris linearis*-*Acacia koa*. Although we do not believe that enough

habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other unit designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 20—*Cyrtandra subumbellata*—b

This unit is critical habitat for *Cyrtandra subumbellata* and is 67 ha (167 ac) on State land. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Cyrtandra subumbellata* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, moist slopes or gulch bottoms in wet forest dominated by *Metrosideros polymorpha* or a mixture of *Metrosideros polymorpha-Dicranopteris linearis-Acacia koa*. Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other unit designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 20—*Cyrtandra viridiflora*—a

This unit is critical habitat for *Cyrtandra viridiflora* and is 782 ha (1,932 ac) on private and State land (Hauula Forest Reserve, Sacred Falls State Park, Kaipapau Forest Reserve, Kahana Valley State Park, and Ewa Forest Reserve). This unit contains Puu Kaaumakua, Puu Pauao, and portions of the Koolau Summit Trail. This unit provides habitat for 5 populations of 300 mature, reproducing individuals of the short-lived perennial *Cyrtandra viridiflora* and is currently occupied by 33 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, moist slopes or gulch bottoms in wet forest dominated by *Metrosideros polymorpha* or a mixture of *Metrosideros polymorpha-Dicranopteris linearis-Acacia koa*.

Oahu 4—*Delissea subcordata*—a

This unit is critical habitat for *Delissea subcordata* and is 764 ha (1,885 ac) on private and State land (Mokuleia Forest Reserve and Pahole and Kaala NARs). This unit contains no named natural features. This unit provides habitat for 4 populations of 300 mature, reproducing individuals of the short-lived perennial *Delissea subcordata* and is currently occupied by 4 plants. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, moderate to steep gulch slopes in mixed mesic forests. This unit is geographically separated from the other five units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 15—*Delissea subcordata*—b

This unit is critical habitat for *Delissea subcordata* and is 220 ha (545 ac) on private land (Honouliuli Preserve). This unit, in combination with unit Oahu 15—*Delissea subcordata*—c, provides habitat for 3 populations of 300 mature, reproducing individuals of the short-lived perennial *Delissea subcordata* and is currently occupied by 9 plants. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, moderate to steep gulch slopes in mixed mesic forests. This unit is geographically separated from the other five units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 15—*Delissea subcordata*—c

This unit is critical habitat for *Delissea subcordata* and is 32 ha (78 ac) on private land (Honouliuli Preserve). This unit, in combination with unit Oahu 15—*Delissea subcordata*—b, provides habitat for 3 populations of 300 mature, reproducing individuals of

the short-lived perennial *Delissea subcordata* and is currently occupied by 3 plants. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, moderate to steep gulch slopes in mixed mesic forests. This unit is geographically separated from the other five units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 15—*Delissea subcordata*—d

This unit is critical habitat for *Delissea subcordata* and is 81 ha (200 ac) on private land (Honouliuli Preserve). This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Delissea subcordata* and is currently occupied by 3 plants. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, moderate to steep gulch slopes in mixed mesic forests. This unit is geographically separated from the other five units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 35—*Delissea subcordata*—e

This unit is critical habitat for *Delissea subcordata* and is 292 ha (721 ac) on private and State land (Honouliuli Preserve), containing a portion of Mauumae Ridge. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Delissea subcordata* and is currently unoccupied. This unit is essential to the conservation of the species because it includes habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery. The habitat features contained in this unit that are essential for this species include, but are not limited to, moderate to steep gulch slopes in mixed mesic forests. This unit is geographically

separated from the other five units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 35—*Delissea subcordata*—f

This unit is critical habitat for *Delissea subcordata* and is 129 ha (317 ac) on State and private land. This unit contains a portion of Kulepiamoa Ridge, Pia Valley, and Kupaua Valley. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Delissea subcordata* and is currently unoccupied. This unit is essential to the conservation of the species because it includes habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery. The habitat features contained in this unit that are essential for this species include, but are not limited to, moderate to steep gulch slopes in mixed mesic forests. This unit is geographically separated from the other five units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 35—*Diellia erecta*—a

This unit is critical habitat for *Diellia erecta* and is 293 ha (731 ac) on private and State land (Honolulu Watershed Forest Reserve). This unit contains a portion of Kulepiamoa Ridge and Laulaupoe Gulch. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Diellia erecta* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, moderate to steep gulch slopes or sparsely vegetated rock faces in mesic forest. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Kauai, Molokai, and Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Diellia falcata*—a

This unit is critical habitat for *Diellia falcata* and is 59 ha (148 ac) on State land (Pahole NAR and Mokuleia Forest Reserve). This unit provides habitat for one population of 300 mature,

reproducing individuals of the short-lived perennial *Diellia falcata* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, deep shade or open understory on moderate to moderately steep slopes and gulch bottoms in diverse mesic forest. This unit is geographically separated from the other three units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 4—*Diellia falcata*—b

This unit is critical habitat for *Diellia falcata* and is 22 ha (54 ac) on State land (Pahole NAR and Mokuleia Forest Reserve). This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Diellia falcata* and is currently occupied by 20 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, deep shade or open understory on moderate to moderately steep slopes and gulch bottoms in diverse mesic forest. This unit is geographically separated from the other three units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 15—*Diellia falcata*—c

This unit is critical habitat for *Diellia falcata* and is 341 ha (844 ac) on State, Federal (Lualualei Naval Reservation), and private land (Honouliuli Preserve). This unit contains a portion of Puu Hapapa, Puu Kanehoa, and Puu Kaua. This unit provides habitat for 4 populations of 300 mature, reproducing individuals of the short-lived perennial *Diellia falcata* and is currently occupied by 297 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features

contained in this unit that are essential for this species include, but are not limited to, deep shade or open understory on moderate to moderately steep slopes and gulch bottoms in diverse mesic forest. This unit is geographically separated from the other three units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 15—*Diellia falcata*—d

This unit is critical habitat for *Diellia falcata* and is 178 ha (437 ac) on State, Federal (Lualualei Naval Reservation), and private land (Honouliuli Preserve), containing a portion of Palikea Summit. This unit provides habitat for 3 populations of 300 mature, reproducing individuals of the short-lived perennial *Diellia falcata* and is currently occupied by 1,230 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and habitat that is necessary to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, deep shade or open understory on moderate to moderately steep slopes and gulch bottoms in diverse mesic forest. This unit is geographically separated from the other three units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 15—*Diellia unisora*—a

This unit is critical habitat for *Diellia unisora* and is 362 ha (894 ac) on State, Federal (Lualualei Naval Reservation), and private land (Honouliuli Preserve). This unit contains a portion of Palikea Summit, Laikea Trail, Pohakea Pass, Puu Kanehoa, and Puu Kaua. This unit provides habitat for 6 populations of 300 mature, reproducing individuals of the short-lived perennial *Diellia unisora* and is currently occupied by 697 plants. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the establishment of additional populations. The habitat features contained in this unit that are essential for this species include, but are not limited to, moderate to steep slopes or gulch bottoms in deep shade or open understory in mesic forest. We do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, but this unit is large enough that one naturally occurring

catastrophic event is unlikely to destroy habitat for all six populations.

Oahu 4—*Diplazium molokaiense*—a

This unit is critical habitat for *Diplazium molokaiense* and is 139 ha (340 ac) on State land (Mokuleia Forest Reserve, Kaala NAR, and Waianae Kai Forest Reserve). This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Diplazium molokaiense* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep, rocky, wooded gulch walls in wet forests. This unit is geographically separated from critical habitat designated on Kauai, Molokai, and Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Dubautia herbstobatae*—a

This unit is critical habitat for *Dubautia herbstobatae* and is 12 ha (29 ac) on State land (Makua Keauu Forest Reserve). This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Dubautia herbstobatae* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, rock outcrops, ridges, moderate slopes, or vertical cliffs in dry or mesic shrubland. Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other two units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event. In addition, this unit is geographically separated from Army lands at Makua Military Reservation that provide habitat for two populations of this species (see “*Analysis of Impacts Under Section 4(b)(2): Other Impacts*”).

Oahu 4—*Dubautia herbstobatae*—b

This unit is critical habitat for *Dubautia herbstobatae* and is 76 ha (191 ac) on private and State land (Waianae

Kai Forest Reserve), containing a portion of Puu Kawiwi Summit. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Dubautia herbstobatae* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, rock outcrops, ridges, moderate slopes, or vertical cliffs in dry or mesic shrubland. Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other two units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event. In addition, this unit is geographically separated from Army lands at Makua Military Reservation that provide habitat for two populations of this species (see “*Analysis of Impacts Under Section 4(b)(2): Other Impacts*”).

Oahu 7—*Dubautia herbstobatae*—c

This unit is critical habitat for *Dubautia herbstobatae* and is 3 ha (7 ac) on State land (Makua Keauu Forest Reserve). This unit provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Dubautia herbstobatae* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, rock outcrops, ridges, moderate slopes, or vertical cliffs in dry or mesic shrubland. Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other two units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event. In addition, this unit is geographically separated from Army lands at Makua Military Reservation that provide habitat for two populations of this species (see “*Analysis of Impacts Under Section 4(b)(2): Other Impacts*”).

Oahu 4—*Eragrostis fosbergii*—a

This unit is critical habitat for *Eragrostis fosbergii* and is 81 ha (199 ac) on State (Waianae Kai Forest Reserve) land. This unit contains no named natural features. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Eragrostis fosbergii* and is currently occupied by 6 plants. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, ridge crests or moderate slopes in dry or mesic forests. We do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species.

Oahu 4—*Eugenia koolauensis*—a

This unit is critical habitat for *Eugenia koolauensis* and is 114 ha (280 ac) on State land, containing a portion of Kaukonahua Stream. This unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Eugenia koolauensis* and is currently occupied by 2 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, gentle to steep slopes or ridges in mesic or dry forests dominated by *Metrosideros polymorpha* or *Diospyros* sp. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Molokai for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 19—*Eugenia koolauensis*—b

This unit is critical habitat for *Eugenia koolauensis* and is 149 ha (369 ac) on private and State (Pupukea-Paumalu Forest Reserve) land, containing a portion of Mount Kawela. This unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Eugenia koolauensis* and is currently occupied by 8 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes

habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, gentle to steep slopes or ridges in mesic or dry forests dominated by *Metrosideros polymorpha* or *Diospyros* sp. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Molokai for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 20—*Eugenia koolauensis*—c

This unit is critical habitat for *Eugenia koolauensis* and is 122 ha (303 ac) on private and State (Hauula Forest Reserve) land. This unit contains no named natural features. This unit provides habitat for 2 populations of 100 mature, reproducing individuals of the long-lived perennial *Eugenia koolauensis* and is currently occupied by 2 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, gentle to steep slopes or ridges in mesic or dry forests dominated by *Metrosideros polymorpha* or *Diospyros* sp. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Molokai for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 3—*Euphorbia haeleeleana*—a

This unit is critical habitat for *Euphorbia haeleeleana* and is 14 ha (38 ac) on State (Kaena State Park, Kuaokala Forest Reserve) land. This unit contains no named natural features. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Euphorbia haeleeleana* and is currently occupied by 50 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. It provides habitat for the easternmost range of the species. The habitat features contained in this unit that are essential for this species include, but are not limited to, dry forest dominated by *Diospyros* sp.

This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Kauai for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Euphorbia haeleeleana*—b

This unit is critical habitat for *Euphorbia haeleeleana* and is 356 ha (881 ac) on private and State (Mokuleia Forest Reserve) land. This unit contains no named natural features. This unit provides habitat for 3 populations of 300 mature, reproducing individuals of the short-lived perennial *Euphorbia haeleeleana* and is currently occupied by 49 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. It provides habitat for the easternmost range of the species. The habitat features contained in this unit that are essential for this species include, but are not limited to, dry forest dominated by *Diospyros* sp. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Kauai for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Flueggea neowawraea*—a

This unit is critical habitat for *Flueggea neowawraea* and is 845 ha (2,087 ac) on State (Mokuleia Forest Reserve and Pahole and Kaala NARs) land. This unit contains no named natural features. This unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Flueggea neowawraea* and is currently occupied by 10 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, gulch slopes, ridge crests, or areas near streams in dry or mesic forest. This unit is geographically separated from critical habitat designated on Kauai, Molokai, and Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 15—*Gardenia mannii*—a

This unit is critical habitat for *Gardenia mannii* and is 266 ha (658 ac) on private (Honouliuli Preserve) land, containing Honouliuli Contour Trail. This unit provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Gardenia mannii* and is currently occupied by 4 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, moderate to moderately steep gulch slopes, ridge crests, gulch bottoms, and stream banks in mesic or wet forests. This unit is geographically separated from the other two units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event. This unit is also geographically separated from Army lands at Schofield Barracks and Kawaihoa that provide habitat for six populations of this species.

Oahu 20—*Gardenia mannii*—b

This unit is critical habitat for *Gardenia mannii* and is 206 ha (510 ac) on private land, containing Kaluakauila Gulch. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Gardenia mannii* and is currently occupied by 2 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, moderate to moderately steep gulch slopes, ridge crests, gulch bottoms, and stream banks in mesic or wet forests. This unit is geographically separated from the other two units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event. This unit is also geographically separated from Army lands at Schofield Barracks and Kawaihoa that provide habitat for six populations of this species.

Oahu 20—*Gardenia mannii*—c

This unit is critical habitat for *Gardenia mannii* and is 1,311 ha (3,239 ac) on private land, containing a portion of Puu Kamana. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Gardenia mannii* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, moderate to moderately steep gulch slopes, ridge crests, gulch bottoms, and stream banks in mesic or wet forests. This unit is geographically separated from the other two units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event. This unit is also geographically separated from Army lands at Schofield Barracks and Kawaihoa that provide habitat for six populations of this species.

Oahu 4—*Gouania meyenii*—a

This unit is critical habitat for *Gouania meyenii* and is 47 ha (118 ac) on State (Waianae Kai Forest Reserve) land. This unit contains no named natural features. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Gouania meyenii* and is currently occupied by 62 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. It provides habitat for the easternmost range of the species. The habitat features contained in this unit that are essential for this species include, but are not limited to, moderate to steep slopes in dry shrubland or mesic lowland forest. This unit is geographically separated from the other units designated on Oahu and Kauai as critical habitat for this multi-island species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 4—*Gouania meyenii*—b

This unit is critical habitat for *Gouania meyenii* and is 39 ha (96 ac) on State (Waianae Kai Forest Reserve) land. This unit contains no named natural features. This unit provides habitat for

one population of 300 mature, reproducing individuals of the short-lived perennial *Gouania meyenii* and is currently occupied by 3 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. It provides habitat for the easternmost range of the species. The habitat features contained in this unit that are essential for this species include, but are not limited to, moderate to steep slopes in dry shrubland or mesic lowland forest. This unit is geographically separated from the other units designated on Oahu and Kauai as critical habitat for this multi-island species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 15—*Gouania meyenii*—c

This unit is critical habitat for *Gouania meyenii* and is 208 ha (515 ac) on Federal (Luahalei Naval Reservation), State, and private (Honouliuli Preserve) land, containing a portion of Puu Hapapa and Puu Kanehoa. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Gouania meyenii* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. It provides habitat for the easternmost range of the species. The habitat features contained in this unit that are essential for this species include, but are not limited to, moderate to steep slopes in dry shrubland or mesic lowland forest. This unit is geographically separated from the other units designated on Oahu and Kauai as critical habitat for this multi-island species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 31—*Gouania meyenii*—d

This unit is critical habitat for *Gouania meyenii* and is 116 ha (286 ac) on State (Diamond Head State Park) land, containing a portion of Kuilei Cliffs. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Gouania meyenii* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations

on Oahu in order to reach recovery goals. It provides habitat for the easternmost range of the species. The habitat features contained in this unit that are essential for this species include, but are not limited to, moderate to steep slopes in dry shrubland or mesic lowland forest. This unit is geographically separated from the other units designated on Oahu and Kauai as critical habitat for this multi-island species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 2—*Gouania vitifolia*—a

This unit is critical habitat for *Gouania vitifolia* and is 20 ha (49 ac) on State (Kaena Point State Park and Kuaokala Forest Reserve) land. This unit contains no named natural features. This unit, along with Oahu 3—*Gouania vitifolia*—b, provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Gouania vitifolia* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. It provides habitat for the westernmost range of the species. The habitat features contained in this unit that are essential for this species include, but are not limited to, sides of ridges or gulches in dry to mesic forests. This unit is geographically separated from critical habitat designated elsewhere on Oahu and Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 3—*Gouania vitifolia*—b

This unit is critical habitat for *Gouania vitifolia* and is 48 ha (120 ac) on State (Kuaokala Forest Reserve) land. This unit contains no named natural features. This unit, along with Oahu 2—*Gouania vitifolia*—a, provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Gouania vitifolia* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, sides of ridges or gulches in dry to mesic forests. This unit is geographically separated from critical habitat designated elsewhere on Oahu and Maui for this species in order to avoid all recovery populations being

destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Gouania vitifolia*—c

This unit is critical habitat for *Gouania vitifolia* and is 196 ha (482 ac) on private and State (Mokuleia Forest Reserve) land. This unit contains no named natural features. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Gouania vitifolia* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, sides of ridges or gulches in dry to mesic forests. This unit is geographically separated from critical habitat designated elsewhere on Oahu and Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Gouania vitifolia*—d

This unit is critical habitat for *Gouania vitifolia* and is 85 ha (208 ac) on State (Waianae Kai Forest Reserve) land. This unit contains no named natural features. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Gouania vitifolia* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, sides of ridges or gulches in dry to mesic forests. This unit is geographically separated from critical habitat designated elsewhere on Oahu and Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Gouania vitifolia*—e

This unit is critical habitat for *Gouania vitifolia* and is 102 ha (252 ac) on State land in the Waianae Kai area. This unit contains no named natural features. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Gouania vitifolia* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of

additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, sides of ridges or gulches in dry to mesic forests. This unit is geographically separated from critical habitat designated elsewhere on Oahu and Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Gouania vitifolia*—f

This unit is critical habitat for *Gouania vitifolia* and is 27 ha (67 ac) on State (Waianae Kai Forest Reserve) land. This unit contains no named natural features. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Gouania vitifolia* and is currently occupied by one individual. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, sides of ridges or gulches in dry to mesic forests. This unit is geographically separated from critical habitat designated elsewhere on Oahu and Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 5—*Gouania vitifolia*—g

This unit is critical habitat for *Gouania vitifolia* and is 17 ha (43 ac) on private and State land in the Waianae Kai area. This unit contains no named natural features. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Gouania vitifolia* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, sides of ridges or gulches in dry to mesic forests. This unit is geographically separated from critical habitat designated elsewhere on Oahu and Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 8—*Gouania vitifolia*—h

This unit is critical habitat for *Gouania vitifolia* and is 64 ha (158 ac) on private and State (Makua Keaau Forest Reserve) land. This unit contains no named natural features. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Gouania vitifolia* and is currently occupied by 45 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, sides of ridges or gulches in dry to mesic forests. This unit is geographically separated from critical habitat designated elsewhere on Oahu and Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 15—*Hedyotis coriacea*—a

This unit is critical habitat for *Hedyotis coriacea* and is 185 ha (458 ac) on private (Honouliuli Preserve) land. This unit contains no named natural features. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Hedyotis coriacea* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. It provides habitat for the westernmost range of the species. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep, rocky slopes in dry to mesic *Dodonaea viscosa* dominated shrublands or forests. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 35—*Hedyotis coriacea*—b

This unit is critical habitat for *Hedyotis coriacea* and is 164 ha (404 ac) on State and private land, containing a portion of Kulepiamoa Ridge. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Hedyotis coriacea* and is currently unoccupied. This unit is essential to the conservation of the species because it supports

habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. It provides habitat for the westernmost range of the species. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep, rocky slopes in dry to mesic *Dodonaea viscosa* dominated shrublands or forests. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Hedyotis degeneri*—a

This unit is critical habitat for *Hedyotis degeneri* and is 917 ha (2,265 ac) on State (Mokuleia Forest Reserve and Kaala and Pahole NARs) land. This unit contains no named natural features. This unit provides habitat for 8 populations of 300 mature, reproducing individuals of the short-lived perennial *Hedyotis degeneri* and is currently occupied by 201 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, ridge crests in diverse mesic forest. This unit is geographically separated from the other unit designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event. In addition, this unit is extensive enough that one catastrophic event would be unlikely to affect habitat for all eight populations.

Oahu 4—*Hedyotis degeneri*—b

This unit is critical habitat for *Hedyotis degeneri* and is 12 ha (29 ac) on State (Waianae Kai Forest Reserve) land. This unit contains no named natural features. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Hedyotis degeneri* and is currently occupied by 6 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are

not limited to, ridge crests in diverse mesic forest. This unit is geographically separated from the other unit designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 4—*Hedyotis parvula*—a

This unit is critical habitat for *Hedyotis parvula* and is 387 ha (956 ac) on State (Mokuleia Forest Reserve and Kaala NAR) land and contains a portion of Dupont Trail and Kamaohanui Summit. This unit provides habitat for 4 populations of 300 mature, reproducing individuals of the short-lived perennial *Hedyotis parvula* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, cliff faces or their bases, rock outcrops, or ledges in mesic habitat. This unit is geographically separated from the other three units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 15—*Hedyotis parvula*—b

This unit is critical habitat for *Hedyotis parvula* and is 8 ha (19 ac) on State land, containing a portion of Puu Hapapa. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Hedyotis parvula* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, cliff faces or their bases, rock outcrops, or ledges in mesic habitat. This unit is geographically separated from the other three units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 15—*Hedyotis parvula*—c

This unit is critical habitat for *Hedyotis parvula* and is 95 ha (236 ac) on Federal (Lualualei Naval Reservation), State, and private (Honouliuli Preserve) land, containing a

portion of Puu Kaua and Puu Kanehoa. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Hedyotis parvula* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, cliff faces or their bases, rock outcrops, or ledges in mesic habitat. This unit is geographically separated from the other three units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 15—*Hedyotis parvula*—d

This unit is critical habitat for *Hedyotis parvula* and is 50 ha (122 ac) on State and Federal (Lualualei Naval Reservation) land, containing a portion of Palikea Summit. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Hedyotis parvula* and is currently occupied by 4 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, cliff faces or their bases, rock outcrops, or ledges in mesic habitat. This unit is geographically separated from the other three units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 4—*Hesperomannia arborescens*—a

This unit is critical habitat for *Hesperomannia arborescens* and is 125 ha (308 ac) on private and State (Kaala NAR) land, containing a portion of Kamaohanui Summit. This unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Hesperomannia arborescens* and is currently occupied by 5 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. It provides

habitat for the westernmost range of the species. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep slopes, ridge tops, or gulches in lowland wet forests or shrublands. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Molokai for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 20—*Hesperomannia arborescens*—b

This unit is critical habitat for *Hesperomannia arborescens* and is 589 ha (1,456 ac) on private and State (Hauula Forest Reserve, Sacred Falls State Park, and Kaipapau Forest Reserve) land, containing a portion of Sacred Falls. This unit provides habitat for 2 populations of 100 mature, reproducing individuals of the long-lived perennial *Hesperomannia arborescens* and is currently occupied by 24 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. It provides habitat for the westernmost range of the species. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep slopes, ridge tops, or gulches in lowland wet forests or shrublands. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Molokai for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Hesperomannia arbuscula*—a

This unit is critical habitat for *Hesperomannia arbuscula* and is 597 ha (1,472 ac) on State (Mokuleia Forest Reserve and Pahole and Kaala NARs) land. This unit contains no named natural features. This unit provides habitat for 2 populations of 100 mature, reproducing individuals of the long-lived perennial *Hesperomannia arbuscula* and is currently occupied by 13 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. It provides habitat for the westernmost range of the species. The habitat features contained in this unit that are essential for this species include, but are not limited to, slopes or ridges in dry to wet forest

dominated by *Acacia koa* or *Metrosideros polymorpha*. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Hesperomannia arbuscula*—b

This unit is critical habitat for *Hesperomannia arbuscula* and is 32 ha (78 ac) on State (Waianae Kai Forest Reserve) land. This unit contains no named natural features. This unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Hesperomannia arbuscula* and is currently occupied by 70 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. It provides habitat for the westernmost range of the species. The habitat features contained in this unit that are essential for this species include, but are not limited to, slopes or ridges in dry to wet forest dominated by *Acacia koa* or *Metrosideros polymorpha*. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 15—*Hesperomannia arbuscula*—c

This unit is critical habitat for *Hesperomannia arbuscula* and is 163 ha (402 ac) on Federal, State, and private (Honouliuli Preserve) land, containing a portion of Puu Kanehoa. This unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Hesperomannia arbuscula* and is currently occupied by 7 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. It provides habitat for the westernmost range of the species. The habitat features contained in this unit that are essential for this species include, but are not limited to, slopes or ridges in dry to wet forest dominated by *Acacia koa* or *Metrosideros polymorpha*. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Maui for this species in order to avoid all recovery populations being

destroyed by one naturally-occurring catastrophic event.

Oahu 15—*Hesperomannia arbuscula*—d

This unit is critical habitat for *Hesperomannia arbuscula* and is 25 ha (60 ac) on State and private (Honouliuli Preserve) land, containing a portion of Puu Kaua. This unit, in combination with Oahu 15—*Hesperomannia arbuscula*—e, provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Hesperomannia arbuscula* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. It provides habitat for the westernmost range of the species. The habitat features contained in this unit that are essential for this species include, but are not limited to, slopes or ridges in dry to wet forest dominated by *Acacia koa* or *Metrosideros polymorpha*. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 15—*Hesperomannia arbuscula*—e

This unit is critical habitat for *Hesperomannia arbuscula* and is 70 ha (172 ac) on State and private (Honouliuli Preserve) land, containing a portion of Palikea Summit and Palikea Trail. This unit, in combination with Oahu 15—*Hesperomannia arbuscula*—d, provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Hesperomannia arbuscula* and is currently occupied by 12 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. It provides habitat for the westernmost range of the species. The habitat features contained in this unit that are essential for this species include, but are not limited to, slopes or ridges in dry to wet forest dominated by *Acacia koa* or *Metrosideros polymorpha*. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 1—*Hibiscus brackenridgei*—a

This unit is critical habitat for *Hibiscus brackenridgei* and is 78 ha (193 ac) on State and private land, containing a portion of Peacock Flat Trail. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Hibiscus brackenridgei* and is currently occupied by 3 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. It provides habitat for the westernmost range of the species. The habitat features contained in this unit that are essential for *Hibiscus brackenridgei* ssp. *mokuleianus* include, but are not limited to, slopes, cliffs, or arid ledges in lowland dry forest or shrubland. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Molokai and Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Hibiscus brackenridgei*—b

This unit is critical habitat for *Hibiscus brackenridgei* and is 560 ha (1,385 ac) on private and State (Mokuleia Forest Reserve) land, containing a portion of Puu Iki. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Hibiscus brackenridgei* and is currently occupied by 158 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. It provides habitat for the westernmost range of the species. The habitat features contained in this unit that are essential for *Hibiscus brackenridgei* ssp. *mokuleianus* include, but are not limited to, slopes, cliffs, or arid ledges in lowland dry forest or shrubland. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Molokai and Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 5—*Hibiscus brackenridgei*—c

This unit is critical habitat for *Hibiscus brackenridgei* and is 23 ha (56 ac) on State and private land in the Waianae Kai area. This unit contains no named natural features. This unit

provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Hibiscus brackenridgei* and is currently occupied by 4 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. It provides habitat for the westernmost range of the species. The habitat features contained in this unit that are essential for *Hibiscus brackenridgei* ssp. *mokokaiana* include, but are not limited to, dry shrublands. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Molokai and Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Isodendron laurifolium*—a

This unit is critical habitat for *Isodendron laurifolium* and is 616 ha (1,524 ac) on State (Mokuleia Forest Reserve and Pahole and Kaala NARs) land, containing a portion of Dupont Trail. This unit provides habitat for 4 populations of 300 mature, reproducing individuals of the short-lived perennial *Isodendron laurifolium* and is currently occupied by 19 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, gulch slopes, ravines, or ridges in diverse mesic or dry forest dominated by *Metrosideros polymorpha*, *Acacia koa*, *Eugenia reinwardtiana*, or *Diospyros sandwicensis*. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Kauai for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Isodendron laurifolium*—b

This unit is critical habitat for *Isodendron laurifolium* and is 62 ha (154 ac) on State (Waianae Kai Forest Reserve) land. This unit contains no named natural features. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Isodendron laurifolium* and is currently occupied by 46 individuals. This unit is essential to the conservation of the species because

it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, gulch slopes, ravines, or ridges in diverse mesic or dry forest dominated by *Metrosideros polymorpha*, *Acacia koa*, *Eugenia reinwardtiana*, or *Diospyros sandwicensis*. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Kauai for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 35—*Isodendron laurifolium*—c

This unit is critical habitat for *Isodendron laurifolium* and is 277 ha (684 ac) on private and State (Honolulu Watershed Forest Reserve) land, containing a portion of Laulapoe Gulch. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Isodendron laurifolium* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. It provides habitat for the easternmost range of the species. The habitat features contained in this unit that are essential for this species include, but are not limited to, gulch slopes, ravines, or ridges in diverse mesic or dry forest dominated by *Metrosideros polymorpha*, *Acacia koa*, *Eugenia reinwardtiana*, or *Diospyros sandwicensis*. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Kauai for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Isodendron longifolium*—a

This unit is critical habitat for *Isodendron longifolium* and is 552 ha (1,363 ac) on private and State (Mokuleia Forest Reserve and Kaala NAR) land, containing a portion of Dupont Trail. This unit provides habitat for 3 populations of 300 mature, reproducing individuals of the short-lived perennial *Isodendron longifolium* and is currently occupied by 40 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently

considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep slopes or stream banks in mixed mesic or lowland wet *Metrosideros polymorpha-Dicranopteris linearis* forest. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Kauai for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 20—*Isodendron longifolium*—b

This unit is critical habitat for *Isodendron longifolium* and is 162 ha (399 ac) on private land. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Isodendron longifolium* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. It provides habitat for the easternmost range of the species. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep slopes or stream banks in mixed mesic or lowland wet *Metrosideros polymorpha-Dicranopteris linearis* forest. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Kauai for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 5—*Isodendron pyrifolium*—a

This unit is critical habitat for *Isodendron pyrifolium* and is 30 ha (74 ac) on State and private land in the Waianae Kai area. This unit contains no named natural features. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Isodendron pyrifolium* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. It provides habitat for the westernmost range of the species. The habitat features contained in this unit that are essential for this species include, but are not limited to, bare, rocky hills or wooded ravines in dry shrublands. This unit provides is geographically separated from critical habitat designated elsewhere on Oahu and on Molokai and Maui for this species in order to avoid all recovery

populations being destroyed by one naturally-occurring catastrophic event.

Oahu 16—*Isodendron pyrifolium*—b

This unit is critical habitat for *Isodendron pyrifolium* and is 130 ha (318 ac) on private and State (Nanakuli Forest Reserve) land. This unit contains no named natural features. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Isodendron pyrifolium* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. It provides habitat for the westernmost range of the species. The habitat features contained in this unit that are essential for this species include, but are not limited to, bare, rocky hills or wooded ravines in dry shrublands. This unit provides is geographically separated from critical habitat designated elsewhere on Oahu and on Molokai and Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 17—*Isodendron pyrifolium*—c

This unit is critical habitat for *Isodendron pyrifolium* and is 73 ha (181 ac) on State (Nanakuli Forest Reserve) land. This unit contains no named natural features. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Isodendron pyrifolium* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. It provides habitat for the westernmost range of the species. The habitat features contained in this unit that are essential for this species include, but are not limited to, bare, rocky hills or wooded ravines in dry shrublands. This unit provides is geographically separated from critical habitat designated elsewhere on Oahu and on Molokai and Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Labordia cyrtandrae*—a

This unit is critical habitat for *Labordia cyrtandrae* and is 161 ha (397 ac) on State (Mokuleia Forest Reserve, Kaala NAR, and Waianae Kai Forest Reserve) land, containing a portion of Kamaohanui Summit. This unit provides habitat for 4 populations of

300 mature, reproducing individuals of the short-lived perennial *Labordia cyrtandrae* and is currently occupied by 17 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, shady gulches, slopes, or glens in mesic to wet forests and shrublands dominated by *Metrosideros polymorpha*, *Diplopterygium pinnatum*, and/or *Acacia koa*. This unit is geographically separated from the other two units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 20—*Labordia cyrtandrae*—b

This unit is critical habitat for *Labordia cyrtandrae* and is 595 ha (1,473 ac) on private and State (Hauula Forest Reserve, Sacred Falls State Park, and Kaipapau Forest Reserve) land, containing a portion of the Koolau Summit Trail. This unit provides habitat for 4 populations of 300 mature, reproducing individuals of the short-lived perennial *Labordia cyrtandrae* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, shady gulches, slopes, or glens in mesic to wet forests and shrublands dominated by *Metrosideros polymorpha*, *Diplopterygium pinnatum*, and/or *Acacia koa*. This unit is geographically separated from the other two units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 20—*Labordia cyrtandrae*—c

This unit is critical habitat for *Labordia cyrtandrae* and is 617 ha (1,525 ac) on private and State (Waiahole Forest Reserve and Ewa Forest Reserve) land, containing a portion of Eleao, Nanaikaalaea, and Ulimakoli Summits. This unit provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Labordia cyrtandrae* and is currently occupied by one individual. This unit is essential to the conservation of the species because it supports an

extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, shady gulches, slopes, or glens in mesic to wet forests and shrublands dominated by *Metrosideros polymorpha*, *Diplopterygium pinnatum*, and/or *Acacia koa*. This unit is geographically separated from the other two units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 4—*Lepidium arbuscula*—a

This unit is critical habitat for *Lepidium arbuscula* and is 330 ha (813 ac) on State (Waianae Kai Forest Reserve) land, containing a portion of Kamaileunu Ridge, Puu Kawiwi, and Puu Kepauala. This unit provides habitat for 4 populations of 300 mature, reproducing individuals of the short-lived perennial *Lepidium arbuscula* and is currently occupied by 51 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, exposed ridge tops and cliff faces in mesic and dry vegetation communities. This unit is geographically separated from the other two units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 15—*Lepidium arbuscula*—b

This unit is critical habitat for *Lepidium arbuscula* and is 118 ha (293 ac) on Federal (Lualualei Naval Reservation), State, and private (Honouliuli Preserve) land, containing a portion of Puu Kaua. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Lepidium arbuscula* and is currently occupied by 150 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are

not limited to, exposed ridge tops and cliff faces in mesic and dry vegetation communities. This unit is geographically separated from the other two units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 15—*Lepidium arbuscula*—c

This unit is critical habitat for *Lepidium arbuscula* and is 99 ha (244 ac) on Federal (Lualualei Naval Reservation) and State land. This unit contains no named natural features. This unit provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Lepidium arbuscula* and is currently occupied by 613 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population. The habitat features contained in this unit that are essential for this species include, but are not limited to, exposed ridge tops and cliff faces in mesic and dry vegetation communities. This unit is geographically separated from the other two units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 4—*Lipochaeta lobata* var. *leptophylla*—a

This unit is critical habitat for *Lipochaeta lobata* var. *leptophylla* and is 139 ha (345 ac) on State (Waianae Kai Forest Reserve) land, containing a portion of Puu Kawiwi. This unit provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Lipochaeta lobata* var. *leptophylla* and is currently occupied by 2 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, cliffs, ridges, or slopes in dry or mesic shrubland. This unit is geographically separated from the other unit designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 15—*Lipochaeta lobata* var. *leptophylla*—b

This unit is critical habitat for *Lipochaeta lobata* var. *leptophylla* and is 534 ha (1,321 ac) on Federal (Lualualei Naval Reservation), State, and private (Honouliuli Preserve) land, containing a portion of Palikea Summit, Pohakea Pass, Puu Hapapa, Puu Kanehoa, and Puu Kaua. This unit provides habitat for 8 populations of 300 mature, reproducing individuals of the short-lived perennial *Lipochaeta lobata* var. *leptophylla* and is currently occupied by 144 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, cliffs, ridges, or slopes in dry or mesic shrubland. This unit is geographically separated from the other unit designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 4—*Lipochaeta tenuifolia*—a

This unit is critical habitat for *Lipochaeta tenuifolia* and is 23 ha (57 ac) on State (Makua Keau Forest Reserve) land. This unit contains no named natural features. This unit provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Lipochaeta tenuifolia* and is currently occupied by 50 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, ridge tops or bluffs in open areas or protected pockets of dry to mesic forest or shrublands. Although we do not believe that enough critical habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other two units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event. In addition, this unit is separated from Army lands at Makua Military Reservation that provide

habitat for one population of this species.

Oahu 4—*Lipochaeta tenuifolia*—b

This unit is critical habitat for *Lipochaeta tenuifolia* and is 66 ha (167 ac) on State (Kaala NAR) land. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Lipochaeta tenuifolia* and is currently occupied by 100 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, ridge tops or bluffs in open areas or protected pockets of dry to mesic forest or shrublands. Although we do not believe that enough critical habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other two units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event. In addition, this unit is separated from Army lands at Makua Military Reservation that provide habitat for one population of this species.

Oahu 4—*Lipochaeta tenuifolia*—c

This unit is critical habitat for *Lipochaeta tenuifolia* and is 118 ha (292 ac) on State (Waianae Kai Forest Reserve) land. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Lipochaeta tenuifolia* and is currently occupied by 150 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, ridge tops or bluffs in open areas or protected pockets of dry to mesic forest or shrublands. Although we do not believe that enough critical habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other two units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event. In addition, this unit

is separated from Army lands at Makua Military Reservation that provide habitat for one population of this species.

Oahu 20—*Lobelia gaudichaudii* ssp. *koolauensis*—a

This unit is critical habitat for *Lobelia gaudichaudii* ssp. *koolauensis* and is 926 ha (2,287 ac) on private and State (Oahu Forest National Wildlife Refuge, Hauula Forest Reserve, Sacred Falls State Park, Kaipapau Forest Reserve, Kahana Valley State Park, Ewa Forest Reserve, and Waiahole Forest Reserve) land, containing a portion of Eleao, Puu Kaaumakua, and Puu Pauao Summits, and the Koolau Summit Trail. This unit provides habitat for 7 populations of 300 mature, reproducing individuals of the short-lived perennial *Lobelia gaudichaudii* ssp. *koolauensis* and is currently occupied by 247 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, moderate to steep slopes in *Metrosideros polymorpha* lowland wet shrublands or bogs. This unit is extensive and is geographically separated from Army lands at Kawaiiloa Training Area that provide habitat for two populations of this species (see “Analysis of Impacts Under Section 4(b)(2): Other Impacts”). It is therefore unlikely that all populations would be destroyed by one naturally occurring catastrophic event.

Oahu 30—*Lobelia monostachya*—a

This unit is critical habitat for *Lobelia monostachya* and is 59 ha (150 ac) on private and State (Honolulu Watershed Forest Reserve) land. This unit contains no named natural features. This unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Lobelia monostachya* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep, sparsely vegetated cliffs in mesic shrubland. Although we do not believe that enough critical habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the

other three units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 32—*Lobelia monostachya*—b

This unit is critical habitat for *Lobelia monostachya* and is 47 ha (115 ac) on private and State (Honolulu Watershed Forest Reserve) land, containing a portion of Kulepiamoa, Mauumae, and Wiliwilinui Ridges. This unit provides habitat for 4 populations of 100 mature, reproducing individuals of the long-lived perennial *Lobelia monostachya* and is currently occupied by 3 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep, sparsely vegetated cliffs in mesic shrubland. Although we do not believe that enough critical habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other three units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 33—*Lobelia monostachya*—c

This unit is critical habitat for *Lobelia monostachya* and is 70 ha (174 ac) on private and State (Honolulu Watershed Forest Reserve and Waahila Ridge State Park) land, containing a portion of Waahila Ridge. This unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Lobelia monostachya* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep, sparsely vegetated cliffs in mesic shrubland. Although we do not believe that enough critical habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other three units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 35—*Lobelia monostachya*—d

This unit is critical habitat for *Lobelia monostachya* and is 493 ha (1,217 ac) on private, Federal, and State (Honolulu Watershed Forest Reserve) land. This unit contains no named natural features. This unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Lobelia monostachya* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep, sparsely vegetated cliffs in mesic shrubland. Although we do not believe that enough critical habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other three units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 4—*Lobelia niihauensis*—a

This unit is critical habitat for *Lobelia niihauensis* and is 44 ha (108 ac) on State (Waianae Kai Forest Reserve) land, containing a portion of Puu Kawiwi. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Lobelia niihauensis* and is currently occupied by 14 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. It provides habitat for the easternmost range of the species. The habitat features contained in this unit that are essential for this species include, but are not limited to, exposed mesic or dry cliffs or ledges. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Kauai for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 17—*Lobelia niihauensis*—b

This unit is critical habitat for *Lobelia niihauensis* and is 41 ha (102 ac) on State (Nanakuli Forest Reserve) land. This unit contains no named natural features. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Lobelia niihauensis* and

is currently occupied by 37 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. It provides habitat for the easternmost range of the species. The habitat features contained in this unit that are essential for this species include, but are not limited to, exposed mesic or dry cliffs or ledges. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Kauai for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 20—*Lobelia oahuensis*—a

This unit is critical habitat for *Lobelia oahuensis* and is 493 ha (1,218 ac) on private, Federal, and State (Oahu Forest National Wildlife Refuge, Kahana Valley State Park, Ewa Forest Reserve, and Waiahole Forest Reserve) land, containing a portion of Puu Pauao, and Eleao, Puu Kaaumakua, Puu Kahuauli, and Puu Keahiakahoe Summits. This unit provides habitat for 7 populations of 300 mature, reproducing individuals of the short-lived perennial *Lobelia oahuensis* and is currently occupied by 13 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep slopes on summit cliffs in cloudswept wet forests or in lowland wet shrublands that are frequently exposed to heavy wind and rain. This unit is rather extensive and is geographically separated from the other unit designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 35—*Lobelia oahuensis*—b

This unit is critical habitat for *Lobelia oahuensis* and is 152 ha (374 ac) on private and State (Honolulu Watershed Forest Reserve and Kuliouou Forest Reserve) land, containing a portion of Kaiawaunui, Konahuanui, and Palike Summits, Mount Olympus, and Puu o Kona. This unit provides habitat for 3 populations of 300 mature, reproducing individuals of the short-lived perennial *Lobelia oahuensis* and is currently occupied by 38 individuals. This unit is essential to the conservation of the

species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep slopes on summit cliffs in cloudswept wet forests or in lowland wet shrublands that are frequently exposed to heavy wind and rain. This unit is geographically separated from the other unit designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 20—*Lysimachia filifolia*—a

This unit is critical habitat for *Lysimachia filifolia* and is 1,512 ha (3,734 ac) on private, Federal, and State (Hauula Forest Reserve, Sacred Falls State Park, Kaipapau Forest Reserve, Kahana Valley State Park, Waiahole Forest Reserve, and Kaneohe Forest Reserve) land, containing a portion of Castle Trail, Keaahala Spring, Nanaikaalea Summit, Nuuanu Pali, Puu Kaaumakua, Puu Kahuauli, Puu Keahiakahoe, Puu Pauao, Sacred Falls, Waiahole Ditch, and the Luluku Tunnels. This unit provides habitat for 6 populations of 300 mature, reproducing individuals of the short-lived perennial *Lysimachia filifolia* and is currently occupied by 160 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. It provides habitat for the easternmost range of the species. The habitat features contained in this unit that are essential for this species include, but are not limited to, mossy banks at the base of cliff faces within the spray zone of waterfalls or along streams. This unit is geographically separated from critical habitat designated on Kauai for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Mariscus pennatifolius*—a

This unit is critical habitat for *Mariscus pennatifolius* and is 166 ha (410 ac) on State (Pahole NAR and Mokuleia Forest Reserve) land. This unit contains no named natural features. This unit provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Mariscus pennatifolius* and is currently

unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, mesic and wet *Metrosideros polymorpha* forest and *Metrosideros polymorpha-Acacia koa* forest. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Kauai, Maui, and the Northwestern Hawaiian Islands for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Mariscus pennatiformis*—b

This unit is critical habitat for *Mariscus pennatiformis* and is 171 ha (421 ac) on State (Mokuleia Forest Reserve) land. This unit contains no named natural features. This unit provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Mariscus pennatiformis* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, mesic and wet *Metrosideros polymorpha* forest and *Metrosideros polymorpha-Acacia koa* forest. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Kauai, Maui, and the Northwestern Hawaiian Islands for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 13—*Marsilea villosa*—a

This unit is critical habitat for *Marsilea villosa* and is 10 ha (25 ac) on Federal (Lualualei Naval Reservation) land. This unit contains no named natural features. This unit provides habitat for one population of an unknown number of mature, reproducing individuals of the annual *Marsilea villosa* and is currently occupied by 50 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. It provides habitat for the westernmost range of the species. The habitat features contained in this unit that are essential for this species

include, but are not limited to, seasonal wetlands in cinder craters, vernal pools surrounded by lowland dry forest vegetation, mud flats, and lowland grasslands. This unit is geographically separated from critical habitat designated elsewhere on Oahu for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 14—*Marsilea villosa*—b

This unit is critical habitat for *Marsilea villosa* and is 7 ha (18 ac) on State (Lualualei Naval Reservation) land. This unit contains no named natural features. This unit provides habitat for one population of an unknown number of mature, reproducing individuals of the annual *Marsilea villosa* and is currently occupied by one individual. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. It provides habitat for the westernmost range of the species. The habitat features contained in this unit that are essential for this species include, but are not limited to, seasonal wetlands in cinder craters, vernal pools surrounded by lowland dry forest vegetation, mud flats, and lowland grasslands. This unit is geographically separated from critical habitat designated elsewhere on Oahu for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 28—*Marsilea villosa*—c

This unit is critical habitat for *Marsilea villosa* and is 7 ha (18 ac) on State land, containing a portion of the flanks of Koko Head Crater. This unit, in combination with unit Oahu 29—*Marsilea villosa*—d, provides habitat for one population of an unknown number of mature, reproducing individuals of the annual *Marsilea villosa* and is currently occupied by 10 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, seasonal wetlands in cinder craters, vernal pools surrounded by lowland dry forest vegetation, mud flats, and lowland grasslands. This unit is geographically separated from critical habitat designated elsewhere on Oahu

for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 29—*Marsilea villosa*—d

This unit is critical habitat for *Marsilea villosa* and is 5 ha (11 ac) on State land, containing a portion of the flanks of Koko Head Crater. This unit, in combination with unit Oahu 28—*Marsilea villosa*—c, provides habitat for one population of an unknown number of mature, reproducing individuals of the annual *Marsilea villosa* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, seasonal wetlands in cinder craters, vernal pools surrounded by lowland dry forest vegetation, mud flats, and lowland grasslands. This unit is geographically separated from critical habitat designated elsewhere on Oahu for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 36—*Marsilea villosa*—e

This unit is critical habitat for *Marsilea villosa* and is 6 ha (14 ac) on State (Diamond Head State Park) land. This unit contains no named natural features. This unit provides habitat for one population of an unknown number of mature, reproducing individuals of the annual *Marsilea villosa* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, seasonal wetlands in cinder craters, vernal pools surrounded by lowland dry forest vegetation, mud flats, and lowland grasslands. This unit is geographically separated from critical habitat designated elsewhere on Oahu for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 20—*Melicope lydgatei*—a

This unit is critical habitat for *Melicope lydgatei* and is 3,499 ha (8,645 ac) on private and State (Ewa Forest Reserve and Keaiwa Heiau State Park) land, containing a portion of Puu Uau, and Aiea, Kipapa, and Waimano Trails.

This unit provides habitat for 6 populations of 100 mature, reproducing individuals of the long-lived perennial *Melicope lydgatei* and is currently occupied by 2 individuals. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, ridges in mesic or wet forests. This unit is geographically separated from Army lands at Kawaihoa Training Area that provide habitat for five populations of this species, in order to avoid all populations from being destroyed by one naturally occurring catastrophic event (see "Analysis of Impacts Under Section 4(b)(2): Other Impacts").

Oahu 4—*Melicope pallida*—a

This unit is critical habitat for *Melicope pallida* and is 855 ha (2,110 ac) on private and State (Mokuleia Forest Reserve and Kaala and Pahole NARs) land, containing a portion of Dupont Trail. This unit provides habitat for 3 populations of 100 mature, reproducing individuals of the long-lived perennial *Melicope pallida* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep rock faces in lowland dry or mesic forest. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Kauai for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 15—*Melicope pallida*—b

This unit is critical habitat for *Melicope pallida* and is 174 ha (431 ac) on private (Honouliuli Preserve) land. This unit contains no named natural features. This unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Melicope pallida* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. It provides habitat for the easternmost range of the species. The habitat features contained in this unit that are essential for this species include, but are not limited to,

steep rock faces in lowland dry or mesic forest. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Kauai for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 15—*Melicope pallida*—c

This unit is critical habitat for *Melicope pallida* and is 29 ha (71 ac) on Federal (Lualualei Naval Reservation) and State land. This unit contains no named natural features. This unit, in combination with unit Oahu 15—*Melicope pallida*—d, provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Melicope pallida* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep rock faces in lowland dry or mesic forest. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Kauai for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 15—*Melicope pallida*—d

This unit is critical habitat for *Melicope pallida* and is 20 ha (51 ac) on State and Federal (Lualualei Naval Reservation) land. This unit, in combination with unit Oahu 15—*Melicope pallida*—c, contains no named natural features. This unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Melicope pallida* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep rock faces in lowland dry or mesic forest. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Kauai for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 15—*Melicope pallida*—e

This unit is critical habitat for *Melicope pallida* and is 243 ha (602 ac) on private (Honouliuli Preserve) land.

This unit contains no named natural features. This unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Melicope pallida* and is currently occupied by one individual. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. It provides habitat for the easternmost range of the species. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep rock faces in lowland dry or mesic forest. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Kauai for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 15—*Melicope saint-johnii*—a

This unit is critical habitat for *Melicope saint-johnii* and is 244 ha (604 ac) on Federal (Lualualei Naval Reservation), State, and private (Honouliuli Preserve) land, containing a portion of Puu Hapapa, Puu Kanehoa, and Puu Kaua. This unit provides habitat for 2 populations of 100 mature, reproducing individuals of the long-lived perennial *Melicope saint-johnii* and is currently occupied by 4 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, ridges or gulch bottoms in mesic forest. Although we do not believe that enough critical habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other unit designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 15—*Melicope saint-johnii*—b

This unit is critical habitat for *Melicope saint-johnii* and is 214 ha (529 ac) on Federal (Lualualei Naval Reservation), State (Nanakuli Forest Reserve), and private (Honouliuli Preserve) land, containing a portion of Palikea Summit. This unit provides habitat for one population of 100

mature, reproducing individuals of the long-lived perennial *Melicope saint-johnii* and is currently occupied by 161 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, ridges or gulch bottoms in mesic forest. Although we do not believe that enough critical habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other unit designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 20—*Myrsine juddii*—a

This unit is critical habitat for *Myrsine juddii* and is 950 ha (2,347 ac) on private and State (Hauula Forest Reserve, Sacred Falls State Park, Kaipapau Forest Reserve, Kahana Valley State Park, and Ewa Forest Reserve) land, containing the Koolau Summit Trail. This unit provides habitat for 6 populations of 100 mature, reproducing individuals of the long-lived perennial *Myrsine juddii* and is currently occupied by 5,000 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population. The habitat features contained in this unit that are essential for this species include, but are not limited to, ridge crests or gulch slopes in wet forests or shrublands dominated by *Metrosideros polymorpha* or a mixture of *Metrosideros polymorpha* and *Dicranopteris linearis*. This unit is extensive and is geographically separated from Army lands at Kawaiiloa and Schofield Barracks that provide habitat for four populations of this species (see “Analysis of Impacts Under Section 4(b)(2): Other Impacts”). It is therefore unlikely that all populations would be destroyed by one naturally occurring catastrophic event.

Oahu 3—*Neraudia angulata*—a

This unit is critical habitat for *Neraudia angulata* and is 39 ha (97 ac) on State (Kaena Point State Park and Kuaokala Forest Reserve) land. This unit contains no named natural features. This unit provides habitat for one population of 300 mature, reproducing

individuals of the short-lived perennial *Neraudia angulata* and is currently occupied by 2 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for *Neraudia angulata* var. *angulata* include, but are not limited to, slopes, ledges, or gulches in lowland mesic or dry forest. The habitat features contained in this unit that are essential for *Neraudia angulata* var. *dentata* include, but are not limited to, cliffs, rock embankments, gulches, or slopes in mesic or dry forest. This unit is geographically separated from the other five units designated as critical habitat for this island-endemic species, and from habitat for three populations on Army lands at Makua Military Reservation, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 4—*Neraudia angulata*—b

This unit is critical habitat for *Neraudia angulata* and is 90 ha (222 ac) on private and State (Mokuleia Forest Reserve and Pahole NAR) land. This unit contains no named natural features. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Neraudia angulata* and is currently occupied by one individual. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for *Neraudia angulata* var. *angulata* include, but are not limited to, slopes, ledges, or gulches in lowland mesic or dry forest. The habitat features contained in this unit that are essential for *Neraudia angulata* var. *dentata* include, but are not limited to, cliffs, rock embankments, gulches, or slopes in mesic or dry forest. This unit is geographically separated from the other five units designated as critical habitat for this island-endemic species and from habitat for three populations on Army lands at Makua Military Reservation, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 4—*Neraudia angulata*—c

This unit is critical habitat for *Neraudia angulata* and is 298 ha (736 ac) on State land in the Waianae Kai area. This unit contains no named natural features. This unit provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Neraudia angulata* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for *Neraudia angulata* var. *angulata* include, but are not limited to, slopes, ledges, or gulches in lowland mesic or dry forest. The habitat features contained in this unit that are essential for *Neraudia angulata* var. *dentata* include, but are not limited to, cliffs, rock embankments, gulches, or slopes in mesic or dry forest. This unit is geographically separated from the other five units designated as critical habitat for this island-endemic species and from habitat for three populations on Army lands at Makua Military Reservation, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 4—*Neraudia angulata*—d

This unit is critical habitat for *Neraudia angulata* and is 33 ha (81 ac) on State (Waianae Kai Forest Reserve) land. This unit contains no named natural features. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Neraudia angulata* and is currently occupied by one individual. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for *Neraudia angulata* var. *angulata* include, but are not limited to, slopes, ledges, or gulches in lowland mesic or dry forest. The habitat features contained in this unit that are essential for *Neraudia angulata* var. *dentata* include, but are not limited to, cliffs, rock embankments, gulches, or slopes in mesic or dry forest. This unit is geographically separated from the other five units designated as critical habitat for this island-endemic species and from habitat for three populations on Army lands at Makua Military Reservation, in order to avoid all

recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 4—*Neraudia angulata*—e

This unit is critical habitat for *Neraudia angulata* and is 40 ha (98 ac) on State (Waianae Kai Forest Reserve) land. This unit contains no named natural features. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Neraudia angulata* and is currently occupied by 40 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for *Neraudia angulata* var. *angulata* include, but are not limited to, slopes, ledges, or gulches in lowland mesic or dry forest. The habitat features contained in this unit that are essential for *Neraudia angulata* var. *dentata* include, but are not limited to, cliffs, rock embankments, gulches, or slopes in mesic or dry forest. This unit is geographically separated from the other five units designated as critical habitat for this island-endemic species and from habitat for three populations on Army lands at Makua Military Reservation, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 15—*Neraudia angulata*—f

This unit is critical habitat for *Neraudia angulata* and is 83 ha (207 ac) on Federal (Lualualei Naval Reservation) and State land. This unit contains no named natural features. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Neraudia angulata* and is currently occupied by 5 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for *Neraudia angulata* var. *angulata* include, but are not limited to, slopes, ledges, or gulches in lowland mesic or dry forest. The habitat features contained in this unit that are essential for *Neraudia angulata* var. *dentata* include, but are not limited to, cliffs, rock embankments, gulches, or slopes in mesic or dry forest. This unit is

geographically separated from the other five units designated as critical habitat for this island-endemic species and from habitat for three populations on Army lands at Makua Military Reservation, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 3—*Nototrichium humile*—a

This unit is critical habitat for *Nototrichium humile* and is 20 ha (51 ac) on State (Kaena Point State Park and Kuaokala Forest Reserve) land. This unit contains no named natural features. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Nototrichium humile* and is currently occupied by 900 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population. The habitat features contained in this unit that are essential for this species include, but are not limited to, cliff faces, gulches, stream banks, or steep slopes in dry or mesic forest often dominated by *Sapindus oahunensis* or *Diopsiros sandwicensis*. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Maui for this species in order to avoid all recovery populations being destroyed by one naturally occurring catastrophic event.

Oahu 4—*Nototrichium humile*—b

This unit is critical habitat for *Nototrichium humile* and is 229 ha (568 ac) on private and State (Pahole NAR and Mokuleia Forest Reserve) land, containing a portion of Mokuleia Trail. This unit provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Nototrichium humile* and is currently occupied by 10 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, cliff faces, gulches, stream banks, or steep slopes in dry or mesic forest often dominated by *Sapindus oahunensis* or *Diopsiros sandwicensis*. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Maui for this species in order to avoid all recovery

populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Nototrichium humile*—c

This unit is critical habitat for *Nototrichium humile* and is 236 ha (586 ac) on private and State (Mokuleia Forest Reserve and Kaala NAR) land. This unit contains no named natural features. This unit provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Nototrichium humile* and is currently occupied by 54 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, cliff faces, gulches, stream banks, or steep slopes in dry or mesic forest often dominated by *Sapindus oahunensis* or *Diopsiros sandwicensis*. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Nototrichium humile*—d

This unit is critical habitat for *Nototrichium humile* and is 30 ha (75 ac) on State (Waianae Kai Forest Reserve) land. This unit contains no named natural features. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Nototrichium humile* and is currently occupied by 215 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, cliff faces, gulches, stream banks, or steep slopes in dry or mesic forest often dominated by *Sapindus oahunensis* or *Diopsiros sandwicensis*. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Peucedanum sandwicense*—a

This unit is critical habitat for *Peucedanum sandwicense* and is 76 ha

(186 ac) on State (Waianae Kai Forest Reserve) lands, containing Puu Kawiwi. The unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Peucedanum sandwicense* and is currently occupied by 34 individuals. The unit is important to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Peucedanum sandwicense* include, but are not limited to, cliffs, slopes, or ridges in *Metrosideros polymorpha* lowland mesic forest. This unit is geographically separated from critical habitat designated on Kauai, Molokai, and Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 20—*Phlegmariurus nutans*—a

This unit is critical habitat for *Phlegmariurus nutans* and is 1,624 ha (4,014 ac) on State (Hauula Forest Reserve, Sacred Falls State Park, Kaipapau Forest Reserve, Kahana Valley State Park, and Ewa Forest Reserve), and private lands. Natural features found in this unit include Castle Trail, Puu Kaaumakua, and Puu Pauao. The unit provides habitat for 5 populations of 300 mature, reproducing individuals of the short-lived perennial *Phlegmariurus nutans* and is currently occupied by contains 5 individuals. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is important for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Phlegmariurus nutans* include, but are not limited to, tree trunks on open ridges, forested slopes, or cliffs in *Metrosideros polymorpha*-dominated wet forests, on cliffs, in shrublands, or in mesic forests. This unit is geographically separated from critical habitat designated on Kauai for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Phyllostegia hirsuta*—a

This unit is critical habitat for *Phyllostegia hirsuta* and is 113 ha (282 ac) on State (Mokuleia Forest Reserve, Kaala NAR, and Waianae Kai Forest Reserve) lands. There are no named natural features in this unit. This unit contains 4 individuals and provides habitat for one population of 300

mature, reproducing individuals of the short-lived perennial *Phyllostegia hirsuta*. The unit is essential to the species' conservation because it supports an extant colony and includes habitat that is important for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Phyllostegia hirsuta* include, but are not limited to, steep, shaded slopes, cliffs, ridges, gullies, or stream banks in mesic or wet forests dominated by *Metrosideros polymorpha* or a mixture of *Metrosideros polymorpha* and *Dicranopteris linearis*. This unit is geographically separated from the other three units designated as critical habitat for this island-endemic species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 15—*Phyllostegia hirsuta*—b

This unit is critical habitat for *Phyllostegia hirsuta* and is 131 ha (324 ac) on Federal (Lualualei Naval Reservation), State, and private (Honouliuli Preserve) lands, containing Puu Hapapa and Puu Kanehoa. This unit is currently occupied by 50 individuals and provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Phyllostegia hirsuta*. The unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Phyllostegia hirsuta* include, but are not limited to, steep, shaded slopes, cliffs, ridges, gullies, or stream banks in mesic or wet forests dominated by *Metrosideros polymorpha* or a mixture of *Metrosideros polymorpha* and *Dicranopteris linearis*. This unit is geographically separated from the other three units designated as critical habitat for this island-endemic species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 15—*Phyllostegia hirsuta*—c

This unit is critical habitat for *Phyllostegia hirsuta* and is 69 ha (171 ac) on private (Honouliuli Preserve) lands. There are no named natural features in this unit. The unit is currently occupied by 2 individuals and provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Phyllostegia hirsuta*. The unit is essential to the species' conservation because it

supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Phyllostegia hirsuta* include, but are not limited to, steep, shaded slopes, cliffs, ridges, gullies, or stream banks in mesic or wet forests dominated by *Metrosideros polymorpha* or a mixture of *Metrosideros polymorpha* and *Dicranopteris linearis*. This unit is geographically separated from the other three units designated as critical habitat for this island-endemic species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 20—*Phyllostegia hirsuta*—d

This unit is critical habitat for *Phyllostegia hirsuta* and is 1,004 ha (2,483 ac) on State (Hauula Forest Reserve, Sacred Falls State Park, and Kaipapau Forest Reserve) and private lands, containing the Koolau Summit Trail. This unit is occupied by 39 individuals and provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Phyllostegia hirsuta*. The unit is essential to species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Phyllostegia hirsuta* include, but are not limited to, steep, shaded slopes, cliffs, ridges, gullies, or stream banks in mesic or wet forests dominated by *Metrosideros polymorpha* or a mixture of *Metrosideros polymorpha* and *Dicranopteris linearis*. This unit is geographically separated from the other three units designated as critical habitat for this island-endemic species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Phyllostegia kaalaensis*—a

This unit is critical habitat for *Phyllostegia kaalaensis* and is 57 ha (141 ac) on State (Pahole NAR and Mokuleia Forest Reserve) lands. There are no named natural features in this unit. This unit is occupied by 21 individuals and provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Phyllostegia kaalaensis*. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently

considered nonviable. The habitat features contained in this unit that are essential to *Phyllostegia kaalaensis* include, but are not limited to, gulch slopes or bottoms or almost vertical rock faces in mesic forest or *Sapindus oahuensis* forest. This unit is geographically separated from the other five units designated as critical habitat for this island-endemic species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Phyllostegia kaalaensis*—b

This unit is critical habitat for *Phyllostegia kaalaensis* and is 589 ha (1,456 ac) on State (Pahole and Kaala NARs and Mokuleia Forest Reserve) lands and contains Dupont Trail. This unit currently occupied by an unknown number of individuals and provides habitat for 6 populations of 300 mature, reproducing individuals of the short-lived perennial *Phyllostegia kaalaensis*. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Phyllostegia kaalaensis* include, but are not limited to, gulch slopes or bottoms or almost vertical rock faces in mesic forest or *Sapindus oahuensis* forest. This unit is geographically separated from the other five units designated as critical habitat for this island-endemic species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Phyllostegia kaalaensis*—c

This unit is critical habitat for *Phyllostegia kaalaensis* and is 122 ha (304 ac) on State (Kaala NAR, Mokuleia Forest Reserve) and private lands. There are no named natural features in this unit. The unit is currently occupied by 10 individuals and provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Phyllostegia kaalaensis*. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Phyllostegia kaalaensis* include, but are not limited to, gulch slopes or bottoms or almost vertical rock faces in mesic forest or *Sapindus oahuensis* forest. This unit is geographically separated from the other five units designated as critical habitat

for this island-endemic species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Phyllostegia kaalaensis*—d

This unit is critical habitat for *Phyllostegia kaalaensis* and is 28 ha (69 ac) on State (Waianae Kai Forest Reserve) lands containing Waianae Kai. This unit, combined with Oahu 4—*Phyllostegia kaalaensis*—e, provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Phyllostegia kaalaensis* and is currently unoccupied. This unit is essential to the species' conservation because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential to *Phyllostegia kaalaensis* include, but are not limited to, gulch slopes or bottoms or almost vertical rock faces in mesic forest or *Sapindus oahuensis* forest. This unit is geographically separated from the other five units designated as critical habitat for this island-endemic species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Phyllostegia kaalaensis*—e

This unit is critical habitat for *Phyllostegia kaalaensis* and is 16 ha (39 ac) on State (Waianae Kai Forest Reserve) lands containing Waianae Kai. This unit is currently occupied by 8 individuals and, combined with Oahu 4—*Phyllostegia kaalaensis*—d, provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Phyllostegia kaalaensis*. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Phyllostegia kaalaensis* include, but are not limited to, gulch slopes or bottoms or almost vertical rock faces in mesic forest or *Sapindus oahuensis* forest. This unit is geographically separated from the other five units designated as critical habitat for this island-endemic species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 15—*Phyllostegia kaalaensis*—f

This unit is critical habitat for *Phyllostegia kaalaensis* and is 30 ha (74 ac) on private (Honouliuli Preserve)

lands. There are no named natural features in this unit. The unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Phyllostegia kaalaensis* and is currently unoccupied. This unit is essential to the species' conservation because it supports habitat that is important to the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential to *Phyllostegia kaalaensis* include, but are not limited to, gulch slopes or bottoms or almost vertical rock faces in mesic forest or *Sapindus oahuensis* forest. This unit is geographically separated from the other five units designated as critical habitat for this island-endemic species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 15—*Phyllostegia mollis*—a

This unit is critical habitat for *Phyllostegia mollis* and is 152 ha (376 ac) on private (Honouliuli Preserve) lands containing Puu Kanehoa. The unit is currently occupied by 7 individuals and provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Phyllostegia mollis*. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Phyllostegia mollis* include, but are not limited to, steep slopes or gulches in diverse mesic to wet forests. This unit is geographically separated from other critical habitat designated elsewhere on Oahu and on Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 15—*Phyllostegia mollis*—b

This unit is critical habitat for *Phyllostegia mollis* and is 85 ha (210 ac) on private (Honouliuli Preserve) lands. There are no named natural features in this unit. The unit is currently occupied by 7 individuals and provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Phyllostegia mollis*. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Phyllostegia mollis* include,

but are not limited to, steep slopes or gulches in diverse mesic to wet forests. This unit is geographically separated from other critical habitat designated elsewhere on Oahu and on Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 15—*Phyllostegia parviflora*—a

This unit is critical habitat for *Phyllostegia parviflora* var. *lydgatei* and is 70 ha (173 ac) on private (Honouliuli Preserve) lands. This unit contains no named natural features. The unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Phyllostegia parviflora* var. *lydgatei* and is currently unoccupied. This unit is essential to the species' conservation because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential to *Phyllostegia parviflora* var. *lydgatei* include, but are not limited to, moderate to steep slopes in mesic forests. This unit is geographically separated from other critical habitat designated on Oahu for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 15—*Phyllostegia parviflora*—b

This unit is critical habitat for *Phyllostegia parviflora* var. *lydgatei* and is 21 ha (51 ac) on private (Honouliuli Preserve) lands. There are no named natural features in this unit. The unit is occupied by unknown number of individuals and provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Phyllostegia parviflora* var. *lydgatei*. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Phyllostegia parviflora* var. *lydgatei* include, but are not limited to, moderate to steep slopes in mesic forests. This unit is geographically separated from other critical habitat designated on Oahu for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 15—*Phyllostegia parviflora*—c

This unit is critical habitat for *Phyllostegia parviflora* var. *lydgatei* and is 69 ha (171 ac) on private (Honouliuli Preserve) lands. There are no named

natural features in this unit. The unit is occupied by 50 individuals and provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Phyllostegia parviflora* var. *lydgatei*. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Phyllostegia parviflora* var. *lydgatei* include, but are not limited to, moderate to steep slopes in mesic forests. This unit is geographically separated from other critical habitat designated on Oahu for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 20—*Phyllostegia parviflora*—d

This unit is critical habitat for *Phyllostegia parviflora* var. *parviflora* and is 1,430 ha (3,534 ac) on State (Hauula Forest Reserve, Sacred Falls State Park, Kaipapau Forest Reserve, Kahana Valley State Park, Ewa Forest Reserve) and private lands, containing Castle Trail, Puu Kaaumakua, Puu Pauao, and the Koolau Summit Trail. The unit is occupied by 30 individuals and provides habitat for 6 populations of 300 mature, reproducing individuals of the short-lived perennial *Phyllostegia parviflora* var. *parviflora*. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Phyllostegia parviflora* var. *parviflora* include, but are not limited to, *Metrosideros polymorpha* mixed lowland wet forest. This unit is geographically separated from other critical habitat designated on Oahu for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Plantago princeps*—a

This unit is critical habitat for *Plantago princeps* var. *longibracteata* and is 15 ha (37 ac) on State lands. There are no named natural features in this unit. The unit, is occupied by 2 individuals and, in combination with Oahu 4—*Plantago princeps*—b, provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Plantago princeps* var. *longibracteata*. This unit is essential to the species' conservation

because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Plantago princeps* var. *longibracteata* include, but are not limited to, sides of waterfalls or wet rock faces. This unit is geographically separated from other critical habitat designated elsewhere on Oahu and on Kauai, Molokai, and Maui in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Plantago princeps*—b

This unit is critical habitat for *Plantago princeps* var. *longibracteata* and is 52 ha (131 ac) on State (Mokuleia Forest Reserve and Pahole Natural Area Preserve) lands. There are no named natural features in this unit. The unit, in combination with Oahu 4—*Plantago princeps*—a, provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Plantago princeps* var. *longibracteata* and is currently unoccupied. This unit is essential to the species' conservation because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential to *Plantago princeps* var. *longibracteata* include, but are not limited to, sides of waterfalls or wet rock faces. This unit is geographically separated from other critical habitat designated elsewhere on Oahu and on Kauai, Molokai, and Maui in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 15—*Plantago princeps*—c

This unit is critical habitat for *Plantago princeps* var. *longibracteata* and is 63 ha (157 ac) on private (Honouliuli Preserve) lands. There are no named natural features in this unit. The unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Plantago princeps* var. *longibracteata* and is currently occupied by 8 individuals. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Plantago princeps* var. *longibracteata* include, but are not limited to, sides of waterfalls or wet rock faces. This unit is

geographically separated from other critical habitat designated elsewhere on Oahu and on Kauai, Molokai, and Maui in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 20—*Plantago princeps*—d

This unit is critical habitat for *Plantago princeps* var. *princeps* and is 992 ha (2,450 ac) on Federal (Oahu Forest National Wildlife Refuge), State (Ewa Forest Reserve, Waiahole Forest Reserve), and private lands, containing Eleao Summit and Kipapa Trail. The unit, in combination with Oahu 20—*Plantago princeps*—e, provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Plantago princeps* var. *princeps* and is currently occupied by 2 individuals. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Plantago princeps* var. *princeps* include, but are not limited to, slopes or ledges in *Metrosideros polymorpha* lowland mesic forests or shrublands. This unit is geographically separated from other critical habitat designated elsewhere on Oahu and on Kauai, Molokai, and Maui in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 20—*Plantago princeps*—e

This unit is critical habitat for *Plantago princeps* var. *princeps* and is 297 ha (729 ac) on State (Waiahole Forest Reserve) and private lands, containing Nanaikaalaea Summit, Ulimakoli Summit, and Waiahole Ditch Tunnel. The unit, in combination with Oahu 20—*Plantago princeps*—d, provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Plantago princeps* var. *princeps* and is currently unoccupied. This unit is essential to the species' conservation because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential to *Plantago princeps* var. *princeps* include, but are not limited to, slopes or ledges in *Metrosideros polymorpha* lowland mesic forests or shrublands. This unit is geographically separated from other critical habitat designated elsewhere on Oahu and on Kauai, Molokai, and Maui in order to avoid all recovery

populations being destroyed by one naturally-occurring catastrophic event.

Oahu 20—*Platanthera holochila*—a

This unit is critical habitat for *Platanthera holochila* and is 35 ha (86 ac) on private lands in the Koolau Mountains. There are no named natural features in this unit. The unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Platanthera holochila* and is currently unoccupied. This unit is essential to the species' conservation because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential to *Platanthera holochila* include, but are not limited to, *Metrosideros polymorpha-Dicranopteris linearis* wet forest or *Metrosideros polymorpha* mixed shrubland. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Kauai and Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 20—*Platanthera holochila*—b

This unit is critical habitat for *Platanthera holochila* and is 165 ha (407 ac) on Federal (Oahu Forest National Wildlife Refuge) and State (Ewa Forest Reserve and Keaiwa Heiau State Park) lands. There are no named natural features in this unit. The unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Platanthera holochila* and is currently unoccupied. This unit is essential to the species' conservation because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential to *Platanthera holochila* include, but are not limited to, *Metrosideros polymorpha-Dicranopteris linearis* wet forest or *Metrosideros polymorpha* mixed shrubland. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Kauai and Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 20—*Pteris lidgatei*—a

This unit is critical habitat for *Pteris lidgatei* and is 1,233 ha (3,044 ac) on State (Hauula Forest Reserve, Sacred Falls State Park and Kaipapau Forest Reserve) and private lands, containing the Castle Trail, Sacred Falls, and the Koolau Summit Trail. The unit provides

habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Pteris lidgatei* and is occupied by 2 individuals. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Pteris lidgatei* include, but are not limited to, steep stream banks or cliffs in wet *Metrosideros polymorpha-Dicranopteris linearis* forest. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Molokai and Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 20—*Pteris lidgatei*—b

This unit is critical habitat for *Pteris lidgatei* and is 289 ha (711 ac) on State (Kahana Valley State Park) and private lands, containing Puu Kaaumakua. The unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Pteris lidgatei* and is currently unoccupied. This unit is essential to the species' conservation because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential to *Pteris lidgatei* include, but are not limited to, steep stream banks or cliffs in wet *Metrosideros polymorpha-Dicranopteris linearis* forest. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Molokai and Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 20—*Pteris lidgatei*—c

This unit is critical habitat for *Pteris lidgatei* and is 844 ha (2,084 ac) on State (Ewa and Waiahole Forest Reserves) and private lands, containing Eleao and Nanaikaalaea Summits. The unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Pteris lidgatei* and is occupied by 4 individuals. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Pteris lidgatei* include, but are not limited to, steep stream banks or cliffs in wet *Metrosideros polymorpha-Dicranopteris linearis* forest. This unit is

geographically separated from critical habitat designated elsewhere on Oahu and on Molokai and Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—Sanicula mariversa—a

This unit is critical habitat for *Sanicula mariversa* and is 7 ha (17 ac) on State (Makua Keauu Forest Reserve) lands. There are no named natural features in this unit. The unit, in combination with Oahu 6—*Sanicula mariversa*—d, provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Sanicula mariversa* and is currently unoccupied. This unit is essential to the species' conservation because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential to *Sanicula mariversa* include, but are not limited to, well-drained, dry slopes or rock faces in mesic shrublands or open grassy areas. Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other five units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 4—Sanicula mariversa—b

This unit is critical habitat for *Sanicula mariversa* and is 6 ha (15 ac) on State (Kaala NAR) lands, containing Kamaohanui Summit. The unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Sanicula mariversa* and is currently unoccupied. This unit is essential to the species' conservation because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential to *Sanicula mariversa* include, but are not limited to, well-drained, dry slopes or rock faces in mesic shrublands or open grassy areas. Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other five units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 4—Sanicula mariversa—c

This unit is critical habitat for *Sanicula mariversa* and is 25 ha (61 ac) on State (Waianae Kai Forest Reserve) lands, containing Puu Kawiwi and Puu Kepauala. The unit provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Sanicula mariversa* and is occupied by 2 individuals. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Sanicula mariversa* include, but are not limited to, well-drained, dry slopes or rock faces in mesic shrublands or open grassy areas. Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other five units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 6—Sanicula mariversa—d

This unit is critical habitat for *Sanicula mariversa* and is 3 ha (8 ac) on State (Makua Keauu Forest Reserve) lands. There are no named natural features in this unit. The unit, in combination with Oahu 6—*Sanicula mariversa*—a, provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Sanicula mariversa* and is occupied by 30 individuals. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Sanicula mariversa* include, but are not limited to, well-drained, dry slopes or rock faces in mesic shrublands or open grassy areas. Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other five units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 15—Sanicula mariversa—e

This unit is critical habitat for *Sanicula mariversa* and is 14 ha (34 ac)

on private (Honouliuli Preserve) lands, containing Puu Hapapa. The unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Sanicula mariversa* and is currently unoccupied. This unit is essential to the species' conservation because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential to *Sanicula mariversa* include, but are not limited to, well-drained, dry slopes or rock faces in mesic shrublands or open grassy areas. Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other five units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 15—Sanicula mariversa—f

This unit is critical habitat for *Sanicula mariversa* and is 39 ha (95 ac) on State and private (Honouliuli Preserve) lands, containing Puu Kanehoa and Puu Kaua. The unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Sanicula mariversa* and is currently unoccupied. This unit is essential to the species' conservation because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential to *Sanicula mariversa* include, but are not limited to, well-drained, dry slopes or rock faces in mesic shrublands or open grassy areas. Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other five units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 20—Sanicula purpurea—a

This unit is critical habitat for *Sanicula purpurea* and is 704 ha (1,739 ac) on Federal (Oahu Forest National Wildlife Refuge), State (Hauula Forest Reserve, Sacred Falls State Park, Kaipapau Forest Reserve, Kahana Valley State Park, Ewa Forest Reserve, Waiahole Forest Reserve), and private lands, containing Eleao Summit, Puu Kaaumakua, Puu Kahuaui, Puu

Keahiakahoe, Puu Pauao and Koolau Summit Trail. The unit provides habitat for 4 populations of 300 mature, reproducing individuals of the short-lived perennial *Sanicula purpurea* and is occupied by 6 individuals. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Sanicula purpurea* include, but are not limited to, open *Metrosideros polymorpha* mixed montane bogs or windswept shrublands within the cloud zone. This unit is geographically separated from critical habitat designated on Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 3—*Schiedea hookeri*—a

This unit is critical habitat for *Schiedea hookeri* and is 22 ha (56 ac) on State (Kaena Point State Park and Kuaokala Forest Reserve) lands. No named natural features are found within this unit. The unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Schiedea hookeri* is occupied by 10 individuals. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Schiedea hookeri* include, but are not limited to, slopes, cliffs or cliff bases, rock walls, or ledges in diverse mesic or dry lowland forest, often with *Diospyros hillebrandii*, *Diospyros sandwicensis*, or *Metrosideros polymorpha*. This unit is geographically separated from critical habitat designated elsewhere on Oahu for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Schiedea hookeri*—b

This unit is critical habitat for *Schiedea hookeri* and is 710 ha (1,755 ac) on State (Mokuleia Forest Reserve and Pahole and Kaala NARs) lands, containing Dupont Trail. The unit provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Schiedea hookeri* and is occupied by 3 individuals. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the

expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Schiedea hookeri* include, but are not limited to, slopes, cliffs or cliff bases, rock walls, or ledges in diverse mesic or dry lowland forest, often with *Diospyros hillebrandii*, *Diospyros sandwicensis*, or *Metrosideros polymorpha*. This unit is geographically separated from critical habitat designated elsewhere on Oahu for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Schiedea hookeri*—c

This unit is critical habitat for *Schiedea hookeri* and is 248 ha (612 ac) on State (Waianae Kai Forest Reserve) lands, containing Kamaileunu Ridge and Puu Kawiwi. The unit provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Schiedea hookeri* and is occupied by 57 individuals. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present populations, which are currently considered nonviable. The habitat features contained in this unit that are essential to *Schiedea hookeri* include, but are not limited to, slopes, cliffs or cliff bases, rock walls, or ledges in diverse mesic or dry lowland forest, often with *Diospyros hillebrandii*, *Diospyros sandwicensis*, or *Metrosideros polymorpha*. This unit is geographically separated from critical habitat designated elsewhere on Oahu for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Schiedea hookeri*—d

This unit is critical habitat for *Schiedea hookeri* and is 31 ha (78 ac) on State (Waianae Kai Forest Reserve) lands. No named natural features are found within this unit. The unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Schiedea hookeri* and is occupied by 50 individuals. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Schiedea hookeri* include, but are not limited to, slopes, cliffs or cliff bases, rock walls, or ledges in diverse mesic or dry lowland forest, often with *Diospyros*

hillebrandii, *Diospyros sandwicensis*, or *Metrosideros polymorpha*. This unit is geographically separated from critical habitat designated elsewhere on Oahu for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 15—*Schiedea hookeri*—e

This unit is critical habitat for *Schiedea hookeri* and is 14 ha (34 ac) on Federal lands (Lualualei Naval Reservation). There are no named natural features in this unit. The unit, in combination with Oahu 15—*Schiedea hookeri*—f, provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Schiedea hookeri* and is occupied by 10 individuals. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Schiedea hookeri* include, but are not limited to, slopes, cliffs or cliff bases, rock walls, or ledges in diverse mesic or dry lowland forest, often with *Diospyros hillebrandii*, *Diospyros sandwicensis*, or *Metrosideros polymorpha*. This unit is geographically separated from critical habitat designated elsewhere on Oahu for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 15—*Schiedea hookeri*—f

This unit is critical habitat for *Schiedea hookeri* and is 10 ha (25 ac) on private (Honouliuli Preserve) lands. There are no named natural features in this unit. The unit, in combination with Oahu 15—*Schiedea hookeri*—e, provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Schiedea hookeri* and is occupied by at 63 individuals. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Schiedea hookeri* include, but are not limited to, slopes, cliffs or cliff bases, rock walls, or ledges in diverse mesic or dry lowland forest, often with *Diospyros hillebrandii*, *Diospyros sandwicensis*, or *Metrosideros polymorpha*. This unit is geographically separated from critical habitat designated elsewhere on Oahu for this species in order to avoid all

recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 15—*Schiedea hookeri*—g

This unit is critical habitat for *Schiedea hookeri* and is 83 ha (204 ac) on Federal (Lualualei Naval Reservation), State, and private lands, containing Puu Kaua. The unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Schiedea hookeri* and is occupied by 42 individuals. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Schiedea hookeri* include, but are not limited to, slopes, cliffs or cliff bases, rock walls, or ledges in diverse mesic or dry lowland forest, often with *Diospyros hillebrandii*, *Diospyros sandwicensis*, or *Metrosideros polymorpha*. This unit is geographically separated from critical habitat designated elsewhere on Oahu for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Schiedea kaalae*—a

This unit is critical habitat for *Schiedea kaalae* and is 426 ha (1,051 ac) on State (Pahole NAR and Mokuleia Forest Reserve) lands. There are no named natural features in this unit. The unit provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Schiedea kaalae* and is occupied by 2 individuals. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered to be nonviable. The habitat features contained in this unit that are essential to *Schiedea kaalae* include, but are not limited to, steep slopes, cliffs, stream banks, or deep shade in diverse mesic or wet forests. This unit is geographically separated from the other five units designated as critical habitat for this island-endemic species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Schiedea kaalae*—b

This unit is critical habitat for *Schiedea kaalae* and is 134 ha (331 ac) on private (Honouliuli Preserve) lands, containing Puu Kanehoa. The unit provides habitat for 2 populations of 300 mature, reproducing individuals of

the short-lived perennial *Schiedea kaalae* and is occupied by 8 individuals. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered to be nonviable. The habitat features contained in this unit that are essential to *Schiedea kaalae* include, but are not limited to, steep slopes, cliffs, stream banks, or deep shade in diverse mesic or wet forests. This unit is geographically separated from the other five units designated as critical habitat for this island-endemic species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 15—*Schiedea kaalae*—c

This unit is critical habitat for *Schiedea kaalae* and is 22 ha (53 ac) on private (Honouliuli Preserve) lands. There are no named natural features in this unit. The unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Schiedea kaalae* and is occupied by 13 individuals. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered to be nonviable. The habitat features contained in this unit that are essential to *Schiedea kaalae* include, but are not limited to, steep slopes, cliffs, stream banks, or deep shade in diverse mesic or wet forests. This unit is geographically separated from the other five units designated as critical habitat for this island-endemic species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 15—*Schiedea kaalae*—d

This unit is critical habitat for *Schiedea kaalae* and is 39 ha (97 ac) on private (Honouliuli Preserve) lands. There are no named natural features in this unit. The unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Schiedea kaalae* and is occupied by one individual. This unit is essential to the species' conservation because it supports occupied habitat that is important for the expansion of the present population, which is currently considered to be nonviable. The habitat features contained in this unit that are essential to *Schiedea kaalae* include, but are not limited to, steep slopes, cliffs, stream banks, or deep shade in diverse mesic or wet forests. This unit is geographically

separated from the other five units designated as critical habitat for this island-endemic species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 20—*Schiedea kaalae*—e

This unit is critical habitat for *Schiedea kaalae* and is 379 ha (934 ac) on State (Hanuula Forest Reserve, Sacred Falls State Park and Kaipapau Forest Reserve) and private lands, containing Sacred Falls. The unit provides habitat for 3 populations of 300 mature, reproducing individuals of the short-lived perennial *Schiedea kaalae* and is occupied by 15 individuals. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered to be nonviable. The habitat features contained in this unit that are essential to *Schiedea kaalae* include, but are not limited to, steep slopes, cliffs, stream banks, or deep shade in diverse mesic or wet forests. This unit is geographically separated from the other five units designated as critical habitat for this island-endemic species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 21—*Schiedea kaalae*—f

This unit is critical habitat for *Schiedea kaalae* and is 105 ha (206 ac) on State (Kahana Valley State Park) and private lands. There are no named natural features in this unit. The unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Schiedea kaalae* and is occupied by one individual. This unit is essential to the species' conservation because it supports occupied habitat that is important for the expansion of the present population, which is currently considered to be nonviable. The habitat features contained in this unit that are essential to *Schiedea kaalae* include, but are not limited to, steep slopes, cliffs, stream banks, or deep shade in diverse mesic or wet forests. This unit is geographically separated from the other five units designated as critical habitat for this island-endemic species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 1—*Schiedea kealiae*—a

This unit is critical habitat for *Schiedea kealiae* and is 193 ha (477 ac) on State (Kaena Point State Park and

Kuaokala Forest Reserve) and private lands, containing Alei Pali, Haili Gulch, Mahoe Pali, Manini Pali, Nihoa Gulch, Peacock Flat Trail, Puu Pueo, and Uluhulu Gulch. The unit provides habitat for 4 populations of 300 mature, reproducing individuals of the short-lived perennial *Schiedea kealiae* and is occupied by 320 individuals. This unit is essential to the species' conservation because it supports occupied habitat that is important for the establishment of additional populations. The habitat features contained in this unit that are essential to *Schiedea kealiae* include, but are not limited to, steep slopes and cliff faces in dry remnant *Erythrina sandwicensis* forest. We do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species.

Oahu 4—*Schiedea nuttallii*—a

This unit is critical habitat for *Schiedea nuttallii* and is 527 ha (1,304 ac) on State (Mokuleia Forest Reserve and Pahole and Kaala NARs) lands. There are no named natural features in this unit. The unit provides habitat for 4 populations of 300 mature, reproducing individuals of the short-lived perennial *Schiedea nuttallii* and is occupied by 370 individuals. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population. The habitat features contained in this unit that are essential to *Schiedea nuttallii* include, but are not limited to, rock walls, forested slopes, or steep walls in *Acacia koa-Metrosideros polymorpha* lowland mesic forest or *Metrosideros polymorpha-Dodonaea viscosa* forest. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Kauai and Molokai in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 15—*Schiedea nuttallii*—b

This unit is critical habitat for *Schiedea nuttallii* and is 141 ha (347 ac) on State and private (Honouliuli Preserve) lands, containing Puu Kanehoa. The unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Schiedea nuttallii* and is currently unoccupied. This unit is essential to the species' conservation because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential to *Schiedea nuttallii* include,

but are not limited to, rock walls, forested slopes, or steep walls in *Acacia koa-Metrosideros polymorpha* lowland mesic forest or *Metrosideros polymorpha-Dodonaea viscosa* forest. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Kauai and Molokai in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 15—*Schiedea nuttallii*—c

This unit is critical habitat for *Schiedea nuttallii* and is 41 ha (102 ac) on private (Honouliuli Preserve) lands. There are no named natural features in this unit. The unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Schiedea nuttallii* and is currently unoccupied. This unit is essential to the species' conservation because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential to *Schiedea nuttallii* include, but are not limited to, rock walls, forested slopes, or steep walls in *Acacia koa-Metrosideros polymorpha* lowland mesic forest or *Metrosideros polymorpha-Dodonaea viscosa* forest. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Kauai and Molokai in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 1—*Sesbania tomentosa*—a

This unit is critical habitat for *Sesbania tomentosa* and is 101 ha (250 ac) on Federal, State (Kaena Point State Park and Kaena Point NAR), and private lands. There are no named natural features in this unit. The unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Sesbania tomentosa* and is occupied by 53 individuals. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Sesbania tomentosa* include, but are not limited to, cliff faces, broken basalt, or sand dunes with rock outcrops in *Scaevola sericea* coastal dry shrubland or *Sporobolus virginicus* mixed grasslands. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Kauai, Molokai, Maui, and the

Northwestern Hawaiian Island in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 18—*Sesbania tomentosa*—b

This unit is critical habitat for *Sesbania tomentosa* and is 5 ha (12 ac) on State (Mokualula State Seabird Sanctuary) lands that contain Mokualula Island. The unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Sesbania tomentosa* and is currently unoccupied. This unit is essential to the species' conservation because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential to *Sesbania tomentosa* include, but are not limited to, cliff faces, broken basalt, or sand dunes with rock outcrops in *Scaevola sericea* coastal dry shrubland or *Sporobolus virginicus* mixed grasslands. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Kauai, Molokai, Maui, and the Northwestern Hawaiian Island in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Silene lanceolata*—a

This unit is critical habitat for *Silene lanceolata* and is 113 ha (281 ac) on State (Waianae Kai Forest Reserve) lands, containing Puu Kawiwi. The unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Silene lanceolata* and is occupied by 12 individuals. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered to be not viable. The habitat features contained in this unit that are essential to *Silene lanceolata* include, but are not limited to, cliff faces or ledges of gullies in dry to mesic shrubland or cliff communities. This unit is geographically separated from critical habitat designated on Molokai in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 15—*Silene perlmannii*—a

This unit is critical habitat for *Silene perlmannii* and is 65 ha (162 ac) on Federal (Lualualei Naval Reservation) and State lands, containing Puu Kawiwi. The unit provides habitat for one population of 300 mature, reproducing individuals of the short-

lived perennial *Silene perlmannii* and is occupied by at 12 individuals. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Silene perlmannii* include, but are not limited to, steep rocky slopes in *Acacia koa-Metrosideros polymorpha* lowland mesic forest. Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other three units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 15—*Silene perlmannii*—b

This unit is critical habitat for *Silene perlmannii* and is 5 ha (12 ac) on private (Honouliuli Preserve) lands. There are no named natural features in this unit. The unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Silene perlmannii* and is currently unoccupied. This unit is essential to the species' conservation because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential to *Silene perlmannii* include, but are not limited to, steep rocky slopes in *Acacia koa-Metrosideros polymorpha* lowland mesic forest. Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other three units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 15—*Silene perlmannii*—c

This unit is critical habitat for *Silene perlmannii* and is 49 ha (124 ac) on State and private lands in the Waianae Mountains. There are no named natural features in this unit. The unit provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Silene perlmannii* and is currently unoccupied. This unit is essential to the species' conservation because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat

features contained in this unit that are essential to *Silene perlmannii* include, but are not limited to, steep rocky slopes in *Acacia koa-Metrosideros polymorpha* lowland mesic forest. Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other three units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 15—*Silene perlmannii*—d

This unit is critical habitat for *Silene perlmannii* and is 52 ha (130 ac) on private (Honouliuli Preserve) lands. There are no named natural features in this unit. The unit provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Silene perlmannii* and is currently unoccupied. This unit is essential to the species' conservation because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential to *Silene perlmannii* include, but are not limited to, steep rocky slopes in *Acacia koa-Metrosideros polymorpha* lowland mesic forest. Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other three units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 4—*Solanum sandwicense*—a

This unit is critical habitat for *Solanum sandwicense* and is 104 ha (258 ac) on State (Pahole NAR and Mokuleia Forest Reserve) lands. There are no named natural features in this unit. The unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Solanum sandwicense* and is currently unoccupied. This unit is essential to the species' conservation because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential to *Solanum sandwicense* include, but are not limited to, talus slopes or streambeds in open, sunny areas. This unit is geographically separated from critical habitat designated elsewhere on Oahu

and on Kauai for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Solanum sandwicense*—b

This unit is critical habitat for *Solanum sandwicense* and is 146 ha (361 ac) on State and private (Honouliuli Preserve) lands, containing Puu Kanehoa. The unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Solanum sandwicense* and is currently unoccupied. This unit is essential to the species' conservation because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential to *Solanum sandwicense* include, but are not limited to, talus slopes or streambeds in open, sunny areas. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Kauai for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 15—*Solanum sandwicense*—c

This unit is critical habitat for *Solanum sandwicense* and is 78 ha (192 ac) on State and private (Honouliuli Preserve) lands. There are no named natural features in this unit. The unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Solanum sandwicense* and is currently unoccupied. This unit is essential to the species' conservation because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential to *Solanum sandwicense* include, but are not limited to, talus slopes or streambeds in open, sunny areas. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Kauai for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 5—*Spermolepis hawaiiensis*—a

This unit is critical habitat for *Spermolepis hawaiiensis* and is 21 ha (53 ac) on State and private lands, containing Kaneana Cave. The unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Spermolepis hawaiiensis* and is occupied by 32 individuals. This unit is essential to the

species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Spermolepis hawaiiensis* include, but are not limited to, steep or vertical cliffs or the base of cliffs or ridges in coastal dry cliff vegetation. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Kauai, Molokai, and Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 31—*Spermolepis hawaiiensis*—b

This unit is critical habitat for *Spermolepis hawaiiensis* and is 116 ha (286 ac) on State (Diamond Head State Park) lands, containing Kuilei Cliffs. The unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Spermolepis hawaiiensis* and is occupied by 10 individuals. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Spermolepis hawaiiensis* include, but are not limited to, steep or vertical cliffs or the base of cliffs or ridges in coastal dry cliff vegetation. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Kauai, Molokai, and Maui for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 15—*Stenogyne kanehoana*—a

This unit is critical habitat for *Stenogyne kanehoana* and is 140 ha (347 ac) on Federal (Lualualei Naval Reservation), State, and private lands (Honouliuli Preserve), containing Puu Hapapa and Puu Kanehoa. The unit provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Stenogyne kanehoana* and is occupied by 6 individuals. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Stenogyne kanehoana* include, but are not limited to, lowland mesic forest.

Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other unit designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event. In addition, this unit is geographically separated from Army lands at Schofield Barracks that provide habitat for two populations of this species.

Oahu 15—*Stenogyne kanehoana*—b

This unit is critical habitat for *Stenogyne kanehoana* and is 43 ha (107 ac) on State and private (Honouliuli Preserve) lands, containing the Palikea Summit and the Laikea Trail. The unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Stenogyne kanehoana* and is currently unoccupied. This unit is essential to the species' conservation because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential to *Stenogyne kanehoana* include, but are not limited to, lowland mesic forest. Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other unit designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event. In addition, this unit is geographically separated from Army lands at Schofield Barracks that provide habitat for two populations of this species.

Oahu 4—*Tetramolopium filiforme*—a

This unit is critical habitat for *Tetramolopium filiforme* and is 111 ha (273 ac) on State (Waianae Kai Forest Reserve) lands, containing Puu Kawiwi. The unit provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Tetramolopium filiforme* and is occupied by one individual. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present populations, which is currently considered nonviable, and the establishment of one additional population. The habitat features contained in this unit that are essential to *Tetramolopium filiforme* include, but are not limited to, dry cliff faces or

ridges in dry or mesic forests. We do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species. However, this unit is geographically separated from Army lands at Makua and Schofield that provide habitat for four populations of this species, in order to avoid all populations being destroyed by one naturally occurring catastrophic event (see "Analysis of Impacts Under Section 4(b)(2): Other Impacts").

Oahu 4—*Tetramolopium lepidotum* ssp. *lepidotum*—a

This unit is critical habitat for *Tetramolopium lepidotum* ssp. *lepidotum* and is 167 ha (413 ac) on State (Kaala NAR, Mokuleia Forest Reserve) lands, containing Kamaohanui Summit. The unit provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Tetramolopium lepidotum* ssp. *lepidotum* and is currently unoccupied. This unit is essential to the species' conservation because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential to *Tetramolopium lepidotum* ssp. *lepidotum* include, but are not limited to, grassy ridgetops, slopes, or cliffs in windblown dry forests. This unit is geographically separated from the other five units designated as critical habitat on Oahu for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Tetramolopium lepidotum* ssp. *lepidotum*—b

This unit is critical habitat for *Tetramolopium lepidotum* ssp. *lepidotum* and is 23 ha (56 ac) on State (Waianae Kai Forest Reserve) lands. There are no named natural features in this unit. The unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Tetramolopium lepidotum* ssp. *lepidotum* and is occupied by 8 individuals. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Tetramolopium lepidotum* ssp. *lepidotum* include, but are not limited to, grassy ridgetops, slopes, or cliffs in windblown dry forests. This unit is geographically separated from the other five units designated as critical habitat on Oahu for this species in order

to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 15—*Tetramolopium lepidotum* ssp. *lepidotum*—c

This unit is critical habitat for *Tetramolopium lepidotum* ssp. *lepidotum* and is 11 ha (28 ac) on Federal lands (Lualualei Naval Reservation), containing Puu Hapapa. The unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Tetramolopium lepidotum* ssp. *lepidotum* and is currently unoccupied. This unit is essential to the species' conservation because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential to *Tetramolopium lepidotum* ssp. *lepidotum* include, but are not limited to, grassy ridgetops, slopes, or cliffs in windblown dry forests. This unit is geographically separated from the other five units designated as critical habitat on Oahu for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 15—*Tetramolopium lepidotum* ssp. *lepidotum*—d

This unit is critical habitat for *Tetramolopium lepidotum* ssp. *lepidotum* and is 94 ha (233 ac) on Federal (Lualualei Naval Reservation), State, and private (Honouliuli Preserve) lands, containing Puu Kanehoa. The unit, in combination with Oahu 15—*Tetramolopium lepidotum* ssp. *lepidotum*—e, provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Tetramolopium lepidotum* ssp. *lepidotum* and is currently unoccupied. This unit is essential to the species' conservation because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential to *Tetramolopium lepidotum* ssp. *lepidotum* include, but are not limited to, grassy ridgetops, slopes, or cliffs in windblown dry forests. This unit is geographically separated from the other five units designated as critical habitat on Oahu for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 15—*Tetramolopium lepidotum* ssp. *lepidotum*—e

This unit is critical habitat for *Tetramolopium lepidotum* ssp.

lepidotum and is 1 ha (3 ac) on State and private (Honouliuli Preserve) lands. There are no named natural features in this unit. The unit, in combination with Oahu 15—*Tetramolopium lepidotum* ssp. *lepidotum*—d, provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Tetramolopium lepidotum* ssp. *lepidotum*. It is currently unoccupied. This unit is essential to the species' conservation because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential to *Tetramolopium lepidotum* ssp. *lepidotum* include, but are not limited to, grassy ridgetops, slopes, or cliffs in windblown dry forests. This unit is geographically separated from the other five units designated as critical habitat on Oahu for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 15—*Tetramolopium lepidotum* ssp. *lepidotum*—f

This unit is critical habitat for *Tetramolopium lepidotum* ssp. *lepidotum* and is 259 ha (641 ac) on Federal (Lualualei Naval Reservation), State, and private lands, containing Palikea Summit. The unit provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Tetramolopium lepidotum* ssp. *lepidotum* and is currently unoccupied. This unit is essential to the species' conservation because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential to *Tetramolopium lepidotum* ssp. *lepidotum* include, but are not limited to, grassy ridgetops, slopes, or cliffs in windblown dry forests. This unit is geographically separated from the other five units designated as critical habitat on Oahu for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 20—*Tetraplasandra gymnocarpa*—a

This unit is critical habitat for *Tetraplasandra gymnocarpa* and is 457 ha (1,129 ac) on State (Sacred Falls State Park, Hauula Forest Reserve, and Kaipapau Forest Reserve) and private lands, containing the Koolau Summit Trail. The unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial

Tetraplasandra gymnocarpa and is occupied by 24 individuals. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Tetraplasandra gymnocarpa* include, but are not limited to, windswept summit ridges, slopes, or gullies in wet or sometimes mesic lowland forests or shrublands. This unit is geographically separated from the other five units designated as critical habitat for this island-endemic species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 20—*Tetraplasandra gymnocarpa*—b

This unit is critical habitat for *Tetraplasandra gymnocarpa* and is 235 ha (581 ac) on State (Kahana Valley State Park), and private lands, containing Puu Kaaumakua. The unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Tetraplasandra gymnocarpa* and is occupied by 5 individuals. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Tetraplasandra gymnocarpa* include, but are not limited to, windswept summit ridges, slopes, or gullies in wet or sometimes mesic lowland forests or shrublands. This unit is geographically separated from the other five units designated as critical habitat for this island-endemic species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 20—*Tetraplasandra gymnocarpa*—c

This unit is critical habitat for *Tetraplasandra gymnocarpa* and is 411 ha (1,018 ac) on State (Waiahole Forest Reserve and Ewa Forest Reserve) and private lands, containing Eleao Summit. The unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Tetraplasandra gymnocarpa* and is occupied by 2 individuals. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently

considered nonviable. The habitat features contained in this unit that are essential to *Tetraplasandra gymnocarpa* include, but are not limited to, windswept summit ridges, slopes, or gullies in wet or sometimes mesic lowland forests or shrublands. This unit is geographically separated from the other five units designated as critical habitat for this island-endemic species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 20—*Tetraplasandra gymnocarpa*—d

This unit is critical habitat for *Tetraplasandra gymnocarpa* and is 362 ha (894 ac) on Federal, State (Waiahole Forest Reserve and Kaneohe Forest Reserve), and private lands, containing Puu Kahualuli and Puu Keahiakahoe. The unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Tetraplasandra gymnocarpa* and is occupied by 28 individuals. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Tetraplasandra gymnocarpa* include, but are not limited to, windswept summit ridges, slopes, or gullies in wet or sometimes mesic lowland forests or shrublands. This unit is geographically separated from the other five units designated as critical habitat for this island-endemic species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 35—*Tetraplasandra gymnocarpa*—e

This unit is critical habitat for *Tetraplasandra gymnocarpa* and is 152 ha (377 ac) on State (Honolulu Watershed Forest Reserve) lands, containing Konahuanui Summit. The unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Tetraplasandra gymnocarpa* and is occupied by 5 individuals. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Tetraplasandra gymnocarpa* include, but are not limited to, windswept summit ridges, slopes, or gullies in wet or sometimes mesic

lowland forests or shrublands. This unit is geographically separated from the other five units designated as critical habitat for this island-endemic species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 35—*Tetraplasandra gymnocarpa*—f

This unit is critical habitat for *Tetraplasandra gymnocarpa* and is 213 ha (528 ac) on State (Honolulu Watershed Forest Reserve) and private lands. There are no named natural features in this unit. The unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Tetraplasandra gymnocarpa* and is occupied by 15 individuals. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Tetraplasandra gymnocarpa* include, but are not limited to, windswept summit ridges, slopes, or gullies in wet or sometimes mesic lowland forests or shrublands. This unit is geographically separated from the other five units designated as critical habitat for this island-endemic species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 20—*Trematolobelia singularis*—a

This unit is critical habitat for *Trematolobelia singularis* and is 86 ha (219 ac) on Federal, State (Waiahole Forest Reserve and Ewa Forest Reserve), and private lands, containing Eleao Summit. The unit provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Trematolobelia singularis* and is currently unoccupied. This unit is essential to the species' conservation because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential to *Trematolobelia singularis* include, but are not limited to, steep, windswept cliff faces or slopes in *Metrosideros polymorpha-Dicranopteris linearis* lowland wet shrubland. Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other four units designated as critical habitat for this island-endemic species to avoid all

recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 20—*Trematolobelia singularis*—b

This unit is critical habitat for *Trematolobelia singularis* and is 10 ha (26 ac) on Federal, State, and private lands, containing Puu Keahiakahoe. The unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Trematolobelia singularis* and is occupied by 50 individuals. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Trematolobelia singularis* include, but are not limited to, steep, windswept cliff faces or slopes in *Metrosideros polymorpha-Dicranopteris linearis* lowland wet shrubland. Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other four units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 34—*Trematolobelia singularis*—c

This unit is critical habitat for *Trematolobelia singularis* and is 2 ha (5 ac) on State (Honolulu Watershed Forest Reserve) and private lands, containing Kainawaunui Summit, Mount Olympus, Palikea Summit, and Puu Lanipo. The unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Trematolobelia singularis* and is currently unoccupied. This unit is essential to the species' conservation because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential to *Trematolobelia singularis* include, but are not limited to, steep, windswept cliff faces or slopes in *Metrosideros polymorpha-Dicranopteris linearis* lowland wet shrubland. Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other four units designated as critical habitat for this island-endemic species to avoid all recovery populations from being

destroyed by one naturally occurring catastrophic event.

Oahu 35—*Trematolobelia singularis*—d

This unit is critical habitat for *Trematolobelia singularis* and is 13 ha (33 ac) on State lands, containing Puu Lanihuli. The unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Trematolobelia singularis* and is occupied by 100 individuals. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Trematolobelia singularis* include, but are not limited to, steep, windswept cliff faces or slopes in *Metrosideros polymorpha-Dicranopteris linearis* lowland wet shrubland. Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other four units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 35—*Trematolobelia singularis*—e

This unit is critical habitat for *Trematolobelia singularis* and is 26 ha (64 ac) on State (Honolulu Watershed Forest Reserve) and private lands, containing Konahuanui Summit. The unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Trematolobelia singularis* and is occupied by 15 individuals. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Trematolobelia singularis* include, but are not limited to, steep, windswept cliff faces or slopes in *Metrosideros polymorpha-Dicranopteris linearis* lowland wet shrubland. Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other four units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 4—*Urera kaalae*—a

This unit is critical habitat for *Urera kaalae* and is 53 ha (133 ac) on State (Waianae Kai Forest Reserve) lands. There are no named natural features in this unit. The unit, in combination with Oahu 4—*Urera kaalae*—b, provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Urera kaalae* and is currently unoccupied. This unit is essential to the species' conservation because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential to *Urera kaalae* include, but are not limited to, slopes or gulches in diverse mesic forest. This unit is geographically separated from the other five units designated as critical habitat for this island-endemic species in order to avoid all recovery populations being destroyed by one naturally occurring catastrophic event.

Oahu 4—*Urera kaalae*—b

This unit is critical habitat for *Urera kaalae* and is 17 ha (43 ac) on State (Honolulu Watershed Forest Reserve) lands. There are no named natural features in this unit. The unit, in combination with Oahu 4—*Urera kaalae*—a, provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Urera kaalae* and is occupied by 3 individuals. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Urera kaalae* include, but are not limited to, slopes or gulches in diverse mesic forest. This unit is geographically separated from the other five units designated as critical habitat for this island-endemic species in order to avoid all recovery populations being destroyed by one naturally occurring catastrophic event.

Oahu 15—*Urera kaalae*—c

This unit is critical habitat for *Urera kaalae* and is 224 ha (555 ac) on Federal (Lualualei Naval Reservation) and private (Honoliuli Preserve) lands, containing Puu Hapapa and Puu Kanehoa. The unit provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Urera kaalae* and is occupied by 4 individuals. This unit is essential to the species' conservation

because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Urera kaalae* include, but are not limited to, slopes or gulches in diverse mesic forest. This unit is geographically separated from the other five units designated as critical habitat for this island-endemic species in order to avoid all recovery populations being destroyed by one naturally occurring catastrophic event.

Oahu 15—*Urera kaalae*—d

This unit is critical habitat for *Urera kaalae* and is 35 ha (87 ac) on private (Honoliuli Preserve) lands. There are no named natural features in this unit. The unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Urera kaalae* and is occupied by 7 individuals. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Urera kaalae* include, but are not limited to, slopes or gulches in diverse mesic forest. This unit is geographically separated from the other five units designated as critical habitat for this island-endemic species in order to avoid all recovery populations being destroyed by one naturally occurring catastrophic event.

Oahu 15—*Urera kaalae*—e

This unit is critical habitat for *Urera kaalae* and is 51 ha (125 ac) on Federal (Lualualei Naval Reservation) and State lands. There are no named natural features in this unit. The unit, in combination with Oahu 15—*Urera kaalae*—f, provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Urera kaalae* and is occupied by 6 individuals. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Urera kaalae* include, but are not limited to, slopes or gulches in diverse mesic forest. This unit is geographically separated from the other five units designated as critical habitat for this island-endemic species in order to avoid all recovery populations being

destroyed by one naturally-occurring catastrophic event.

Oahu 15—*Urera kaalae*—f

This unit is critical habitat for *Urera kaalae* and is 82 ha (202 ac) on State and private (Honouliuli Preserve) lands, containing Palikea Summit. The unit, in combination with Oahu 15—*Urera kaalae*—e, provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Urera kaalae* and is occupied by 31 individuals. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Urera kaalae* include, but are not limited to, slopes or gulches in diverse mesic forest. This unit is geographically separated from the other five units designated as critical habitat for this island-endemic species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 1—*Vigna o-wahuensis*—a

This unit is critical habitat for *Vigna o-wahuensis* and is 180 ha (447 ac) on State (Kaena Point State Park) lands, containing Alau Gulch, Alei Pali, Nihoa Gulch, Puu Pueo, and Uluhulu Gulch. The unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Vigna o-wahuensis* and is currently unoccupied. This unit is essential to the species' conservation because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential to *Vigna o-wahuensis* include, but are not limited to, open dry fossil reef, with shrubs or grasses or fairly steep slopes. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Maui and Kahoolawe for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 24—*Vigna o-wahuensis*—b

This unit is critical habitat for *Vigna o-wahuensis* and is 4 ha (12 ac) on State (Mokulua Island State Seabird Sanctuary) lands, containing the Mokulua Islands. The unit, in combination with Oahu 25—*Vigna o-wahuensis*—c, provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Vigna o-wahuensis* and is currently unoccupied. This unit

is essential to the species' conservation because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential to *Vigna o-wahuensis* include, but are not limited to, open dry fossil reef with shrubs or grasses or fairly steep slopes. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Maui and Kahoolawe for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 25—*Vigna o-wahuensis*—c

This unit is critical habitat for *Vigna o-wahuensis* and is 4 ha (9 ac) on State (Mokulua Island State Seabird Sanctuary) lands, containing the Mokulua Islands. The unit, in combination with Oahu 24—*Vigna o-wahuensis*—b, provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Vigna o-wahuensis* and is currently unoccupied. This unit is essential to the species' conservation because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential to *Vigna o-wahuensis* include, but are not limited to, open dry fossil reef with shrubs or grasses or fairly steep slopes. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Maui and Kahoolawe for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 26—*Vigna o-wahuensis*—d

This unit is critical habitat for *Vigna o-wahuensis* and is 26 ha (63 ac) on State (Manana Island State Seabird Sanctuary) lands, containing Manana Island. The unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Vigna o-wahuensis* and is currently unoccupied. This unit is essential to the species' conservation because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential to *Vigna o-wahuensis* include, but are not limited to, open dry fossil reef with shrubs or grasses or fairly steep slopes. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Maui and Kahoolawe for this species in order to avoid all recovery

populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Viola chamissoniana* ssp. *chamissoniana*—a

This unit is critical habitat for *Viola chamissoniana* ssp. *chamissoniana* and is 199 ha (491 ac) on State (Kaala NAR and Mokuleia Forest Reserve) lands. There are no named natural features in this unit. The unit provides habitat for 4 populations of 300 mature, reproducing individuals of the short-lived perennial *Viola chamissoniana* ssp. *chamissoniana* and is currently unoccupied. This unit is essential to the species' conservation because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential to *Viola chamissoniana* ssp. *chamissoniana* include, but are not limited to, dry cliffs, rocky ledges, or steep slopes in mesic shrubland or cliff vegetation. This unit is geographically separated from the other five units designated as critical habitat for this island-endemic species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Viola chamissoniana* ssp. *chamissoniana*—b

This unit is critical habitat for *Viola chamissoniana* ssp. *chamissoniana* and is 10 ha (25 ac) on State (Waianae Kai Forest Reserve) lands. There are no named natural features in this unit. The unit, in combination with Oahu 4—*Viola chamissoniana* ssp. *chamissoniana*—c, provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Viola chamissoniana* ssp. *chamissoniana* and is currently unoccupied. This unit is essential to the species' conservation because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential to *Viola chamissoniana* ssp. *chamissoniana* include, but are not limited to, dry cliffs, rocky ledges, or steep slopes in mesic shrubland or cliff vegetation. This unit is geographically separated from the other five units designated as critical habitat for this island-endemic species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Viola chamissoniana* ssp. *chamissoniana*—c

This unit is critical habitat for *Viola chamissoniana* ssp. *chamissoniana* and

is 22 ha (55 ac) on State (Waianae Kai Forest Reserve) lands, containing Puu Kawiwi. The unit, in combination with Oahu 4—*Viola chamissoniana* ssp. *chamissoniana*—b, provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Viola chamissoniana* ssp. *chamissoniana* and is occupied by 5 individuals. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Viola chamissoniana* ssp. *chamissoniana* include, but are not limited to, dry cliffs, rocky ledges, or steep slopes in mesic shrubland or cliff vegetation. This unit is geographically separated from the other five units designated as critical habitat for this island-endemic species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 10—*Viola chamissoniana* ssp. *chamissoniana*—d

This unit is critical habitat for *Viola chamissoniana* ssp. *chamissoniana* and is 6 ha (15 ac) on Federal lands (Lualualei Naval Reservation). There are no named natural features in this unit. The unit, in combination with Oahu 15—*Viola chamissoniana* ssp. *chamissoniana*—e, provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Viola chamissoniana* ssp. *chamissoniana* and is currently unoccupied. This unit is essential to the species' conservation because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential to *Viola chamissoniana* ssp. *chamissoniana* include, but are not limited to, dry cliffs, rocky ledges, or steep slopes in mesic shrubland or cliff vegetation. This unit is geographically separated from the other five units designated as critical habitat for this island-endemic species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 15—*Viola chamissoniana* ssp. *chamissoniana*—e

This unit is critical habitat for *Viola chamissoniana* ssp. *chamissoniana* and is 13 ha (31 ac) on Federal lands (Lualualei Naval Reservation). There are no named natural features in this unit. The unit, in combination with Oahu

10—*Viola chamissoniana* ssp. *chamissoniana*—d, provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Viola chamissoniana* ssp. *chamissoniana* and is currently unoccupied. This unit is essential to the species' conservation because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential to *Viola chamissoniana* ssp. *chamissoniana* include, but are not limited to, dry cliffs, rocky ledges, or steep slopes in mesic shrubland or cliff vegetation. This unit is geographically separated from the other five units designated as critical habitat for this island-endemic species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 15—*Viola chamissoniana* ssp. *chamissoniana*—f

This unit is critical habitat for *Viola chamissoniana* ssp. *chamissoniana* and is 29 ha (72 ac) on Federal (Lualualei Naval Reservation) and private lands. There are no named natural features in this unit. The unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Viola chamissoniana* ssp. *chamissoniana* and is occupied by 3 individuals. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Viola chamissoniana* ssp. *chamissoniana* include, but are not limited to, dry cliffs, rocky ledges, or steep slopes in mesic shrubland or cliff vegetation. This unit is geographically separated from the other five units designated as critical habitat for this island-endemic species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 20—*Viola oahuensis*—a

This unit is critical habitat for *Viola oahuensis* and is 903 ha (2,232 ac) on Federal (Oahu Forest National Wildlife Refuge), State (Hauula Forest Reserve, Sacred Falls State Park, Kaipapau Forest Reserve, Kahana Valley State Park, Ewa Forest Reserve, and Waiahole Forest Reserve), and private lands, containing Eleao Summit, Puu Kahuaui, Puu Keahiakahoe, Puu Pauao, and the Koolau Summit Trail. The unit provides habitat for 6 populations of 300 mature,

reproducing individuals of the short-lived perennial *Viola oahuensis* and is occupied by 67 individuals. This unit is essential to the species' conservation because it supports an extant colony and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential to *Viola oahuensis* include, but are not limited to, exposed, windswept ridges of moderate to steep slope in wet *Metrosideros polymorpha-Dicranopteris linearis* shrublands or *Metrosideros polymorpha* mixed montane bogs in the cloud zone. This unit is geographically separated from the other unit designated as critical habitat for this island-endemic species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 35—*Viola oahuensis*—b

This unit is critical habitat for *Viola oahuensis* and is 74 ha (186 ac) on State (Honolulu Watershed Forest Reserve) lands, containing Konahuanui Summit and Mount Olympus. The unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Viola oahuensis* and is currently unoccupied. This unit is essential to the species' conservation because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential to *Viola oahuensis* include, but are not limited to, exposed, windswept ridges of moderate to steep slope in wet *Metrosideros polymorpha-Dicranopteris linearis* shrublands or *Metrosideros polymorpha* mixed montane bogs in the cloud zone. This unit is geographically separated from the other unit designated as critical habitat for this island-endemic species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Effects of Critical Habitat Designation

Section 7 Consultation

Section 7(a) of the Act requires Federal agencies, including the Service, to ensure that actions they fund, authorize, or carry out are not likely to destroy or adversely modify critical habitat. Destruction or adverse modification of critical habitat occurs when a Federal action directly or indirectly alters critical habitat to the extent that it appreciably diminishes the value of critical habitat for the conservation of the species. Individuals,

organizations, States, local governments, and other non-Federal entities are affected by the designation of critical habitat when their actions occur on Federal lands, require a Federal permit, license, or other authorization, or involve Federal funding.

Section 7(a)(2) of the Act requires Federal agencies, including the Service, to evaluate their actions with respect to any species that is listed as endangered or threatened and with respect to its critical habitat, if any is designated. If a Federal action may affect a listed species or its critical habitat, the responsible Federal action agency must enter into consultation with us. Through this consultation, the action agency would ensure that the permitted actions do not destroy or adversely modify critical habitat. Section 7(a)(4) of the Act requires Federal agencies (action agency) to confer with us on any action that is likely to jeopardize the continued existence of a species proposed for listing or result in destruction or adverse modification of proposed critical habitat. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402.

Regulations at 50 CFR 402.16 require Federal agencies to reinitiate formal consultation on previously reviewed actions under certain circumstances, including instances where critical habitat is subsequently designated and the Federal agency has retained discretionary involvement, or control has been retained or is authorized by law. Consequently, some Federal agencies may request reinitiation of consultation or conferencing with us on actions for which formal consultation has been completed, if those actions may affect designated critical habitat or adversely modify or destroy proposed critical habitat.

If we issue a biological opinion concluding that a project is likely to result in the destruction or adverse modification of critical habitat, we also provide "reasonable and prudent alternatives" to the project, if any are identifiable. Reasonable and prudent alternatives are defined at 50 CFR 402.02 as alternative actions identified during consultation that can be implemented in a manner consistent with the intended purpose of the action, that are consistent with the scope of the Federal agency's legal authority and jurisdiction, that are economically and technologically feasible, and that the Director believes would avoid destruction or adverse modification of critical habitat. Reasonable and prudent alternatives can vary from slight project modifications to extensive redesign or

relocation of the project. Costs associated with implementing a reasonable and prudent alternative are similarly variable.

Activities on Federal lands that may affect critical habitat of one or more of the 99 plant species from Oahu will require section 7 consultation. Activities on private or State lands requiring a permit from a Federal agency, such as a permit from the U.S. Army Corps of Engineers (Corps) under section 404 of the Clean Water Act (33 U.S.C. 1344 *et seq.*), the Department of Housing and Urban Development, or a section 10(a)(1)(B) permit from us; or some other Federal action, including funding (e.g., from the Federal Highway Administration, Federal Aviation Administration (FAA), Federal Emergency Management Agency (FEMA), Environmental Protection Agency (EPA), or Department of Energy); regulation of airport improvement activities by the FAA; and construction of communication sites licensed by the Federal Communications Commission (FCC) will also continue to be subject to the section 7 consultation process. Federal actions not affecting critical habitat and actions on non-Federal lands that are not federally funded, authorized, or permitted do not require section 7 consultation.

Section 4(b)(8) of the Act requires us to briefly describe and evaluate in any proposed or final regulation that designates critical habitat those activities involving a Federal action that may adversely modify such habitat or that may be affected by such designation. We note that such activities may also jeopardize the continued existence of the species.

Activities that, when carried out, funded, or authorized by a Federal agency, may directly or indirectly destroy or adversely modify critical habitat include, but are not limited to:

(1) Activities that appreciably degrade or destroy the primary constituent elements including, but not limited to: Overgrazing; maintenance of feral ungulates; clearing or cutting of native live trees and shrubs, whether by burning or mechanical, chemical, or other means (e.g., woodcutting, bulldozing, construction, road building, mining, herbicide application); introducing or enabling the spread of nonnative species; and taking actions that pose a risk of fire;

(2) Activities that alter watershed characteristics in ways that would appreciably reduce groundwater recharge or alter natural, dynamic wetland or other vegetative communities. Such activities may

include water diversion or impoundment, excess groundwater pumping, manipulation of vegetation such as timber harvesting, residential and commercial development, and grazing of livestock that degrades watershed values;

(3) Rural residential construction that includes concrete pads for foundations and the installation of septic systems in wetlands where a permit under section 404 of the Clean Water Act would be required by the Corps;

(4) Recreational activities that appreciably degrade vegetation;

(5) Mining of sand or other minerals;

(6) Introducing or encouraging the spread of nonnative plant species into critical habitat units; and

(7) Importation of nonnative species for research, agriculture, and aquaculture, and the release of biological control agents that would have unanticipated effects on the listed species and the primary constituent elements of their habitat.

If you have questions regarding whether specific activities will likely constitute adverse modification of critical habitat, contact the Field Supervisor, Pacific Islands Ecological Services Field Office (see **ADDRESSES** section). Requests for copies of the regulations on listed plants and animals, and inquiries about prohibitions and permits may be addressed to the U.S. Fish and Wildlife Service, Branch of Endangered Species/Permits, 911 N.E. 11th Ave., Portland, OR 97232-4181 (telephone 503/231-2063; facsimile 503/231-6243).

Analysis of Managed Lands Under Section 3(5)(A)

The need for "special management considerations or protections" of the essential habitat features (primary constituent elements) included in a designation is required by the definition of critical habitat in section 3(5)(A) of the Act. If the primary constituent elements are being adequately managed then they do not need "special management considerations or protections." Adequate management or protection is provided by a legally operative plan that addresses the maintenance and improvement of the essential elements and provides for the long-term conservation of the species. We consider a plan adequate when it (1) provides a conservation benefit to the species (*i.e.*, the plan must maintain or provide for an increase in the species' population or the enhancement or restoration of its habitat within the area covered by the plan); (2) provides assurances that the management plan will be implemented (*i.e.*, those

responsible for implementing the plan are capable of accomplishing the objectives, have an implementation schedule and have adequate funding for the management plan); and, (3) provides assurances that the conservation plan will be effective (*i.e.*, it identifies biological goals, has provisions for reporting progress, and is of a duration sufficient to implement the plan and achieve the plan's goals and objectives). If an area is covered by a plan that meets these criteria, it does not constitute critical habitat as defined by the Act because the primary constituent elements found there are not considered to be in need of special management or protection.

Currently occupied and historically known sites containing one or more of the primary constituent elements considered essential to the conservation of these 99 plant species were examined to determine the adequacy of special management considerations or protection and, consequently, whether such areas meet the definition of critical habitat under section 3(5)(A). We reviewed all available management information on these plants at these sites, including published reports and surveys; annual performance and progress reports; management plans; grants; memoranda of understanding and cooperative agreements; DOFAW planning documents; internal letters and memos; biological assessments and environmental impact statements; and section 7 consultations. We reviewed all biological information received during the public comment periods, public meeting, and public hearing. When clarification was required on the information provided to us, we followed up with a telephone contact. We also met with staff from the Oahu District DOFAW office to discuss management activities they are conducting on Oahu.

In determining whether a management plan or agreement provides adequate management or protection, we first consider whether that plan provides a conservation benefit to the species. We considered the following threats and associated recommended management actions:

(1) The factors that led to the listing of the species, as described in the final rules for listing each of the species. Effects of clearing and burning for agricultural purposes and of invasive nonnative plant and animal species have contributed to the decline of nearly all endangered and threatened plants in Hawaii (Cuddihy and Stone 1990; Howarth 1985; Loope 1998; Scott *et al.* 1986; Service 1994, 1995a, 1995b, 1996a, 1996b, 1996c, 1996d, 1997, 1998a, 1998b, 1999; Smith 1985; Stone

1985; Vitousek 1992; Wagner *et al.* 1985).

Current threats to these species include nonnative grass- and shrub-carried wildfire; browsing, digging, rooting, and trampling from feral ungulates (including goats, cattle, and pigs); direct and indirect effects of nonnative plant invasions, including alteration of habitat structure and microclimate; and disruption of pollination and gene-flow processes by adverse effects of mosquito-borne avian disease on forest bird pollinators, direct competition between native and nonnative insect pollinators for food, and predation of native insect pollinators by nonnative hymenopteran insects (ants). In addition, physiological processes such as reproduction and establishment, continue to be negatively affected by fruit- and flower-eating pests such as nonnative arthropods, mollusks, and rats, and photosynthesis and water transport are affected by nonnative insects, pathogens, and diseases. Many of these factors interact with one another, thereby compounding effects. Such interactions include nonnative plant invasions altering wildfire regimes; feral ungulates carry weeds and disturbing vegetation and soils, thereby facilitating dispersal and establishment of nonnative plants; and numerous nonnative insect species feeding on native plants, thereby increasing their vulnerability and exposure to pathogens and disease (Brueggemann *et al.* 2001; Cuddihy and Stone 1990; D'Antonio and Vitousek 1992; Howarth 1985; Mack 1992; Scott *et al.* 1986; Service 1994, 1995a, 1995b, 1996a, 1996b, 1996c, 1996d, 1997, 1998a, 1998b, 1999; Smith 1985; Tunison *et al.* 1992);

(2) The recommendations from the HPPRCC in their 1998 report to us ("Habitat Essential to the Recovery of Hawaiian Plants"). As summarized in this report, recovery goals for endangered Hawaiian plant species cannot be achieved without the effective control of nonnative species threats, wildfire, and land use changes; and

(3) The management actions needed for assurance of survival and ultimate recovery of these plants. These actions are described in our recovery plans for these 99 species (Service 1994, 1995a, 1995b, 1996a, 1996b, 1996c, 1996d, 1997, 1998a, 1998b, 1999), in the 1998 HPPRCC report to us, and in various other documents and publications relating to plant conservation in Hawaii (Cuddihy and Stone 1990; Mueller-Dombois 1985; Smith 1985; Stone 1985; Stone *et al.* 1992).

In general, taking all of the above recommended management actions into account, the following management

actions are important in providing a conservation benefit to the species: Feral ungulate control; wildfire management; nonnative plant control; rodent control; invertebrate pest control; maintenance of genetic material of the endangered and threatened plant species; propagation, reintroduction, and augmentation of existing populations into areas essential for the recovery of the species; ongoing management of the wild, outplanted, and augmented populations; maintenance of natural pollinators and pollinating systems, when known; habitat management and restoration in areas essential for the recovery of the species; monitoring of the wild, outplanted, and augmented populations; rare plant surveys; and control of human activities/access (Service 1994, 1995a, 1995b, 1996a, 1996b, 1996c, 1996d, 1997, 1998a, 1998b, 1999). On a case-by-case basis, these actions may rise to different levels of importance for a particular species or area, depending on the biological and physical requirements of the species and the location(s) of the individual plants.

As shown in Table 2, the 99 species of plants are found on Federal, State, and private lands on the island of Oahu. Information received in response to our public notices; meetings with Oahu District DOFAW staff; the May 28, 2002, proposal; public comment periods; and the November 19, 2002, public hearing; as well as information in our files, indicated that there is limited ongoing conservation management action for these plants, except as noted below. Without management plans and assurances that the plans will be implemented, we are unable to find that the lands in question do not require special management or protection.

The following discussion analyzes current management plans that provide a conservation benefit to the species on lands under U.S. Army jurisdiction to assess whether they meet the Service's requirements for adequate management or protection.

The Sikes Act Improvements Act of 1997 (Sikes Act) requires each military installation that includes land and water suitable for the conservation and management of natural resources to complete, by November 17, 2001, an Integrated Natural Resources Management Plan (INRMP). An INRMP integrates implementation of the military mission of the installation with stewardship of the natural resources found there. Each INRMP includes an assessment of the ecological needs on the installation, including needs to provide for the conservation of listed species; a statement of goals and

priorities; a detailed description of management actions to be implemented to provide for these ecological needs; and a monitoring and adaptive management plan. We consult with the military on the development and implementation of INRMPs for installations with listed species. Bases that have completed and approved INRMPs that adequately address the needs of the species may not meet the definition of critical habitat discussed above, because they may not require special management or protection. We would not include these areas in critical habitat designations if they meet the following three criteria: (1) A current INRMP must be complete and provide a conservation benefit to the species, (2) there must be assurances that the conservation management strategies will be implemented, and (3) there must be assurances that the conservation management strategies will be effective, by providing for periodic monitoring and revisions as necessary. If all of these criteria are met, then the lands covered under the plan would not meet the definition of critical habitat.

Lands Under U.S. Army Jurisdiction

The Army has six installations under its jurisdiction on Oahu: Dillingham Military Reservation (DMR), Kawaihoa Training Area (KLOA), Kahuku Training Area (KTA), Makua Military Reservation (MMR), Schofield Barracks Military Reservation (SBMR), and Schofield Barracks East Range (SBER). All of these lands are administered by the Army Garrison, Hawaii, for various types of routine military training. The Army has completed an INRMP (Army 2002), an Ecosystem Management Plan (Army 1998), and an Endangered Species Management Plan (Research Corporation of Hawaii (RCUH) 1998) for all of the Oahu training areas. These plans encompass management actions that will benefit all 76 listed plant species for which critical habitat has been proposed on these Army lands. They have a completed Wildland Fire Management Plan (WFMP) for MMR (Army 2000) and a draft plan which includes the other five installations (Army 2003). The goal of the WFMP is to reduce the threat of wildfire which adversely affects threatened and endangered species on all six installations. The Army also provides monthly and annual summary reports (Col. W.E. Ryan III, Army, *in litt.* 2000–2002; Col. F.A. Quintana, Army, *in litt.* 2002–2003) regarding the natural resources management projects performed under the Ecosystems Management Program for all six installations (RCUH 1998, 1999, 2000,

2001 and 2002). These reports provide information on management actions which have been implemented and which of these have proven beneficial to populations of listed species.

The INRMP describes specific actions for each installation, including anticipated implementation schedules. It includes hundreds of ongoing and proposed actions within the time frame of the INRMP designed to address the variety of threats faced by these plant species at appropriate scales: Species-specific, small areas, watersheds, and installation-wide. Examples of management activities directed towards the conservation of listed plants and their habitat include: (1) Field surveys to identify new populations of threatened and endangered plant species in previously unsurveyed areas and areas of suitable habitat; (2) development of a web-based system for a rare plant database; (3) establishment of a GIS database to store data to be used to monitor threatened and endangered plant species; (4) maintenance a GIS database updated with results of field surveys; (5) determining effects of military actions on threatened and endangered plants species through monitoring known populations of threatened and endangered plant species; (6) evaluation and determination of plant propagation needs and storage facilities; (7) identification of research needs regarding pollination biology and establishment of a GIS database to store data to be used to monitor threatened and endangered plant species; (8) propagation and outplanting of threatened and endangered plant species; and (9) creation of a full-time horticulturist position to identify and implement management actions for threatened and endangered plant species (Army 2002).

The list of ongoing and proposed actions detailed in the INRMP focuses management activities into the areas of wildfire management, nonmilitary human land use, feral ungulate control, invasive plant control, and other nonnative species control. As an example, some of the management actions that address feral ungulate control include: (1) The establishment and evaluation of permanent ungulate monitoring transects; (2) development and establishment of a GIS database to maintain these transect data; (3) implementation of ungulate control measures as necessary in areas where there are populations or occurrences of threatened and endangered species; (4) evaluation of ungulate control efforts to determine if permanent management units are required; and (5) monitoring

and maintenance of existing fenced units. In addition, management actions for control of nonnative plant species include: (1) The control and eradication of nonnative incipient plant species, particularly in areas where threatened and endangered species occur; (2) control of widespread nonnative plant species where they threaten native plant communities; and (3) establishment of a GIS database for nonnative plant location data, and updating nonnative plant location maps to track and prioritize control efforts (Army 2002).

The comprehensive list of ongoing and proposed management activities detailed in the INRMP addresses each of the management actions detailed above that the Service considers are important in providing a conservation benefit to the species, therefore, the plan provides a conservation benefit to the species.

In terms of providing assurances that the management plan will be implemented, the INRMP provides implementation schedules and identifies funding needs for each installation through the year 2006. Examples of those programs identified for funding include the Endangered Species Management, Biodiversity and Ecosystem Integrity, Watershed Management, Conservation Education and Outreach, and Pest Management. The Army has committed to increased funding for their wildland fire program to ensure proactive fire management that will benefit threatened and endangered plant species through increased protection of habitat on their lands. They have also committed to continued funding of actions that benefit habitat restoration, species stabilization, and threat abatement (Anderson, *in litt.* 2003).

The plan does provide assurances that the conservation effort will be effective. The Army will fund and engage in activities that have been demonstrated to benefit threatened and endangered species (*e.g.*, ungulate and invasive weed control). In addition to the extensive monitoring provisions contained in the INRMP and provided by the reporting procedures, the Army has agreed to amend their existing INRMP to include additional monitoring of federally listed plants and their habitat at all of their Oahu installations to determine the success of identified management activities. Based upon this information, activities will be revised to provide for the optimum conservation benefit to the listed plant species and their habitat (Col. David L. Anderson, Army, *in litt.* 2003). Thus, the Army will monitor the effectiveness of its management actions and modify them,

as necessary, to ensure their effectiveness.

As all three criteria above have been met, the Service has determined that lands on the island of Oahu which fall under U.S. Army jurisdiction do not meet the definition of critical habitat in the Act. According to the Service's published recovery plans, the major extinction threats to Oahu plants involve the persistent and expanding presence of alien species and their associated impacts. In general, for most of these species there is less relative concern associated with Federal activities or proposed development. Recovery of these listed species will require active management such as plant propagation and reintroduction, management of fire risk, alien species removal, and ungulate and rat management. Failure to implement these management measures, all of which require active intervention and participation, virtually assures the extinction of these species. The Army is carrying out many of these actions on their lands, in some cases to a degree that surpasses that of other Federal, State, and private landowners in Hawaii. We are, therefore, not designating critical habitat on these lands. Should the status of these commitments change, the Service will reconsider whether these lands meet the definition of critical habitat. If the definition is met, we have the authority to propose to amend critical habitat to include identified areas at that time (50 CFR section 424.14(g)). Although these areas are removed from the final critical habitat designation, the number of populations that habitat on these installations provides is applied toward the overall conservation goal of 8 to 10 populations for each species because these lands will be managed under the INRMP with recovery goals.

Analysis of Impacts Under Section 4(b)(2)

Section 4(b)(2) of the Act requires us to designate critical habitat on the basis of the best scientific and commercial information available, and to consider the economic and other relevant impacts of designating a particular area as critical habitat. We may exclude areas from critical habitat upon a determination that the benefits of such exclusions outweigh the benefits of specifying such areas as critical habitat. We cannot exclude such areas from critical habitat when such exclusion will result in the extinction of the species concerned.

Economic Impacts

Following the publication of the proposed critical habitat designation on May 28, 2002, a draft economic analysis was prepared to estimate the potential direct and indirect economic impacts associated with the designation, in accordance with recent decisions in the *N.M. Cattlegrowers Ass'n v. U.S. Fish and Wildlife Serv.*, 248 F.3d 1277 (10th Cir. 2001). The draft analysis was made available for review on December 26, 2002 (67 FR 78763). Following the close of the comment period, an addendum was completed that incorporated public comments on the draft analysis and made other changes as necessary. These changes were primarily the result of modifications made to the proposed critical habitat designation based on biological information received during the comment periods. Together, the draft economic analysis and the addendum constitute our final economic analysis.

Our economic analysis evaluated the potential direct and indirect economic impacts associated with the proposed critical habitat designation for the 99 plant species from the island of Oahu over the next 10 years. Direct impacts are those related to consultations under section 7 of the Act. They include the cost of completing the section 7 consultation process and potential project modifications resulting from the consultation. Indirect impacts are secondary costs and benefits not directly related to operation of the Act. Examples of indirect impacts include potential effects to property values, redistricting of land from agricultural or urban to conservation, and social welfare benefits of ecological improvements.

The categories of potential direct and indirect costs considered in the analysis included the costs associated with: (1) Conducting section 7 consultations, including incremental consultations and technical assistance; (2) modifications to projects, activities, or land uses resulting from the section 7 consultations; (3) uncertainty and public perceptions resulting from the designation of critical habitat including potential effects on property values and potential indirect costs resulting from the loss of hunting opportunities and the interaction of State and local laws; and (4) potential offsetting beneficial costs associated with critical habitat, including educational benefits. The most likely economic effects of critical habitat designation are on activities funded, authorized, or carried out by a Federal agency (*i.e.*, direct costs).

The analysis in the DEA incorporated two baselines: one that addressed the impact of the proposed critical habitat designation that may be attributable coextensively to the listing of the species, and one that addressed the incremental impact of the proposed designation.

The Addendum utilizes only the first of the two baselines. Because of the uncertainty about the benefits and economic costs resulting solely from critical habitat designations, the Service believes that it is reasonable to estimate the economic impacts of a designation utilizing this single baseline. It is important to note that the inclusion of impacts attributable coextensively to the listing does not convert the economic analysis into a tool to be used in deciding whether or not a species should be added to the Federal list of threatened and endangered species.

The final economic analysis estimates that, over the next 10 years, the designation (co-extensive with the listing in some instances) may result in potential direct economic effects from implementation of section 7 ranging from approximately \$8.3 million to \$20.3 million in quantifiable costs. This is an increase from the range of \$1.1 to \$2.4 million in the draft economic analysis. The increase is primarily due to revised estimates associated with section 7 consultations on Army lands. All other direct costs stay the same or decrease, due primarily to the exclusion of proposed units Oahu C, Oahu M, Oahu P, and Oahu V from final designation and the significant reduction in size to proposed units Oahu A, Oahu G, Oahu L, and Oahu W because they lacked the primary constituent elements or were not essential to the conservation of the species. Overall, the largest portion of this estimate includes Army lands that were proposed as critical habitat but have been removed from the final designation. Therefore, the direct cost of designating critical habitat for these 99 plant species will be far less than this estimate.

While our final economic analysis includes an evaluation of potential indirect costs associated with the designation of critical habitat for 99 plant species on Oahu, the reported costs are often unquantifiable and discussed in qualitative terms. In general, most of the potential indirect effects are thought to have a low probability of occurrence. The final economic analysis concludes the probability that some land within the Urban and Agricultural Districts would be redistricted to Conservation is considered moderate to high. However,

the analysis concludes it is unlikely that all lands within the Urban and Agricultural Districts would be redistricted to Conservation. In addition, such redistricting is not expected to have a significant economic impact because the land most likely converted to the Conservation District are those with a high value for conservation and low economic value (*i.e.*, not suitable for development). The final economic analysis also discusses economic benefits in qualitative terms rather than providing quantitative estimates because of the lack of information available to estimate the economic benefits of endangered species preservation and ecosystem improvements.

A more detailed discussion of our economic analysis is contained in the draft economic analysis and the addendum. Both documents are available for inspection at the Pacific Islands Fish and Wildlife Office (see **ADDRESSES** section).

Other than the Army lands discussed below, no critical habitat units in the proposed rule were excluded or modified due to a determination that the benefits of excluding the lands, taking into account the economic and other relevant impacts, exceeded the benefits of specifying them as critical habitat.

Other Impacts

As described in the "Analysis of Managed Lands Under Section 3(5)(A)" section above, based on our evaluation of the adequacy of special management and protection that is provided in the Army's Final Integrated Natural Resources Management Plan (INRMP) for Oahu Training Areas (Department of the Army 2002) for the plant species addressed in this proposal which are found on Army lands, in accordance with section 3(5)(A)(i) of the Act, we have not included the Army's Dillingham Military Reservation (DMR), Kawaihoa Training Area (KLOA), Kahuku Training Area (KTA), Makua Military Reservation (MMR), Schofield Barracks Military Reservation (SBMR), and Schofield Barracks East Range (SBER), in this final designation of critical habitat. However, to the extent that special management considerations and protection may be required for these areas and they, therefore, would meet the definition of critical habitat according to section 3(5)(A)(i), they are properly excluded from designation under section 4(b)(2) of the Act, based on the following analysis.

As explained below, we believe the benefits of designating critical habitat for the 76 species listed above at DMR, KLOA, KTA, MMR, SBMR, and SBER

are relatively low and outweighed by the benefits of excluding these areas from critical habitat. We also have concerns that a critical habitat designation may negatively impact the Army's ability to effectively carry out a recently proposed training and equipment conversion program on Oahu and otherwise adversely impact national security.

The Army's DMR, KLOA, KTA, MMR, SBMR, and SBER are occupied habitat for 53 species and unoccupied habitat for 23 species, as referenced above. A total of 10,905 hectares (26,946 acres) are excluded from final critical habitat; of this total, 6,208 hectares (15,340 acres) are considered occupied by one or more listed species, while 4,697 hectares (11,606 acres) are considered unoccupied. The unoccupied habitat is located in the northern portion of the Koolau Mountains.

According to our published recovery plans, recovery of these 76 species will require reproducing, self-sustaining populations located in a geographic array across the landscape, with population numbers and population locations of sufficient robustness to withstand periodic threats due to natural disaster or biological threats (Service 1994, 1995a, 1995b, 1996a, 1996b, 1996c, 1996d, 1997, 1998a, 1998b, 1999). The highest priority recovery tasks include proactive management such as plant propagation and reintroduction, fire control, nonnative species removal, and ungulate fencing. Failure to implement these active management measures, all of which require voluntary landowner support and participation, increases the likelihood that species will go extinct or not recover. The Army is undertaking many of these types of conservation actions on their lands on Oahu as part of the implementation of the INRMP for Oahu Training Areas. These activities, which are described in more detail in the "Analysis of Managed Lands Under Section 3(5)(A)" section, require substantial financial obligations by the Army and cooperation with other agencies, landowners, and local residents.

The following analysis describes the likely positive and negative impacts of a critical habitat designation on Army lands compared to the likely positive and negative impacts of a critical habitat exclusion of those lands. The Service paid particular attention to the following issues: To what extent a critical habitat designation would confer additional regulatory, educational, and social benefits; and to what extent would critical habitat interfere with the

Army's ongoing proactive conservation actions.

(1) Benefits of Designating U.S. Army Lands as Critical Habitat

The six Army Oahu installations contain habitat essential to the conservation of the 76 species listed above. The primary regulatory benefit provided by a critical habitat designation on Army lands is the requirement under section 7 of the Act that any actions authorized, funded, or carried out by the Army would not destroy or adversely modify any critical habitat, which includes an evaluation on the effects of the action on recovery of the species. Most of the Army areas are occupied by listed species and thus section 7 consultation would already be required. However, since areas without listed species present or without a critical habitat designation do not always receive section 7 evaluation (*e.g.*, see 50 CFR 402.12, biological assessments are based on a list of species present in the action area), a critical habitat designation in unoccupied areas may provide additional regulatory benefits.

The net benefit of this aspect of critical habitat, however, has been significantly minimized by the Army's commitment to coordinate with the Service on any of its activities that may adversely affect areas whether occupied or unoccupied by listed species that are considered essential to their conservation (*i.e.*, proposed as critical habitat) (Anderson, *in litt.*, March 20, 2003). In fact, for the current consultation at the six Oahu installations, the Army is evaluating impacts of its ongoing and future training activities on habitat considered essential to the conservation, including habitat unoccupied by listed species.

Moreover, the section 7 mandate to avoid destroying critical habitat does not extend to requiring plant reintroductions or other proactive conservation measures (*e.g.*, ungulate control, etc.) considered essential to the conservation of the species. As discussed above, the major threat to these species is the persistent and expanding presence of alien species. Failure to implement proactive management measures such as alien species removal and ungulate and rat management, as well as management of fire risk and plant propagation and reintroduction, may result in extinction of these species even with a critical habitat designation. These actions are, however, included in the Army's INRMP for Oahu Training Areas and will provide tangible benefits that will

reduce the likelihood of extinction and increase the chances of recovery.

Another potential benefit of a critical habitat designation on these Army lands is the education of the Army and the general public concerning the conservation value of these lands. While we believe these educational benefits are important for the conservation of these species, we believe it has already been achieved through the Army's INRMP (for example most of the INRMP's biologically sensitive areas overlap with proposed critical habitat), publication of the proposed critical habitat rule, the many public and interagency meetings that have been held to discuss the proposal, and discussion contained in this final rule.

In sum, the Army will manage for the conservation of all of these species through their INRMP process; this management will confer significant conservation benefits to the species that would not necessarily result from the section 7 consultation process. In addition, the Army has agreed to coordinate with the Service on any actions that may affect essential habitat areas (whether occupied or unoccupied by the listed species) even if these areas are not designated as final critical habitat. Taken together, these two management commitments by the Army lead the Service to conclude that any additional, incremental regulatory benefits provided by a final critical habitat designation on Army lands would be relatively small.

(2) Benefits of Excluding U.S. Army Lands from Critical Habitat

When evaluating the potential negative impacts of a critical habitat designation and the potential benefits of excluding Army lands from final critical habitat, the Service considered whether critical habitat designation would affect Army's military mission on its Oahu installations and adversely impact national security.

As noted above, these plants will need actions that proactively remove existing threats and that include propagation and reintroduction into unoccupied areas if they are to recover. Neither section 7 consultations nor a critical habitat designation would necessarily result in the implementation of actions needed for recovery of these species.

The Army is engaged in or has committed to engage in a wide variety of proactive conservation management activities that are set out in the "Analysis of Managed Lands Under Section 3(5)(A)" section of this rule.

The Service also considered whether a final critical habitat designation would

negatively impact the Army's military mission and thus national security. Overall, the Service believes it has been able to work closely and in a positive collaborative fashion with the Army to minimize potential negative impacts to the Army's military training activities as a consequence of Endangered Species Act regulation.

However, the 25th Infantry Division (Light) based on Oahu has recently been selected to participate in the experimental "Transformation" of its force to a lighter, rapid response force known as a Stryker Brigade Combat Team.

The Army has stated that a final critical habitat designation may lead to disruption to training and a delay of construction of required training facilities if the Army has to consult on the impacts to newly designated critical habitat. The active training areas allow the troops to attain skills to respond to enemy fire quickly and accurately and to train in offensive operations. The natural and physical attributes of the training areas in Hawaii realistically mirror the battlefield conditions found in other nations in the Pacific region. As these training conditions are not found anywhere else in the continental United States, the Army states that it is imperative that the utilization of the military training installations in Hawaii not be impeded by additional requirements associated with section 7 consultations on critical habitat designations.

(3) The Benefits of Excluding Army Lands from Critical Habitat Outweigh the Benefits of Inclusion

Based on the above considerations, and in accordance with section 4(b)(2) of the Act, we have determined that the benefits of excluding the Army's Oahu training areas from critical habitat due to adverse impacts to national security and other relevant factors, as set forth above, outweigh the benefits of including these lands in critical habitat for the 76 species listed above. We acknowledge that the benefits for either inclusion or exclusion of Army lands appear to be relatively limited. Therefore, we have carefully weighed the relative benefits of each option.

Although these areas within Army lands are removed from the final critical habitat designation, the Service still considers them essential to the conservation of these species. The number of populations that the habitat on these installations provides is applied towards the overall recovery goal of 8 to 10 populations for each species (see discussion below), and it is anticipated that these lands will be

managed under the Army's INRMP for Oahu Training Areas consistent with the conservation goals for these species.

(4) Exclusion of This Unit Will Not Cause Extinction of the Species

For both the 44 endemic and the 32 multi-island species, it is the Service's conclusion that the Army's mission and management plans (e.g., INRMP) will provide more net conservation benefits than would be provided if these areas were designated as critical habitat. These management plans, which are described above, will provide tangible proactive conservation benefits that will reduce the likelihood of extinction for the listed plants in these areas of Oahu and increase their likelihood of recovery. Further, the majority of these areas are already occupied by 53 of the 76 species and thereby benefit from the section 7 protections of the Act. The Army has agreed to coordinate with the Service on any actions that may adversely affect habitat in remaining unoccupied areas that are essential to the conservation of these species. The exclusion of these areas will not increase the risk of extinction to any of these species, and it may increase the likelihood these species will recover by encouraging other landowners to implement discretionary conservation activities as the Army has done.

In addition, critical habitat is being designated on other areas of Oahu for all 44 of the endemic species, and critical habitat has been designated elsewhere on Oahu, and/or designated or proposed on other islands, for the remaining 32 multi-island species consistent with the guidance in recovery plans. These other designations identify conservation areas for the maintenance and expansion of the existing populations.

In sum, the above analysis concludes that the exclusion of these lands will not cause extinction and should in fact improve the chances of recovery for all 76 species.

Lands Under U.S. Navy Jurisdiction

The U.S. Navy (Navy) manages several areas which contain proposed critical habitat: Naval Magazine Pearl Harbor Lualualei Branch and Naval Computer and Telecommunication Area Master Station Pacific Transmitting Facility at Lualualei. The following discussion explains why portions of these Navy areas are included in final critical habitat.

The U.S. Navy owns or leases much of Lualualei Valley, which is operated as a naval magazine and transmitting facility. One listed species, *Marsilea villosa*, occurs on land at the Naval Computer and Telecommunications

Area Master Station Pacific Radio Transmitting Facility at Lualualei. The Navy regularly mows this area, which benefits the species by keeping the grasses from taking over the habitat (HINHP Database 2001; Navy 2001a; Navy 2001c). Twenty-three species, *Abutilon sandwicense*, *Alectryon macrococcus*, *Bonamia menziesii*, *Chamaesyce kuwaleana*, *Diellia falcata*, *Flueggea neowawraea*, *Hedyotis parvula*, *Lepidium arbuscula*, *Lipochaeta lobata*, *Lipochaeta tenuifolia*, *Lobelia niihauensis*, *Marsilea villosa*, *Melicope saint-johnii*, *Neraudia angulata*, *Nototrichium humile*, *Phyllostegia hirsuta*, *Plantago princeps*, *Sanicula mariversa*, *Schiedea hookeri*, *Tetramolopium filiforme*, *Tetramolopium lepidotum*, *Urera kaalae*, and *Viola chamissoniana* ssp. *chamissoniana*, are reported from lands at the Naval Magazine Pearl Harbor Lualualei Branch (HINHP Database 2001; Navy 2001b; Navy 2001d). One fenced enclosure at the Halona management area has been erected to protect *Abutilon sandwicense* from feral ungulates, and another enclosure at Puu Hapapa protects *Abutilon sandwicense*, *Bonamia menziesii*, *Flueggea neowawraea*, *Lipochaeta lobata* var. *leptophylla*, and *Nototrichium humile* from browsing by feral ungulates. Other management actions include some monitoring of rare plants, surveying for rare plants, and controlling some invasive plants in rare plant habitats (The Traverse Group 1988; Navy 1997, 2001a, 2001b; Navy 2001c; Navy 2001d).

The Service conducted an analysis for U.S. Navy lands similar to that described above for Army lands. We were not able to exclude Navy lands from final critical habitat for the following reasons:

- The Navy's INRMP fails to address 17 of the 20 listed species for which critical habitat has been proposed on Navy lands. Therefore, absent explicit beneficial management plans for these species, and absent a reasonable likelihood that such plans for these species will be funded and implemented in the future, the Service cannot identify compelling conservation benefits that temper the regulatory benefits of a critical habitat designation on these Navy lands.
- Since the time critical habitat was first proposed on Navy lands, the Service has worked closely with Navy staff to scientifically refine the proposed critical habitat. The changes from the proposed critical habitat to final critical habitat reflect our attempt to ensure that we have included on those lands that contain features essential to the species or, if unoccupied, are themselves

essential to the conservation of the species. In doing so, we have also been able to minimize the potential for negative impacts to military activities. Therefore, at this time we cannot identify any relevant negative impacts to the Navy's military mission as a consequence of this critical habitat designation.

In conclusion, the Service believes that it is necessary to include these Navy lands in final critical habitat when the above factors are considered. The Navy is an important partner of the Service and, as described above, is carrying out some conservation activities on Oahu for some of these listed plant species. The current Navy management practices for the areas that are designated as critical habitat, including mowing and fire suppression, are consistent with the conservation of the listed plants and maintenance of their habitat. For example, Navy mowing has benefitted listed species by keeping grasses from taking over their habitat. Similarly, Navy fire management practices, such as restricting access, can further the conservation of listed plants. Although some areas on Navy lands are included in the final critical habitat designation, the Service will consider amending this critical habitat designation if new information becomes available regarding potential impacts to military readiness, or if there is a change in Navy INRMP planning and implementation that was not previously considered and that addresses the conservation needs of these species. For one listed species, *Marsilea villosa*, occurs on land at the Naval Computer and Telecommunications Area Master Station Pacific Radio Transmitting Facility at Lualualei. The Navy regularly mows this area, which benefits the species by keeping the grasses from taking over the habitat (HINHP Database 2001; Navy 2001a; Navy 2001c).

Taxonomic Changes

At the time we listed *Hibiscus brackenridgei*, *Phyllostegia parviflora*, and *Mariscus pennatifloris*, we followed the taxonomic treatments in Wagner *et al.* (1990), the widely used and accepted *Manual of the Flowering Plants of Hawaii*. Subsequent to the final listings for these three species, we became aware of new taxonomic treatments for these species. Also, the recently published book *Hawaii's Ferns and Fern Allies* (Palmer 2003) has changed the family name for *Ctenitis squamigera* (from Asplenaceae to Dryopteridaceae). Due to the court-ordered deadlines, we are required to publish this final rule to designate

critical habitat on Oahu before we can prepare and publish a notice of taxonomic changes for these four species. We will prepare a taxonomic change notice for these four species after we have published the final critical habitat designations on Oahu.

Required Determinations

Regulatory Planning and Review

In accordance with Executive Order 12866, the Office of Management and Budget (OMB) has determined that this critical habitat designation is not a significant regulatory action. This rule will not have an annual economic effect of \$100 million or more or adversely affect any economic sector, productivity, competition, jobs, the environment, or other units of government. This designation will not create inconsistencies with other agencies' actions or otherwise interfere with an action taken or planned by another agency. It will not materially affect entitlements, grants, user fees, loan programs, or the rights and obligations of their recipients. Finally, this designation will not raise novel legal or policy issues. Accordingly, OMB has not formally reviewed this final critical habitat designation.

Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*)

Under the Regulatory Flexibility Act (RFA) (as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996), whenever a Federal agency is required to publish a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the effect of the rule on small entities (*i.e.*, small businesses, small organizations, and small governmental jurisdictions). However, no regulatory flexibility analysis is required if the head of the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. SBREFA amended the RFA to require Federal agencies to provide a statement of the factual basis for certifying that a rule will not have a significant economic impact on a substantial number of small entities.

Based on the information in our economic analysis (draft economic analysis and addendum), we are certifying that the critical habitat designation for 99 Oahu plant species will not have a significant effect on a substantial number of small entities because a substantial number of small

entities are not affected by the designation.

Federal courts and Congress have indicated that an RFA/SBREFa analysis may be limited to entities directly subject to the requirements of the regulation (Service 2002). As such, entities not directly regulated by the listing or critical habitat designation are not considered in this section of the analysis.

Small entities include small organizations, such as independent nonprofit organizations, and small governmental jurisdictions, including school boards and city and town governments that serve fewer than 50,000 residents, as well as small businesses. Small businesses include manufacturing and mining concerns with fewer than 500 employees, wholesale trade entities with fewer than 100 employees, retail and service businesses with less than \$5 million in annual sales, general and heavy construction businesses with less than \$27.5 million in annual business, special trade contractors doing less than \$11.5 million in annual business, and agricultural businesses with annual sales less than \$750,000. The RFA/SBREFa defines "small governmental jurisdiction" as the government of a city, county, town, school district, or special district with a population of less than 50,000. By this definition, Honolulu County is not a small governmental jurisdiction because its population was 876,156 in 2000. Although certain State agencies, such as DLNR, Department of Agriculture (DOA), and Department of Transportation (DOT), may be affected by the critical habitat designation, State governments are not considered small governments, for the purposes of the RFA. To determine if potential economic impacts to these small entities are significant, we consider the types of activities that might trigger regulatory impacts under this rule as well as the types of project modifications that may result. In general, the term "significant economic impact" is meant to apply to a typical small business firm's business operations.

To determine if the rule would affect a substantial number of small entities, we consider the number of small entities affected within particular types of economic activities (e.g., housing development, grazing, oil and gas production, timber harvesting, etc.). We apply the "substantial number" test individually to each industry to determine if certification is appropriate. SBREFa does not explicitly define either "substantial number" or "significant economic impact."

Consequently, to assess whether a "substantial number" of small entities is affected by this designation, this analysis considers the relative number of small entities likely to be impacted in the area. Similarly, this analysis considers the relative cost of compliance on the revenues/profit margins of small entities in determining whether or not entities incur a "significant economic impact." Only small entities that are expected to be directly affected by the designation are considered in this portion of the analysis. This approach is consistent with several judicial opinions related to the scope of the RFA (*Mid-Tex Electric Co-op Inc. v. F.E.R.C.*, 249 U.S. App. D.C. 64, 773 F.2d 327 (1985) and *American Trucking Associations, Inc. v. U.S. E.P.A.*, 175 F.3d 1027, 336 U.S.App.D.C. 16 (D.C.Cir., May 14, 1999)).

The primary projects and activities that might be affected by the designation that could affect small entities include ranching operations and conservation projects. Based on our draft economic analysis and addendum, there were 100 cattle livestock operations in Honolulu County in 2000. The combined cattle sales of all of these operations in 2000 was about \$556,000 (State Department of Agriculture 2002). Since this implies average annual cattle sales per business of \$9,267, it is likely that all or almost all of the Honolulu County cattle operations meet the definition of a small business (annual sales less than \$750,000). Thus, our draft economic analysis concluded that the proposed critical habitat designation might affect a half dozen out of 100 (or 12 percent) of the small businesses in the cattle industry in Honolulu County.

The actual impacts of the final rule will be even smaller. The final rule designates less land used for ranching as critical habitat. In turn, both the number of affected ranches and the number of Section 7 consultations involving ranching will be lower. As discussed in the addendum, the final designation could have a negative impact on about three ranches (about three percent of the total ranches on Oahu). These estimates were based on the proposed designations. However, this final rule designates 22,767 hectares (56,258 acres) less than had been proposed, or a 49 percent reduction.

These conclusions are supported by the history of consultations on Oahu. Since these 99 plant species were listed (between 1991 and 1996), we have conducted 2 formal consultations and 24 informal consultations, in addition to consultations on Federal grants to State wildlife programs that do not affect

small entities. The two formal consultations were conducted on behalf of the Army, for review of the "Biological Assessment for Programmatic Section 7 Consultation on Routine Military Training at Makua Military Reservation, and Makua Endangered Species Mitigation Plan." Thirty-nine of the 99 species, *Alectryon macrococcus*, *Abutilon sandwicense*, *Alsinidendron obovatum*, *Bonamia menziesii*, *Cenchrus agrimonioides*, *Chamaesyce celastroides* var. *kaenana*, *Chamaesyce herbstii*, *Colubrina oppositifolia*, *Ctenitis squamigera*, *Cyanea grimesiana* ssp. *grimesiana*, *Cyanea longiflora*, *Cyanea superba*, *Cyrtandra dentata*, *Delissea subcordata*, *Diellia falcata*, *Dubautia herbstobatae*, *Euphorbia haeleeleana*, *Flueggea neowawraea*, *Hedyotis degeneri*, *Hedyotis parvula*, *Hesperomannia arbuscula*, *Hibiscus brackenridgei*, *Lepidium arbuscula*, *Lipochaeta tenuifolia*, *Lobelia niihauensis*, *Lobelia oahuensis*, *Neraudia angulata*, *Nototrichium humile*, *Peucedanum sandwicense*, *Phyllostegia kaalaensis*, *Plantago princeps*, *Sanicula mariversa*, *Schiedea hookeri*, *Schiedea kaalae*, *Schiedea nuttallii*, *Silene lanceolata*, *Spermolepis hawaiiensis*, *Tetramolopium filiforme*, and *Viola chamissoniana* ssp. *chamissoniana*, were reported from the action area. We conducted 24 informal consultations with the Army, U.S. Air Force, Navy, FAA, Department of Transportation, U.S. Coast Guard, Department of Land and Natural Resources Division of State Parks, Hawaii Army National Guard, U.S. Department of Agriculture's Animal and Plant Health Inspection Service, and U.S. Department of Energy.

None of these consultations affected or concerned small entities. We have determined that the State of Hawaii and Honolulu County are not small entities. The Army, Navy, NRCS, Corps, FCC, Department of Transportation, Environmental Protection Agency, FAA, FEMA, Dole Food Company, local television stations, and cellular, paging, and wireless services are not small entities. In 21 of the 24 informal consultations, we concurred with each agency's determination that the project, as proposed, was not likely to adversely affect listed species. We initiated formal consultation for the remaining three. For both formal consultations, we found that routine military training at Makua Military Reservation, which included an indepth list of conservation measures the Army would carry out in the action area, was not likely to jeopardize listed species.

For these reasons, we are certifying that the designation of critical habitat

for *Abutilon sandwicense*, *Adenophorus periens*, *Alectryon macrococcus*, *Alsinidendron obovatum*, *Alsinidendron trinerve*, *Bonamia menziesii*, *Cenchrus agrimonoides*, *Centaurium sebaeoides*, *Chamaesyce celastroides* var. *kaenana*, *Chamaesyce deppeana*, *Chamaesyce herbstii*, *Chamaesyce kuwaleana*, *Chamaesyce rockii*, *Colubrina oppositifolia*, *Ctenitis squamigera*, *Cyanea acuminata*, *Cyanea crispa*, *Cyanea grimesiana* ssp. *grimesiana*, *Cyanea grimesiana* ssp. *obatae*, *Cyanea humboltiana*, *Cyanea koolauensis*, *Cyanea longiflora*, *Cyanea pinnatifida*, *Cyanea st.-johnii*, *Cyanea superba*, *Cyanea truncata*, *Cyperus trachysanthos*, *Cyrtandra dentata*, *Cyrtandra polyantha*, *Cyrtandra subumbellata*, *Cyrtandra viridiflora*, *Delissea subcordata*, *Diellia erecta*, *Diellia falcata*, *Diellia unisora*, *Diplazium molokaiense*, *Dubautia herbstobatae*, *Eragrostis fosbergii*, *Eugenia koolauensis*, *Euphorbia haeleeleana*, *Flueggea neowawraea*, *Gardenia mannii*, *Gouania meyenii*, *Gouania vitifolia*, *Hedyotis coriacea*, *Hedyotis degeneri*, *Hedyotis parvula*, *Hesperomannia arborescens*, *Hesperomannia arbuscula*, *Hibiscus brackenridgei*, *Isodendron laurifolium*, *Isodendron longifolium*, *Isodendron pyriforme*, *Labordia cyrtandrae*, *Lepidium arbuscula*, *Lipochaeta lobata* var. *leptophylla*, *Lipochaeta tenuifolia*, *Lobelia gaudichaudii* ssp. *koolauensis*, *Lobelia monostachya*, *Lobelia niihauensis*, *Lobelia oahuensis*, *Lysimachia filifolia*, *Mariscus pennatifolius*, *Marsilea villosa*, *Melicope lydgatei*, *Melicope pallida*, *Melicope saint-johnii*, *Myrsine juddii*, *Neraudia angulata*, *Nototrichium humile*, *Peucedanum sandwicense*, *Phlegmariurus nutans*, *Phyllostegia hirsuta*, *Phyllostegia kaalaensis*, *Phyllostegia mollis*, *Phyllostegia parviflora*, *Plantago princeps*, *Platanthera holochila*, *Pteris lidgatei*, *Sanicula mariversa*, *Sanicula purpurea*, *Schiedea hookeri*, *Schiedea kaalae*, *Schiedea kealiae*, *Schiedea nuttallii*, *Sesbania tomentosa*, *Silene lanceolata*, *Silene perlmanii*, *Solanum sandwicense*, *Spermolepis hawaiiensis*, *Stenogyne kanehoana*, *Tetramolopium filiforme*, *Tetramolopium lepidotum* ssp. *lepidotum*, *Tetraplasandra gymnocarpa*, *Trematolobelia singularis*, *Urera kaalae*, *Vigna o-wahuensis*, *Viola chamissoniana* ssp. *chamissoniana*, and *Viola oahuensis* will not have a significant economic impact on a substantial number of small entities. Therefore, a regulatory flexibility analysis is not required.

Small Business Regulatory Enforcement Fairness Act (5 U.S.C. 804(2))

Under the Small Business Regulatory Enforcement Fairness Act (5 U.S.C. 801 *et seq.*), this rule is not a major rule. Our detailed assessment of the economic effects of this designation are described in the draft economic analysis and the final addendum to the economic analysis. Based on the effects identified in these documents, we believe that this rule will not have an effect on the economy of \$100 million or more, will not cause a major increase in costs or prices for consumers, and will not have significant adverse effects on competition, employment, investment, productivity, innovation, or the ability of U.S.-based enterprises to compete with foreign-based enterprises. Refer to the final addendum to the economic analysis for a discussion of the effects of this determination.

Executive Order 13211

On May 18, 2001, the President issued Executive Order 13211, on regulations that significantly affect energy supply, distribution, and use. Executive Order 13211 requires agencies to prepare Statements of Energy Effects when undertaking certain actions. This rule is not a significant regulatory action under Executive Order 12866, and it is not expected to significantly affect energy production supply and distribution facilities because no significant energy production, supply, and distribution facilities are included within designated critical habitat. Further, for the reasons described in the economic analysis, we do not believe that designation of critical habitat for the 99 plant species will affect future energy production. Therefore, this action is not a significant energy action, and no Statement of Energy Effects is required.

Unfunded Mandates Reform Act (2 U.S.C. 1501 *et seq.*)

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501 *et seq.*):

(a) For the reasons described in our economic analysis, this rule will not produce a Federal mandate on State or local governments or the private sector that may result in the expenditure of \$100 million or greater in any year. Therefore, a statement pursuant to 2 U.S.C. 1532 is not required.

(b) This rule will not “significantly or uniquely” affect small governments, so a Small Government Agency Plan is not required. Small governments will not be directly affected unless they propose an action requiring Federal funds, permits, or other authorizations. Any such

activities will require that the Federal agency ensure that the action will not adversely modify or destroy designated critical habitat.

Takings

In accordance with Executive Order 12630 (“Government Actions and Interference with Constitutionally Protected Private Property Rights”), we have analyzed the potential takings implications of designating critical habitat for the 99 species from Oahu in a takings implications assessment. The takings implications assessment concludes that this final rule does not pose significant takings implications.

Federalism

In accordance with Executive Order 13132, this final rule does not have significant Federalism effect and does not impose substantial direct compliance costs on State and local governments. In addition, this regulation is required by statute. See 16 U.S.C. 1533(a)(3). Therefore, a Federalism assessment is not required.

This rule imposes no regulatory requirements unless an agency is seeking Federal funding or authorization. In addition, for the reasons contained in the economic analysis, this rule will not have substantial direct compliance costs on State and local governments.

In fact, the designations may have some benefit to these governments, in that the areas essential to the conservation of these species are more clearly defined, and the primary constituent elements of the habitat necessary to the survival of the species are specifically identified. While this definition and identification do not alter where and what federally sponsored activities may occur, they may assist these local governments in long range planning, rather than waiting for case-by-case section 7 consultation to occur. Nevertheless, keeping with Department of the Interior policy, we requested information from appropriate State and local officials in Hawaii.

Civil Justice Reform

In accordance with Executive Order 12988, the Department of the Interior's Office of the Solicitor has determined that this rule does not unduly burden the judicial system and does meet the requirements of sections 3(a) and 3(b)(2) of the Order. We have designated critical habitat in accordance with the provisions of the Endangered Species Act. The rule uses standard property descriptions and identifies the primary constituent elements within the designated areas to assist the public in

understanding the habitat needs of 99 plant species from Oahu.

Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.)

This rule does not contain any information collection requirements for which OMB approval under the Paperwork Reduction Act is required. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number.

National Environmental Policy Act

We have determined that we do not need to prepare an Environmental Assessment and/or an Environmental Impact Statement as defined by the National Environmental Policy Act of 1969 in connection with regulations adopted pursuant to section 4(a) of the Endangered Species Act. We published a notice outlining our reason for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244).

Government-to-Government Relationship With Tribes

In accordance with the President's memorandum of April 29, 1994, "Government-to-Government Relations with Native American Tribal Governments" (59 FR 22951) Executive Order 13175 and the Department of the Interior's manual at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with recognized Federal Tribes on a government-to-government basis. We have determined that there are no Tribal lands essential for the conservation of these 99 plant species. Therefore, designation of critical habitat for these 99 species does not involve any Tribal lands.

References Cited

A complete list of all references cited in this final rule is available upon request from the Pacific Islands Fish

and Wildlife Office (see **ADDRESSES** section).

Authors

The authors of this final rule are staff of the Pacific Islands Fish and Wildlife Office (see **ADDRESSES** section).

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

Regulation Promulgation

■ Accordingly, we hereby amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations as set forth below:

PART 17—[AMENDED]

■ 1. The authority citation for part 17 continues to read as follows:

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

■ 2. Amend § 17.12(h), the List of Endangered and Threatened Plants, as set forth below:

■ a. Under the table's heading FLOWERING PLANTS, by revising the entries for *Abutilon sandwicense*, *Alectryon macrococcus*, *Alsinidendron obovatum*, *Alsinidendron trinerve*, *Bonamia menziesii*, *Cenchrus agrimonoides*, *Centaurium sebaeoides*, *Chamaesyce celastroides* var. *kaenana*, *Chamaesyce deppeana*, *Chamaesyce herbstii*, *Chamaesyce kuwaleana*, *Chamaesyce rockii*, *Colubrina oppositifolia*, *Cyanea acuminata*, *Cyanea crispa*, *Cyanea grimesiana* ssp. *grimesiana*, *Cyanea grimesiana* ssp. *obatae*, *Cyanea humboltiana*, *Cyanea koolauensis*, *Cyanea longiflora*, *Cyanea pinnatifida*, *Cyanea st.-johnii*, *Cyanea superba*, *Cyanea truncata*, *Cyperus trachysanthos*, *Cyrtandra dentata*, *Cyrtandra polyantha*, *Cyrtandra subumbellata*, *Cyrtandra viridiflora*,

Delissea subcordata, *Dubautia herbstobatae*, *Eragrostis fosbergii*, *Eugenia koolauensis*, *Euphorbia haeleleana*, *Flueggea neowawraea*, *Gardenia mannii*, *Gouania meyenii*, *Gouania vitifolia*, *Hedyotis coriacea*, *Hedyotis degeneri*, *Hedyotis parvula*, *Hesperomannia arborescens*, *Hesperomannia arbuscula*, *Hibiscus brackenridgei*, *Isodendron laurifolium*, *Isodendron longifolium*, *Isodendron pyrifolium*, *Labordia cyrtandrae*, *Lepidium arbuscula*, *Lipochaeta lobata* var. *leptophylla*, *Lipochaeta tenuifolia*, *Lobelia gaudichaudii* ssp. *koolauensis*, *Lobelia monostachya*, *Lobelia niihauensis*, *Lobelia oahuensis*, *Lysimachia filifolia*, *Mariscus pennatifolius*, *Melicope lydgatei*, *Melicope pallida*, *Melicope saint-johnii*, *Myrsine juddii*, *Neraudia angulata*, *Nototrichium humile*, *Peucedanum sandwicense*, *Phyllostegia hirsuta*, *Phyllostegia kaalaensis*, *Phyllostegia mollis*, *Phyllostegia parviflora*, *Plantago princeps*, *Platanthera holochila*, *Sanicula mariversa*, *Sanicula purpurea*, *Schiedea hookeri*, *Schiedea kaalae*, *Schiedea kealiae*, *Schiedea nuttallii*, *Sesbania tomentosa*, *Silene lanceolata*, *Silene perlmanni*, *Solanum sandwicense*, *Spermolepis hawaiiensis*, *Stenogyne kanehoana*, *Tetramolopium filiforme*, *Tetramolopium lepidotum* ssp. *lepidotum*, *Tetraplasandra gymnocarpa*, *Trematolobelia singularis*, *Urera kaalae*, *Vigna o-wahuensis*, *Viola chamissoniana* ssp. *chamissoniana*, and *Viola oahuensis* to read as follows; and

■ b. Under the table's heading FERNS AND ALLIES, by revising the entries for *Adenophorus periens*, *Ctenitis squamigera*, *Diellia erecta*, *Diellia falcata*, *Diellia unisora*, *Diplazium molokaiense*, *Marsilea villosa*, *Phlegmariurus nutans*, and *Pteris lidgatei* to read as follows.

§ 17.12 Endangered and threatened plants.

* * * * *

(h) * * *

Species		Historic range	Family	Status	When listed	Critical habitat	Special rules
Scientific name	Common name						
FLOWERING PLANTS							
<i>Abutilon sandwicense.</i>	None	U.S.A. (HI)	Malvaceae	E	448	17.99(i)	NA
<i>Alectryon macrococcus.</i>	Mahoe	U.S.A. (HI)	Sapindaceae	E	467	17.99(a)(1), (c), (e)(1), and (i).	NA
<i>Alsinidendron obovatum.</i>	None	U.S.A. (HI)	Caryophyllaceae	E	448	17.99(i)	NA

Species		Historic range	Family	Status	When listed	Critical habitat	Special rules
Scientific name	Common name						
<i>Alsinidendron trinerve.</i>	None	U.S.A. (HI)	Caryophyllaceae	E	448	17.99(i)	NA
<i>Bonamia menziesii</i> ..	None	U.S.A. (HI)	Convolvulaceae	E	559	17.99(a)(1), (e)(1), and (i).	NA
<i>Cenchrus agrimonioides.</i>	Kamanomano	U.S.A. (HI)	Poaceae	E	592	17.99(e)(1) and (i).	NA
<i>Centaurium sebaeoides.</i>	Awiwi	U.S.A. (HI)	Gentianaceae	E	448	17.99(a)(1), (c), (e)(1), and (i).	NA
<i>Chamaesyce celastroides</i> var. <i>kaenana.</i>	Akoko	U.S.A. (HI)	Euphorbiaceae	E	448	17.99(i)	NA
<i>Chamaesyce deppeana.</i>	Akoko	U.S.A. (HI)	Euphorbiaceae	E	536	17.99(i)	NA
<i>Chamaesyce herbstii</i>	Akoko	U.S.A. (HI)	Euphorbiaceae	E	591	17.99(i)	NA
<i>Chamaesyce kuwaleana.</i>	Akoko	U.S.A. (HI)	Euphorbiaceae	E	448	17.99(i)	NA
<i>Chamaesyce rockii</i> ..	Akoko	U.S.A. (HI)	Euphorbiaceae	E	591	17.99(i)	NA
<i>Colubrina oppositifolia.</i>	Kauila	U.S.A. (HI)	Rhamnaceae	E	532	17.99(e)(1) and (i).	NA
<i>Cyanea acuminata</i> ...	HaHa	U.S.A. (HI)	Campanulaceae	E	591	17.99(i)	NA
<i>Cyanea (=Rollandia) crispa.</i>	None	U.S.A. (HI)	Campanulaceae	E	536	17.99(i)	NA
<i>Cyanea grimesiana</i> ssp. <i>grimesiana.</i>	HaHa	U.S.A. (HI)	Campanulaceae	E	592	17.99(c), (e)(1), and (i).	NA
<i>Cyanea grimesiana</i> ssp. <i>obatae.</i>	HaHa	U.S.A. (HI)	Campanulaceae	E	541	17.99(i)	NA
<i>Cyanea humboltiana</i>	HaHa	U.S.A. (HI)	Campanulaceae	E	591	17.99(i)	NA
<i>Cyanea koolauensis</i>	HaHa	U.S.A. (HI)	Campanulaceae	E	591	17.99(i)	NA
<i>Cyanea longiflora</i>	HaHa	U.S.A. (HI)	Campanulaceae	E	591	17.99(i)	NA
<i>Cyanea pinnatifida</i> ...	HaHa	U.S.A. (HI)	Campanulaceae	E	448	17.99(i)	NA
<i>Cyanea st.-johnii</i>	HaHa	U.S.A. (HI)	Campanulaceae	E	591	17.99(i)	NA
<i>Cyanea superba</i>	None	U.S.A. (HI)	Campanulaceae	E	434	17.99(i)	NA
<i>Cyanea truncata</i>	Haha	U.S.A. (HI)	Campanulaceae	E	536	17.99(i)	NA
<i>Cyperus trachysanthos.</i>	Puukaa	U.S.A. (HI)	Cyperaceae	E	592	17.99(a)(1) and (i).	NA

Species		Historic range	Family	Status	When listed	Critical habitat	Special rules
Scientific name	Common name						
<i>Cyrtandra dentata</i>	Haiwale	U.S.A. (HI)	Gesneriaceae	E	591	17.99(i)	NA
<i>Cyrtandra polyantha</i>	Haiwale	U.S.A. (HI)	Gesneriaceae	E	536	17.99(i)	NA
<i>Cyrtandra subumbellata</i> .	Haiwale	U.S.A. (HI)	Gesneriaceae	E	591	17.99(i)	NA
<i>Cyrtandra viridiflora</i>	Haiwale	U.S.A. (HI)	Gesneriaceae	E	591	17.99(i)	NA
<i>Delissea subcordata</i>	Oha	U.S.A. (HI)	Campanulaceae	E	591	17.99(i)	NA
<i>Dubautia herbstobatae</i> .	Naenae	U.S.A. (HI)	Asteraceae	E	448	17.99(i)	NA
<i>Eragrostis fosbergii</i> ..	Fosberg's love grass.	U.S.A. (HI)	Poaceae	E	591	17.99(i)	NA
<i>Eugenia koolauensis</i>	Nioi	U.S.A. (HI)	Myrtaceae	E	536	17.99(c) and (i).	NA
<i>Euphorbia haeleeleana</i> .	Akoko	U.S.A. (HI)	Euphorbiaceae	E	592	17.99(a)(1) and (i).	NA
<i>Flueggea neowawraea</i> .	Mehamehame	U.S.A. (HI)	Euphorbiaceae	E	559	17.99(a)(1), (c), (e)(1), and (i).	NA
<i>Gardenia mannii</i>	Nanu	U.S.A. (HI)	Rubiaceae	E	591	17.99(i)	NA
<i>Gouania meyenii</i>	None	U.S.A. (HI)	Rhamnaceae	E	448	17.99(a)(1) and (i).	NA
<i>Gouania vitifolia</i>	None	U.S.A. (HI)	Rhamnaceae	E	541	17.99(e)(1) and (i).	NA
<i>Hedyotis coriacea</i>	Kioele	U.S.A. (HI)	Rubiaceae	E	467	17.99(e)(1) and (i).	NA
<i>Hedyotis degeneri</i>	None	U.S.A. (HI)	Rubiaceae	E	448	17.99(i)	NA
<i>Hedyotis parvula</i>	None	U.S.A. (HI)	Rubiaceae	E	448	17.99(i)	NA
<i>Hesperomannia arborescens</i> .	None	U.S.A. (HI)	Asteraceae	E	536	17.99(c) and (i).	NA
<i>Hesperomannia arbuscula</i> .	None	U.S.A. (HI)	Asteraceae	E	448	17.99(e)(1) and (i).	NA
<i>Hibiscus brackenridgei</i> ..	Mao hau hele	U.S.A. (HI)	Malvaceae	E	559	17.99(c), (e)(1), and (i).	NA
<i>Isodendron laurifolium</i> .	Aupaka	U.S.A. (HI)	Violaceae	E	592	17.99(a)(1) and (i).	NA
<i>Isodendron longifolium</i> .	Aupaka	U.S.A. (HI)	Violaceae	T	592	17.99(a)(1) and (i).	NA
<i>Isodendron pyrifolium</i> .	Wahine noho kula ..	U.S.A. (HI)	Violaceae	E	532	17.99(c), (e)(1), and (i).	NA

Species		Historic range	Family	Status	When listed	Critical habitat	Special rules
Scientific name	Common name						
<i>Labordia cyrtandrae</i>	Kamakahala	U.S.A. (HI)	Loganiaceae	E	591	17.99(i)	NA
<i>Lepidium arbuscula</i>	Anaunau	U.S.A. (HI)	Brassicaceae	E	591	17.99(i)	NA
<i>Lipochaeta lobata</i> var. <i>leptophylla</i> .	Nehe	U.S.A. (HI)	Asteraceae	E	448	17.99(i)	NA
<i>Lipochaeta tenuifolia</i>	Nehe	U.S.A. (HI)	Asteraceae	E	448	17.99(i)	NA
<i>Lobelia gaudichaudii</i> ssp. <i>koolauensis</i> .	None	U.S.A. (HI)	Campanulaceae	E	591	17.99(i)	NA
<i>Lobelia monostachya</i>	None	U.S.A. (HI)	Campanulaceae	E	591	17.99(i)	NA
<i>Lobelia niihauensis</i> ..	None	U.S.A. (HI)	Campanulaceae	E	448	17.99(i)	NA
<i>Lobelia oahuensis</i>	None	U.S.A. (HI)	Campanulaceae	E	536	17.99(i)	NA
<i>Lysimachia filifolia</i>	None	U.S.A. (HI)	Primulaceae	E	530	17.99(a)(1) and (i).	NA
<i>Mariscus pennatiformis</i> .	None	U.S.A. (HI)	Cyperaceae	E	559	17.99(a)(1), (e)(1), (g), and (i).	NA
<i>Melicope lydgatei</i>	Alani	U.S.A. (HI)	Rutaceae	E	536	17.99(i)	NA
<i>Melicope pallida</i>	Alani	U.S.A. (HI)	Rutaceae	E	530	17.99(a)(1) and (i).	NA
<i>Melicope saint-johnii</i>	Alani	U.S.A. (HI)	Rutaceae	E	591	17.99(i)	NA
<i>Myrsine juddii</i>	Kolea	U.S.A. (HI)	Myrsinaceae	E	591	17.99(i)	NA
<i>Neraudia angulata</i> ...	None	U.S.A. (HI)	Urticaceae	E	448	17.99(i)	NA
<i>Nototrichium humile</i>	Kului	U.S.A. (HI)	Amaranthaceae	E	448	17.99(e)(1) and (i).	NA
<i>Peucedanum sandwicense</i> .	Makou	U.S.A. (HI)	Apiaceae	T	530	17.99(a)(1), (c), (e)(1), and (i).	NA
<i>Phyllostegia hirsuta</i>	None	U.S.A. (HI)	Lamiaceae	E	591	17.99(i)	NA
<i>Phyllostegia kaalaensis</i> .	None	U.S.A. (HI)	Lamiaceae	E	591	17.99(i)	NA
<i>Phyllostegia mollis</i> ...	None	U.S.A. (HI)	Lamiaceae	E	448	17.99(e)(1) and (i).	NA
<i>Phyllostegia parviflora</i> .	None	U.S.A. (HI)	Lamiaceae	E	592	17.99(i)	NA
<i>Plantago princeps</i>	Laukahi kuahiwi	U.S.A. (HI)	Plantaginaceae	E	559	17.99(a)(1), (c), (e)(1), and (i).	NA

Species		Historic range	Family	Status	When listed	Critical habitat	Special rules
Scientific name	Common name						
<i>Platanthera holochila</i>	None	U.S.A. (HI)	Orchidaceae	E	592	17.99(a)(1), (e)(1), and (i).	NA
*	*	*	*	*	*		*
<i>Sanicula mariversa</i> ..	None	U.S.A. (HI)	Apiaceae	E	448	17.99(i)	NA
<i>Sanicula purpurea</i> ...	None	U.S.A. (HI)	Apiaceae	E	592	17.99(e)(1) and (i).	NA
*	*	*	*	*	*		*
<i>Schiedea hookeri</i>	None	U.S.A. (HI)	Caryophyllaceae	E	592	17.99(i)	NA
<i>Schiedea kaalae</i>	None	U.S.A. (HI)	Caryophyllaceae	E	448	17.99(i)	NA
*	*	*	*	*	*		*
<i>Schiedea kealiae</i>	Maolioli	U.S.A. (HI)	Caryophyllaceae	E	591	17.99(i)	NA
*	*	*	*	*	*		*
<i>Schiedea nuttallii</i>	None	U.S.A. (HI)	Caryophyllaceae	E	592	17.99(a)(1), (c), and (i).	NA
*	*	*	*	*	*		*
<i>Sesbania tomentosa</i>	Ohai	U.S.A. (HI)	Fabaceae	E	559	17.99(a)(1), (c), (e)(1), (g), and (i).	NA
*	*	*	*	*	*		*
<i>Silene lanceolata</i>	None	U.S.A. (HI)	Caryophyllaceae	E	480	17.99(c) and (i).	NA
<i>Silene perlmantii</i>	None	U.S.A. (HI)	Caryophyllaceae	E	448	17.99(i)	NA
*	*	*	*	*	*		*
<i>Solanum sandwicense</i> .	Aiakeakua, popolo ..	U.S.A. (HI)	Solanaceae	E	530	17.99(a)(1) and (i).	NA
*	*	*	*	*	*		*
<i>Spermolepis hawaiiensis</i> .	None	U.S.A. (HI)	Apiaceae	E	559	17.99(a)(1), (c), (e)(1), and (i).	NA
*	*	*	*	*	*		*
<i>Stenogyne kanehoana</i> .	None	U.S.A. (HI)	Lamiaceae	E	466	17.99(i)	NA
*	*	*	*	*	*		*
<i>Tetramolopium filiforme</i> .	None	U.S.A. (HI)	Asteraceae	E	448	17.99(i)	NA
<i>Tetramolopium lepidotum</i> ssp. <i>lepidotum</i> .	None	U.S.A. (HI)	Asteraceae	E	448	17.99(i)	NA
*	*	*	*	*	*		*
<i>Tetraplasandra gymnocarpa</i> .	Oheohe	U.S.A. (HI)	Araliaceae	E	536	17.99(i)	NA
*	*	*	*	*	*		*
<i>Trematolobelia singularis</i> .	None	U.S.A. (HI)	Campanulaceae	E	591	17.99(i)	NA
*	*	*	*	*	*		*
<i>Urera kaalae</i>	Opuhe	U.S.A. (HI)	Urticaceae	E	448	17.99(i)	NA
*	*	*	*	*	*		*
<i>Vigna o-wahuensis</i> ..	None	U.S.A. (HI)	Fabaceae	E	559	17.99(e)(1) and (i).	NA
<i>Viola chamissoniana</i> ssp. <i>chamissoniana</i> .	Pamakani	U.S.A. (HI)	Violaceae	E	448	17.99(i)	NA
*	*	*	*	*	*		*
<i>Viola oahuensis</i>	None	U.S.A. (HI)	Violaceae	E	591	17.99(i)	NA

Species		Historic range	Family	Status	When listed	Critical habitat	Special rules
Scientific name	Common name						
*	*	*	*	*	*		*
FERNS AND ALLIES							
<i>Adenophorus periens</i>	Pendent kihi fern	U.S.A. (HI)	Grammitidaceae	E	559	17.99(a)(1), (c), and (i).	NA
*	*	*	*	*	*		*
<i>Ctenitis squamigera</i>	Pauoa	U.S.A. (HI)	Aspleniaceae	E	553	17.99(a)(1), (c), (e)(1), and (i).	NA
*	*	*	*	*	*		*
<i>Diellia erecta</i>	Asplenium-leaved diellia.	U.S.A. (HI)	Aspleniaceae	E	559	17.99(a)(1), (c), (e)(1), and (i).	NA
<i>Diellia falcata</i>	None	U.S.A. (HI)	Aspleniaceae	E	448	17.99(i)	NA
*	*	*	*	*	*		*
<i>Diellia unisora</i>	None	U.S.A. (HI)	Aspleniaceae	E	541	17.99(i)	NA
<i>Diplazium molokaiense</i> .	None	U.S.A. (HI)	Aspleniaceae	E	553	17.99(a)(1), (c), (e)(1), and (i).	NA
*	*	*	*	*	*		*
<i>Marsilea villosa</i>	Ihihi	U.S.A. (HI)	Marsileaceae	E	474	17.99(i)	NA
<i>Phlegmariurus nutans</i> .	Wawaeiole	U.S.A. (HI)	Lycopodiaceae	E	536	17.99(a)(1) and (i).	NA
*	*	*	*	*	*		*
<i>Pteris lidgatei</i>	None	U.S.A. (HI)	Adiantaceae	E	553	17.99(c), (e)(1), and (i).	NA
*	*	*	*	*	*		*

■ 3. Amend § 17.99 as set forth below:

■ a. By revising the section heading to read as follows; and

■ b. By adding new paragraphs (i) and (j) to read as follows.

§ 17.99 Critical habitat; plants on the islands of Kauai, Niihau, Molokai, Maui, Kahoolawe, and Oahu, HI, and on the Northwest Hawaiian Islands.

* * * * *

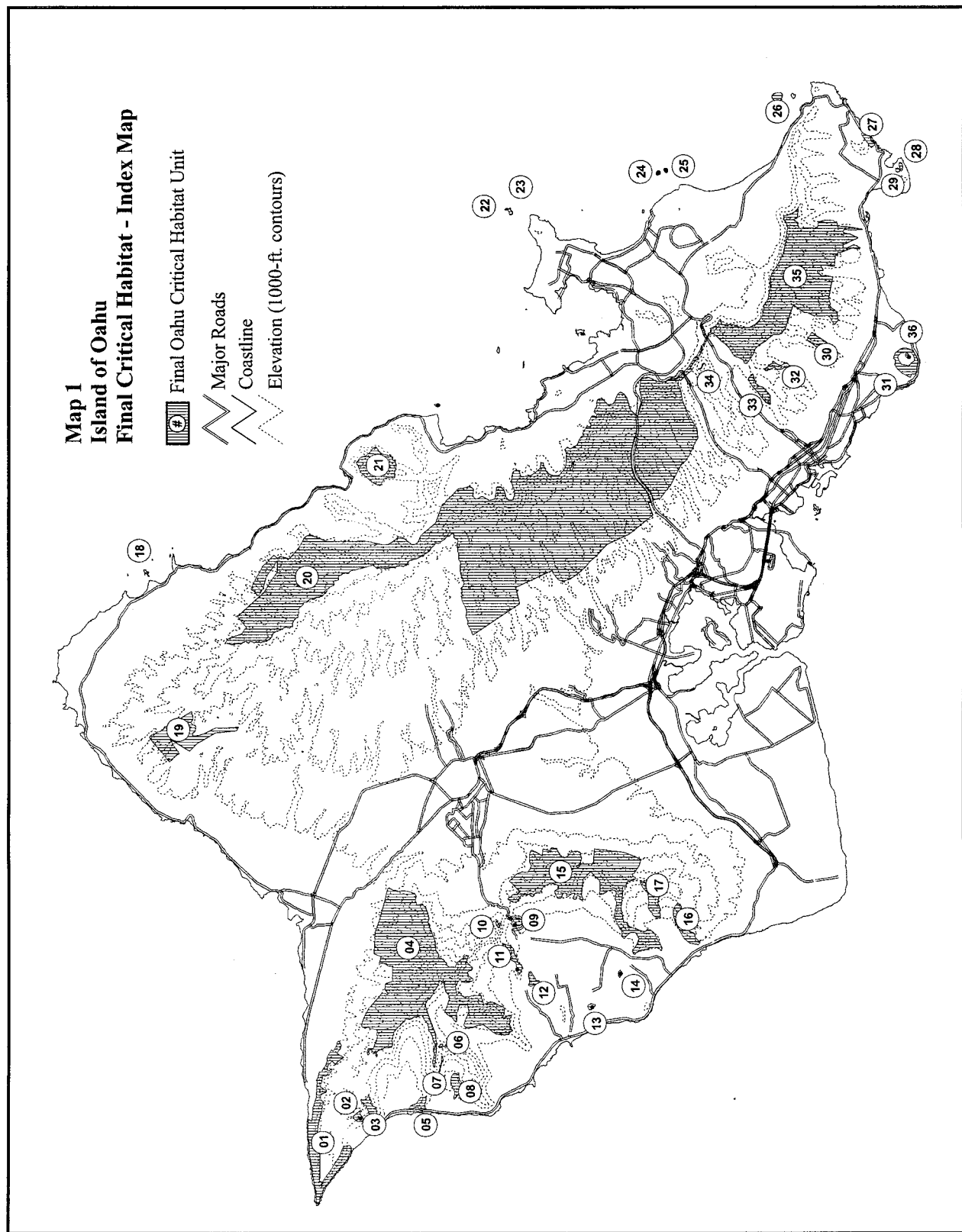
(i) *Maps and critical habitat unit descriptions for the island of Oahu, HI.* The following paragraphs contain the legal descriptions of the critical habitat units designated for the Hawaiian island of Oahu. Existing manmade features and structures within the boundaries of the mapped units, such as buildings; roads;

aqueducts and other water system features, including but not limited to, pumping stations, irrigation ditches, pipelines, siphons, tunnels, water tanks, gaging stations, intakes, reservoirs, diversions, flumes, and wells; existing trails; campgrounds and their immediate surrounding landscaped area; scenic lookouts; remote helicopter landing sites; existing fences; telecommunications equipment towers and associated structures, electrical power transmission and distribution lines, communication facilities and regularly maintained associated rights-of-way and access ways; radars; telemetry antennas; missile launch sites; arboreta and gardens, heiau (indigenous

places of worship or shrines), and other archaeological sites; airports; other paved areas; and lawns and other rural residential landscaped areas do not contain one or more of the primary constituent elements described for each species in paragraph (j) of this section and therefore are not included in the critical habitat designations. Critical habitat units are described below. Coordinates in UTM Zone 4 with units in meters using North American Datum of 1983 (NAD83). The following map shows the general locations of the 317 critical habitat units designated on the island of Oahu.

(1) **Note:** Map 1—Index map follows:

BILLING CODE 4310-55-U



(2) Oahu 1—*Centaurium sebaeoides*—a (61 ha; 151 ac)

(i) Unit consists of the following 41 boundary points: Start at 575051,

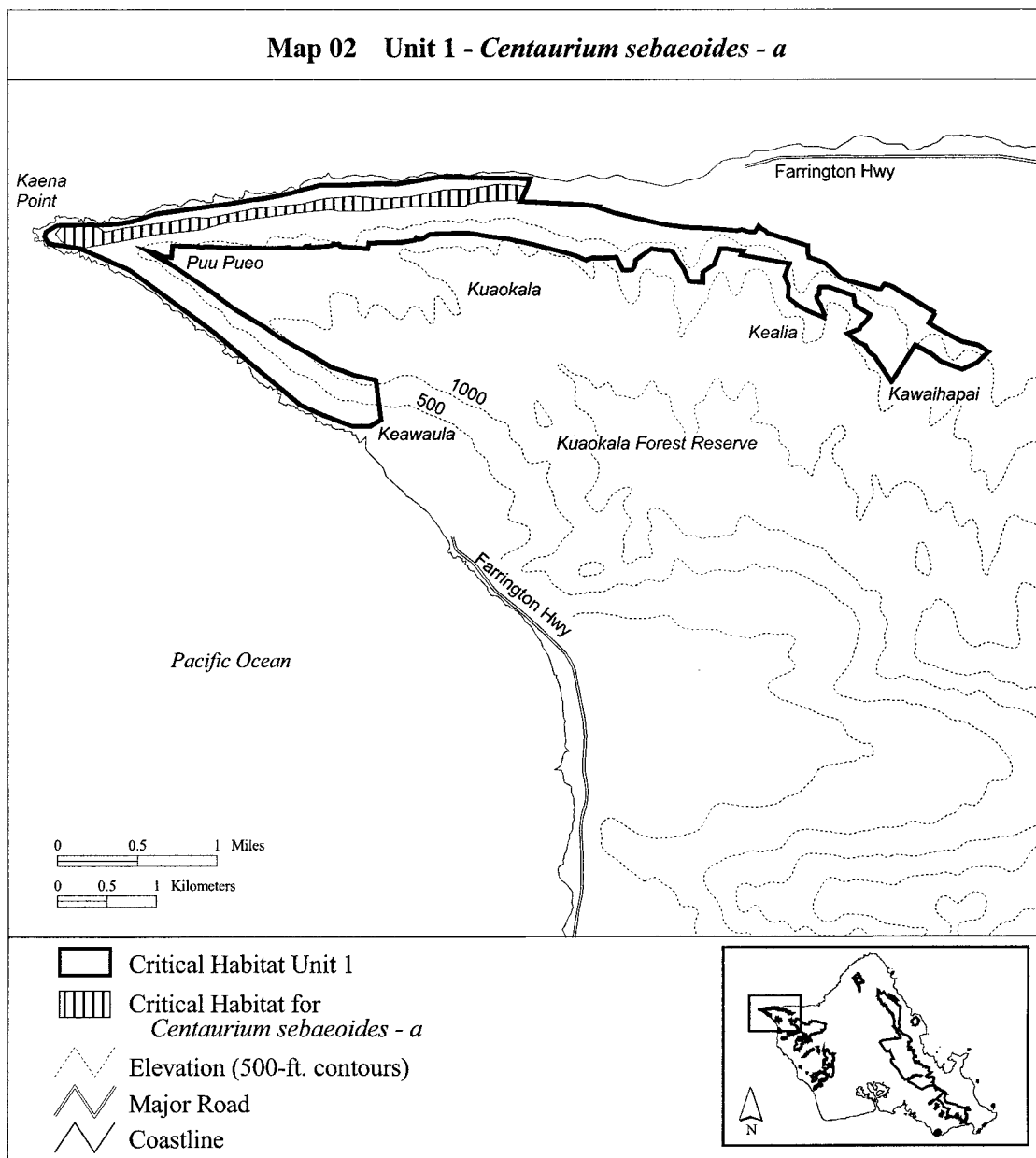
2385984; 575168, 2385907; 575381, 2385957; 575728, 2386002; 576060, 2386059; 576211, 2386052; 576675, 2386146; 577140, 2386190; 577385, 2386247; 577692, 2386272; 577943,

2386247; 578245, 2386266; 578596, 2386335; 578835, 2386341; 579136, 2386391; 579331, 2386379; 579418, 2386363; 579365, 2386234; 579326, 2386224; 579284, 2386229; 579083,

2386225; 578934, 2386215; 578812,
2386182; 578812, 2386173; 578242,
2386164; 577779, 2386117; 577527,
2386117; 577448, 2386136; 577102,

2386103; 576728, 2386052; 576378,
2386005; 576135, 2385935; 575699,
2385884; 575419, 2385832; 575157,
2385789; 574970, 2385752; 574806,

2385766; 574722, 2385822; 574666,
2385892; 574727, 2385962; 574813,
2385980; return to starting point.
(ii) **Note:** Map 2 follows:



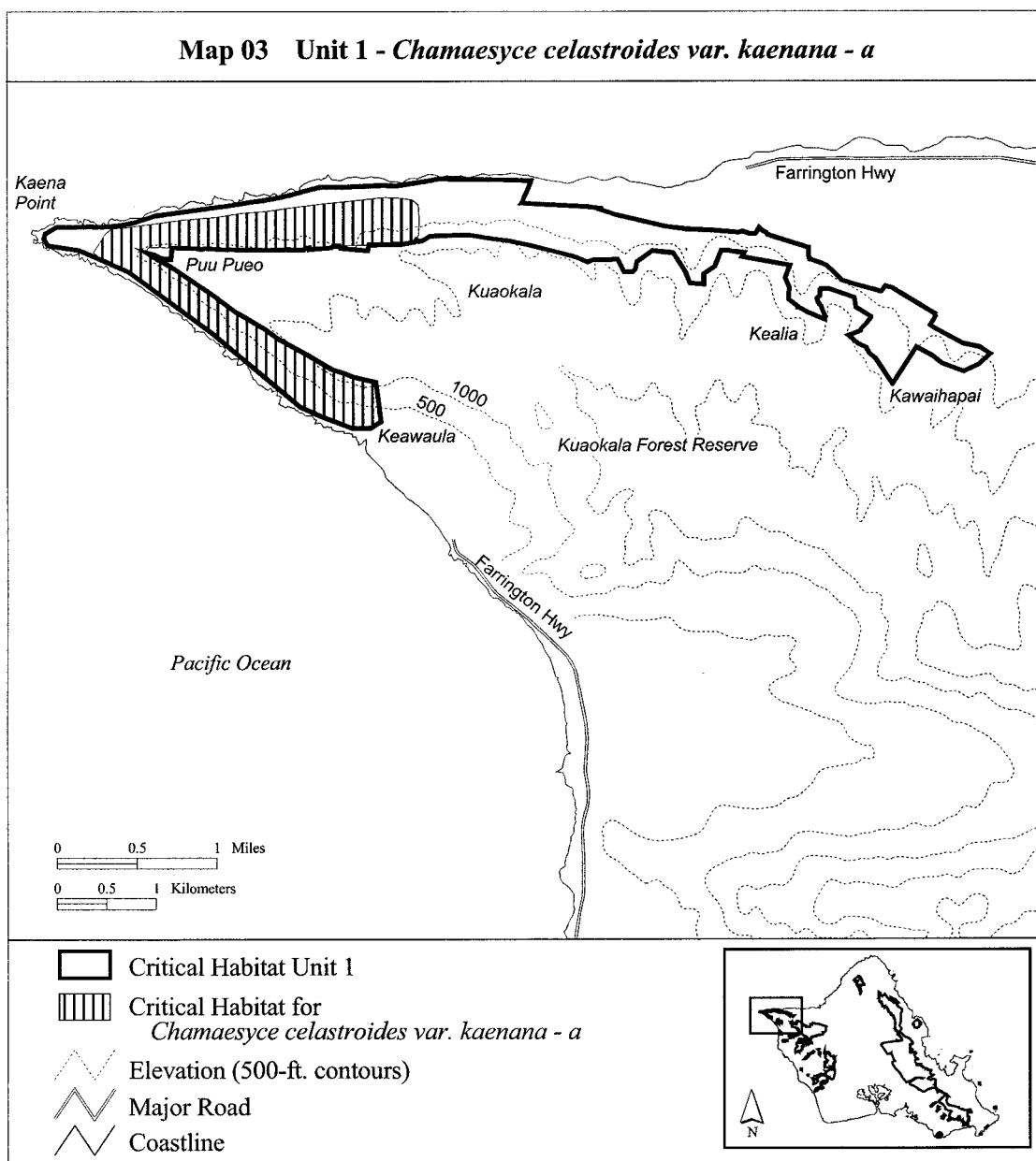
(3) Oahu 1—*Chamaesyce celastroides* var. *kaenana*—a (231 ha; 571 ac)

(i) Unit consists of the following 51 boundary points: Start at 576308, 2385257; 576310, 2385255; 576482, 2385122; 576596, 2385060; 576780, 2384950; 576915, 2384849; 577201, 2384696; 577456, 2384543; 577457, 2384543; 577566, 2384511; 577687, 2384461; 577875, 2384421; 577897,

2384415; 577947, 2384017; 577842, 2383950; 577659, 2383950; 577365, 2384061; 577132, 2384164; 576278, 2384884; 575413, 2385523; 575412, 2385523; 575247, 2385596; 575153, 2385648; 575059, 2385726; 575131, 2385837; 575170, 2385898; 575237, 2385959; 575392, 2385976; 575949, 2386049; 576293, 2386077; 576565, 2386121; 576787, 2386138; 577037, 2386171; 577343, 2386210; 577704,

2386249; 577970, 2386277; 578126, 2386271; 578265, 2386255; 578320, 2386199; 578331, 2386071; 578326, 2385899; 578293, 2385827; 578155, 2385804; 577627, 2385796; 576867, 2385746; 576360, 2385755; 575731, 2385777; 575614, 2385777; 575581, 2385727; 575692, 2385660; 575835, 2385580; return to starting point.

(ii) **Note:** Map 3 follows:



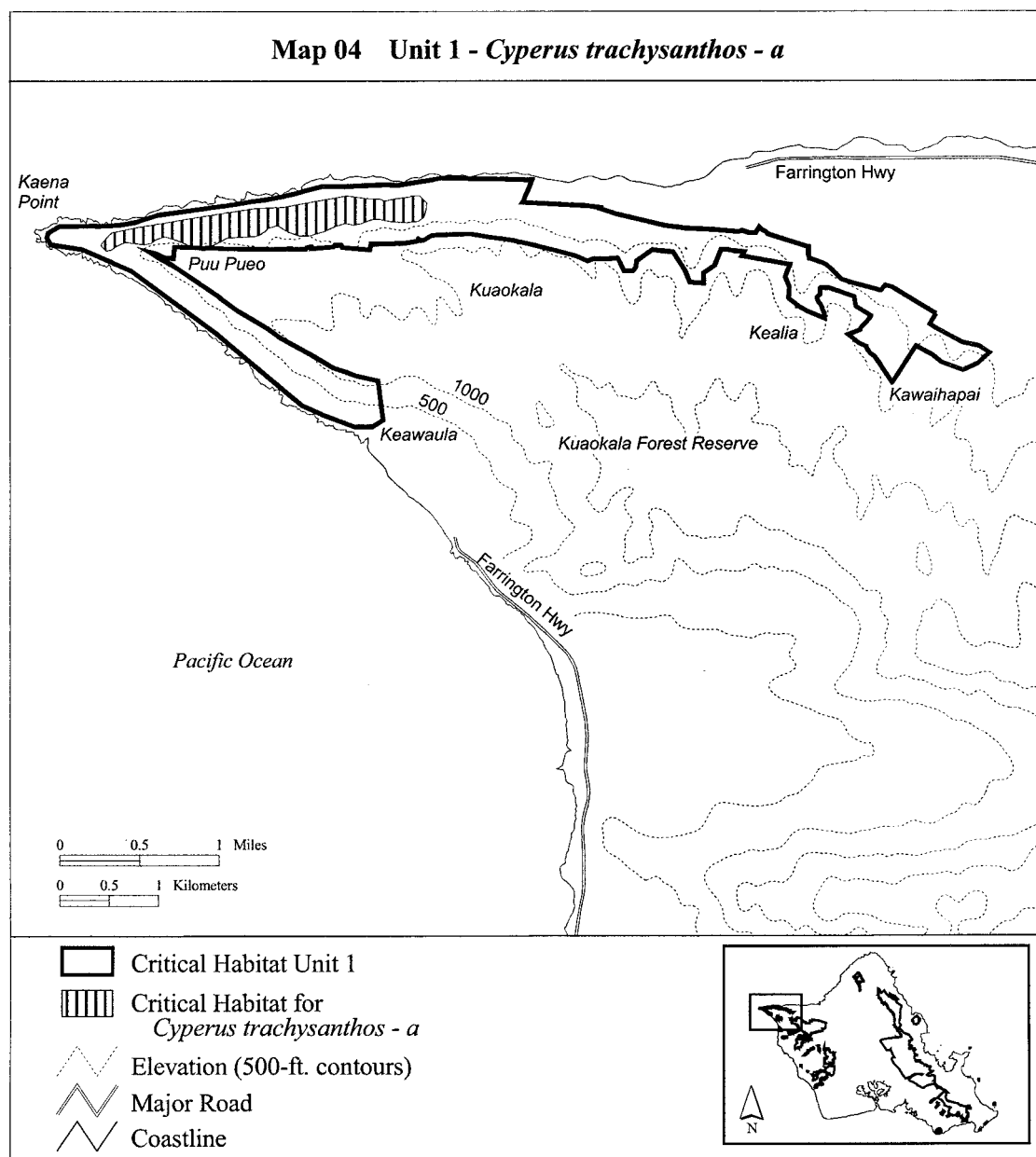
(4) Oahu 1—*Cyperus trachysanthos*—a
(78 ha; 193 ac)

(i) Unit consists of the following 56 boundary points: Start at 575111, 2385777; 575104, 2385794; 575138, 2385842; 575212, 2385916; 575474, 2385967; 576015, 2386059; 576440, 2386124; 576662, 2386160; 576954, 2386170; 577298, 2386235; 577591, 2386291; 577777, 2386257; 577916, 2386253; 577974, 2386238; 578056,

2386253; 578228, 2386278; 578229, 2386286; 578316, 2386286; 578383, 2386219; 578383, 2386161; 578364, 2386074; 578302, 2386026; 578206, 2386022; 578205, 2386017; 578022, 2386026; 577902, 2386050; 577835, 2386045; 577738, 2386012; 577652, 2385993; 577570, 2386007; 577469, 2385973; 577363, 2385930; 577204, 2385882; 577112, 2385882; 577002, 2385920; 576891, 2385983; 576804, 2385964; 576771, 2385935; 576703,

2385887; 576650, 2385877; 576501, 2385867; 576385, 2385863; 576313, 2385824; 576241, 2385790; 576150, 2385752; 575996, 2385786; 575866, 2385838; 575754, 2385872; 575672, 2385853; 575619, 2385810; 575547, 2385795; 575451, 2385805; 575349, 2385818; 575268, 2385780; 575215, 2385741; 575157, 2385730; return to starting point.

(ii) **Note:** Map 4 follows:



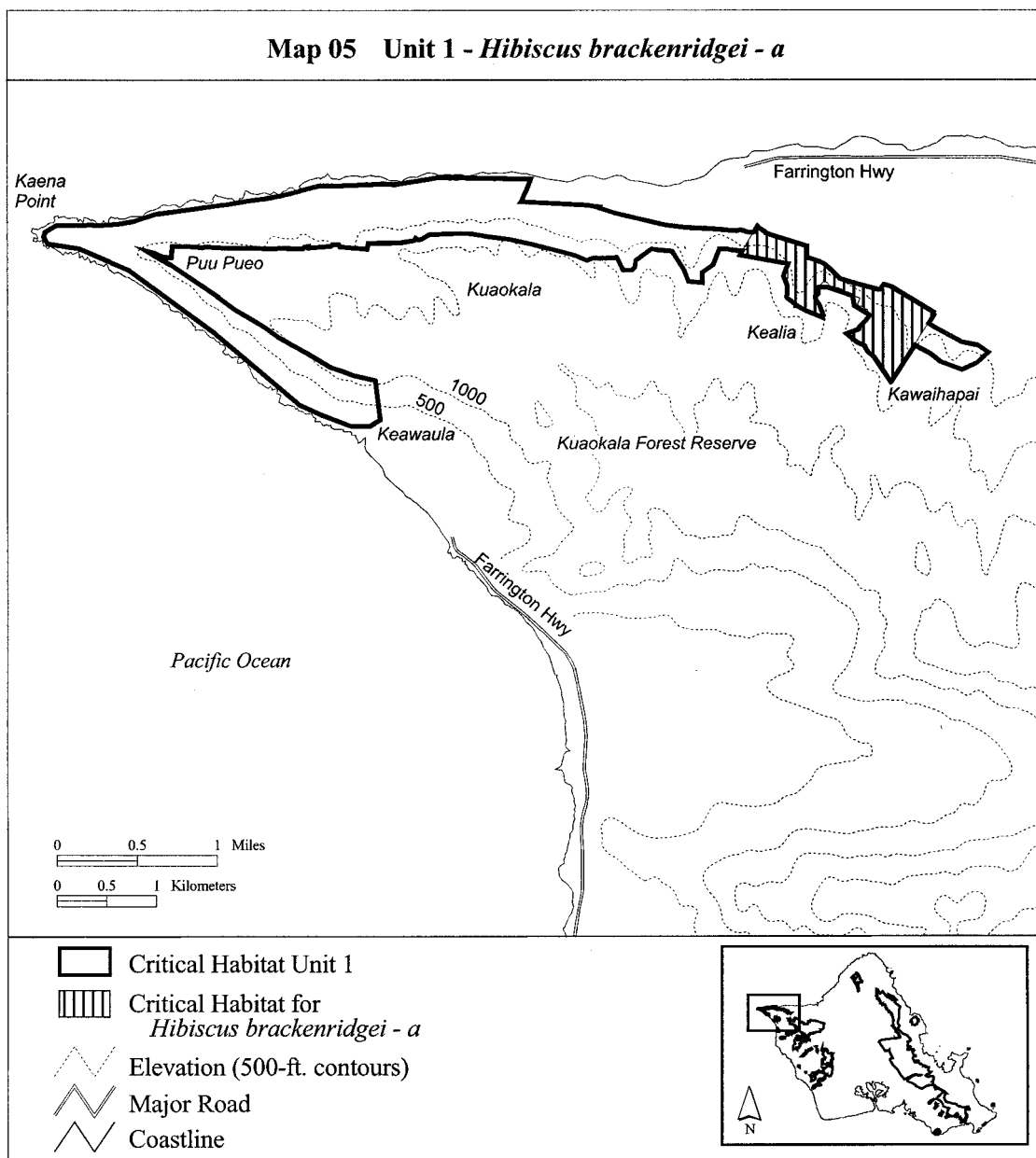
(5) Oahu 1—*Hibiscus brackenridgei*—a
(78 ha; 193 ac)

(i) Unit consists of the following 89 boundary points: Start at 582235, 2385764; 582235, 2385703; 582245, 2385655; 582239, 2385640; 582361, 2385607; 582365, 2385614; 582376, 2385611; 582406, 2385591; 582466, 2385542; 582534, 2385473; 582530, 2385467; 582583, 2385397; 582622, 2385387; 582697, 2385368; 582698, 2385368; 582771, 2385349; 582837, 2385333; 582969, 2385301; 583028, 2385287; 583040, 2385330; 583050, 2385369; 583082, 2385357; 583521, 2385089; 583077, 2384390; 582908,

2384650; 582852, 2384698; 582818, 2384756; 582818, 2384757; 582738, 2384795; 582634, 2384882; 582757, 2384928; 582765, 2384950; 582790, 2384982; 582816, 2385003; 582835, 2385024; 582849, 2385043; 582861, 2385069; 582859, 2385082; 582842, 2385102; 582842, 2385127; 582830, 2385134; 582818, 2385138; 582801, 2385156; 582777, 2385158; 582758, 2385154; 582747, 2385186; 582750, 2385199; 582765, 2385221; 582764, 2385241; 582725, 2385262; 582711, 2385280; 582648, 2385284; 582600, 2385323; 582564, 2385342; 582544, 2385348; 582504, 2385341; 582466, 2385365; 582444, 2385398; 582407,

2385408; 582368, 2385363; 582325, 2385320; 582322, 2385255; 582331, 2385214; 582361, 2385178; 582377, 2385126; 582395, 2385086; 582398, 2385049; 582397, 2385046; 582219, 2385118; 582126, 2385175; 582038, 2385247; 582055, 2385587; 581567, 2385679; 581565, 2385680; 581743, 2385970; 581764, 2385946; 581812, 2385925; 581815, 2385913; 581815, 2385912; 581825, 2385902; 581826, 2385901; 581834, 2385899; 581833, 2385898; 581835, 2385886; 581903, 2385869; 581908, 2385875; 582076, 2385822; 582074, 2385807; 582080, 2385801; return to starting point.

(ii) **Note:** Map 5 follows:



(6) Oahu 1—*Schiedea kealiae*—a (193 ha; 477 ac)

(i) Area consists of the following 138 boundary points: Start at 582365,

2385614; 582376, 2385611; 582406, 2385591; 582466, 2385542; 582534, 2385473; 582530, 2385467; 582583, 2385397; 582622, 2385387; 582697, 2385368; 582698, 2385368; 582771, 2385349; 582837, 2385333; 582969, 2385301; 582970, 2385301; 583021, 2385255; 583270, 2385092; 583519, 2384945; 583786, 2384799; 583958, 2384765; 584061, 2384696; 583941, 2384592; 583795, 2384523; 583571, 2384600; 583476, 2384678; 583287, 2384782; 583055, 2384902; 582917, 2385040; 582711, 2385169; 582694, 2385264; 582444, 2385350; 582350,

2385350; 582350, 2385281; 582221, 2385169; 582126, 2385169; 582040, 2385367; 582003, 2385463; 582059, 2385623; 581885, 2385625; 581766, 2385701; 581470, 2385733; 581363, 2385753; 581292, 2385582; 581180, 2385504; 581180, 2385401; 581043, 2385410; 580993, 2385527; 580876, 2385719; 580742, 2385732; 580671, 2385739; 580587, 2385684; 580505, 2385625; 580495, 2385553; 580475, 2385529; 580380, 2385529; 580313, 2385654; 580235, 2385648; 580148, 2385650; 580071, 2385650; 580011, 2385624; 579890, 2385675; 579718, 2385727; 579460, 2385787; 579228, 2385839; 579039, 2385865; 578841, 2385899; 578703, 2385899; 578439, 2385890; 578359, 2385838; 578331,

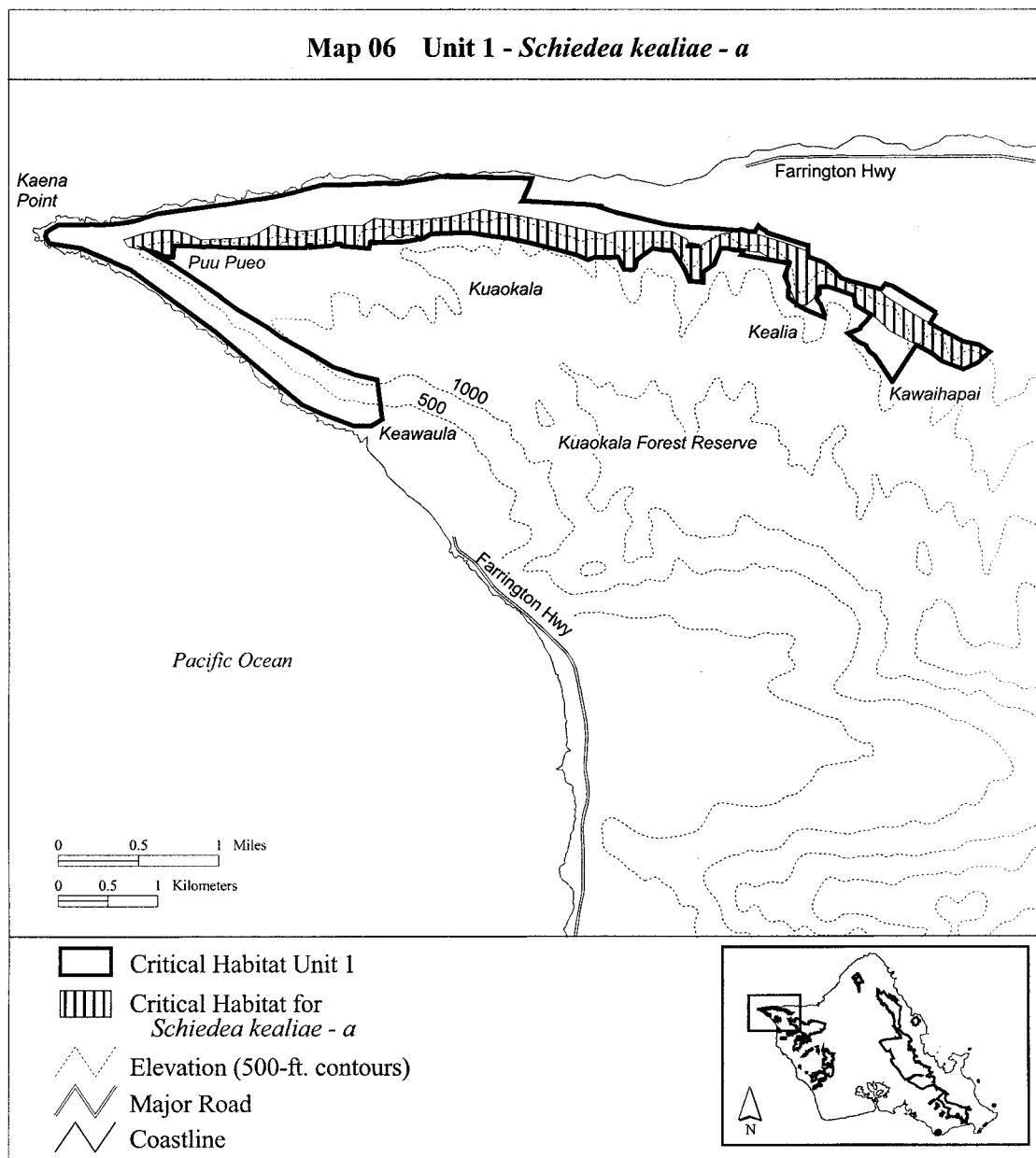
2385837; 578270, 2385867; 578185, 2385874; 578150, 2385855; 578104, 2385853; 578068, 2385878; 578011, 2385870; 577970, 2385822; 577909, 2385815; 577831, 2385831; 577818, 2385744; 577543, 2385765; 577529, 2385794; 577493, 2385800; 577450, 2385768; 577228, 2385755; 577224, 2385793; 577196, 2385796; 577178, 2385750; 577021, 2385746; 576991, 2385803; 576939, 2385805; 576897, 2385750; 576337, 2385757; 576119, 2385765; 575852, 2385776; 575844, 2385705; 575830, 2385704; 575829, 2385702; 575833, 2385655; 575753, 2385658; 575667, 2385701; 575384, 2385766; 575344, 2385828; 575555, 2385899; 575712, 2385925; 575847, 2385925; 575972, 2385894; 576115,

2385830; 576442, 2385848; 576631,
2385865; 576837, 2385977; 577095,
2385916; 577259, 2385925; 577482,
2385977; 577757, 2385977; 577869,
2386045; 578093, 2386028; 578291,
2386028; 578609, 2386054; 578961,

2386131; 579314, 2386071; 579727,
2385994; 580200, 2385882; 580303,
2385916; 580578, 2385916; 580862,
2385916; 581025, 2385831; 581025,
2385763; 581146, 2385763; 581266,
2385831; 581387, 2385892; 581447,

2385892; 581571, 2385935; 582039,
2385788; 582235, 2385711; 582235,
2385703; 582245, 2385655; 582239,
2385640; 582361, 2385607; return to
starting point.

(ii) **Note:** Map 6 follows:



(7) Oahu 1—*Sesbania tomentosa*—a
(101 ha; 250 ac)

(i) Unit consists of the following 70 boundary points: Start at 574558, 2385864; 574569, 2385910; 574683, 2385977; 574741, 2385979; 574788, 2385979; 574998, 2385979; 575206, 2385987; 575263, 2385988; 575282, 2385993; 575451, 2386022; 575668, 2386087; 575699, 2386094; 576319, 2386183; 576376, 2386186; 576495,

2386204; 576637, 2386230; 576767, 2386248; 576923, 2386277; 576926, 2386277; 576928, 2386275; 576929, 2386275; 576980, 2386288; 577035, 2386298; 577098, 2386318; 577139, 2386329; 577140, 2386329; 577141, 2386331; 577151, 2386335; 577321, 2386378; 577336, 2386381; 577539, 2386380; 577539, 2386381; 577540, 2386381; 577540, 2386382; 577979, 2386400; 578097, 2386392; 578439,

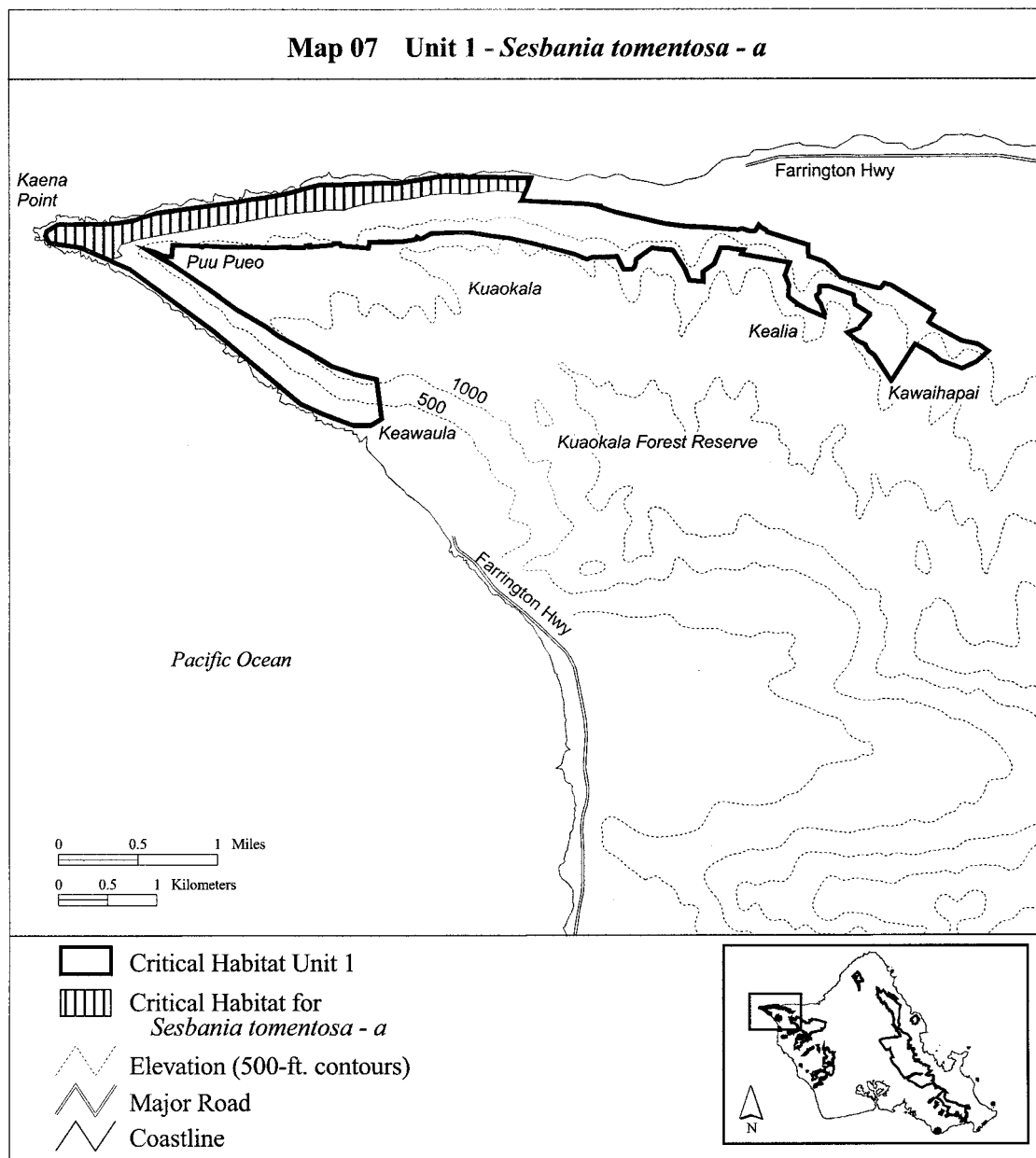
2386448; 578534, 2386462; 579452, 2386445; 579394, 2386306; 579354, 2386308; 579179, 2386315; 579092, 2386315; 578836, 2386286; 578783, 2386286; 578606, 2386293; 578434, 2386274; 578294, 2386249; 578107, 2386224; 577860, 2386199; 577676, 2386162; 577589, 2386131; 577590, 2386124; 577571, 2386125; 577561, 2386121; 577561, 2386125; 577412, 2386128; 577050, 2386092; 576800,

2386052; 576463, 2385983; 576365,
2385980; 575843, 2385893; 575502,
2385827; 575324, 2385776; 575292,

2385710; 575339, 2385664; 575295,
2385646; 575203, 2385616; 574908,

2385748; 574601, 2385795; return to
starting point.

(ii) **Note:** Map 7 follows:



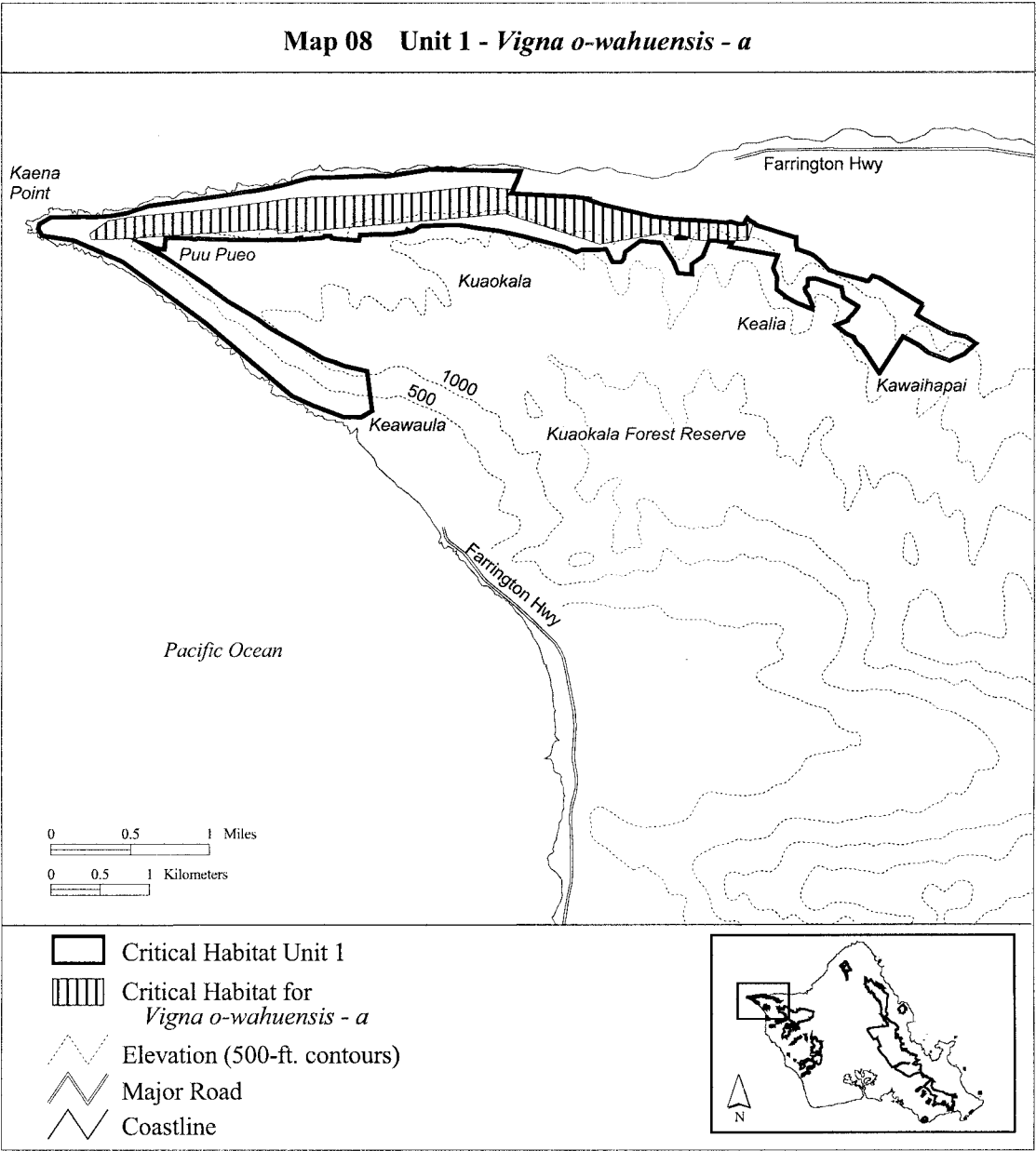
(8) Oahu 1—*Vigna o-wahuensis*—a (181 ha; 448 ac)

(i) Unit consists of the following 31 boundary points: Start at 575092, 2385751; 575081, 2385809; 575265, 2385942; 575531, 2385987; 576306, 2386058; 577144, 2386172; 578381,

2386223; 579003, 2386292; 579376, 2386260; 579359, 2386220; 579359, 2386219; 579360, 2386219; 579360, 2386218; 579361, 2386218; 580020, 2386181; 580139, 2386165; 580137, 2386157; 580278, 2386108; 580792, 2385988; 581014, 2385956; 581268,

2385944; 581636, 2385913; 581801, 2385913; 581750, 2385741; 581268, 2385741; 580873, 2385809; 580253, 2385706; 579290, 2386015; 576993, 2385810; 576984, 2385861; 575400, 2385757; return to starting point.

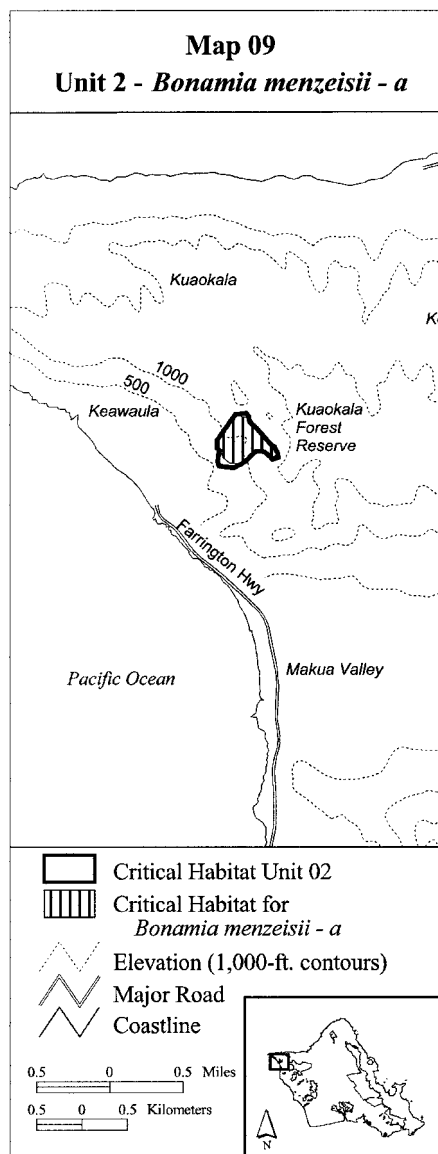
(ii) **Note:** Map 8 follows:



(9) Oahu 2—*Bonamia menziesii*—a (21 ha; 51 ac)

(i) Unit consists of the following 21 boundary points: Start at 579334, 2383456; 579333, 2383554; 579526, 2383824; 579661, 2383800; 579690, 2383768; 579693, 2383749; 579693, 2383748; 579792, 2383655; 579844, 2383597; 579988, 2383419; 579988, 2383385; 579968, 2383366; 579925, 2383371; 579833, 2383424; 579771, 2383438; 579703, 2383400; 579670, 2383342; 579588, 2383284; 579477, 2383294; 579395, 2383356; 579367, 2383424; return to starting point.

(ii) Note: Map 9 follows:

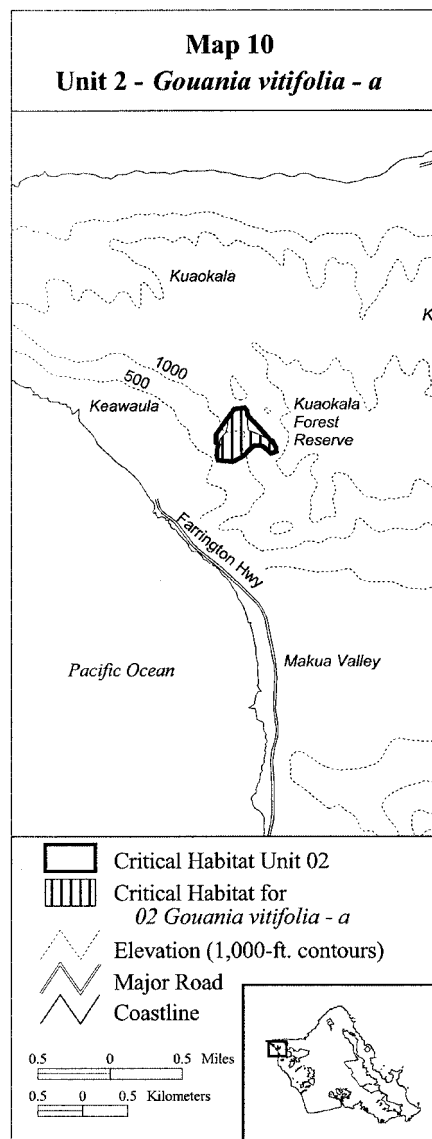


(10) Oahu 2—*Gouania vitifolia*—a (20 ha; 49 ac)

(i) Unit consists of the following 29 boundary points: Start at 579610, 2383845; 579650, 2383848; 579684, 2383810; 579684, 2383807; 579684,

2383736; 579684, 2383672; 579693, 2383598; 579800, 2383560; 579963, 2383474; 580001, 2383409; 580006, 2383353; 579941, 2383336; 579898, 2383379; 579842, 2383422; 579760, 2383426; 579704, 2383375; 579649, 2383319; 579580, 2383271; 579515, 2383241; 579352, 2383263; 579339, 2383310; 579343, 2383379; 579383, 2383499; 579443, 2383573; 579460, 2383641; 579469, 2383702; 579482, 2383736; 579503, 2383795; 579534, 2383838; return to starting point.

(ii) Note: Map 10 follows:

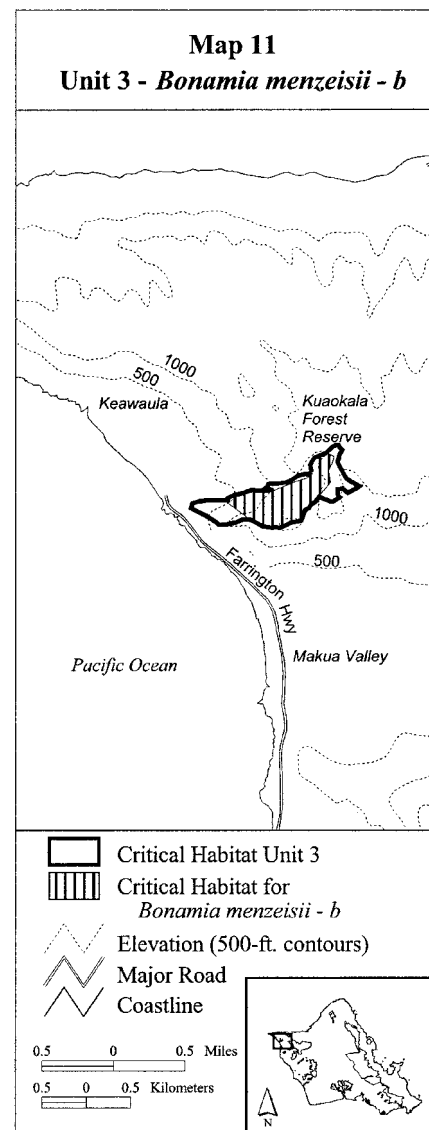


(11) Oahu 3—*Bonamia menziesii*—b (42 ha; 104 ac)

(i) Unit consists of the following 35 boundary points: Start at 579371, 2382797; 579436, 2382825; 579544, 2382850; 579623, 2382881; 579630, 2382883; 579645, 2382884; 579886, 2382879; 580161, 2382995; 580267, 2383024; 580298, 2383084; 580303,

2383086; 580304, 2383086; 580304, 2383087; 580304, 2383088; 580303, 2383095; 580306, 2383101; 580290, 2383172; 580359, 2383241; 580504, 2383303; 580566, 2383265; 580542, 2383178; 580504, 2383106; 580523, 2382971; 580393, 2382812; 580344, 2382744; 580214, 2382657; 580200, 2382575; 580137, 2382527; 580079, 2382532; 579993, 2382474; 579872, 2382460; 579769, 2382469; 579763, 2382471; 579592, 2382571; 579366, 2382744; return to starting point.

(ii) Note: Map 11 follows:

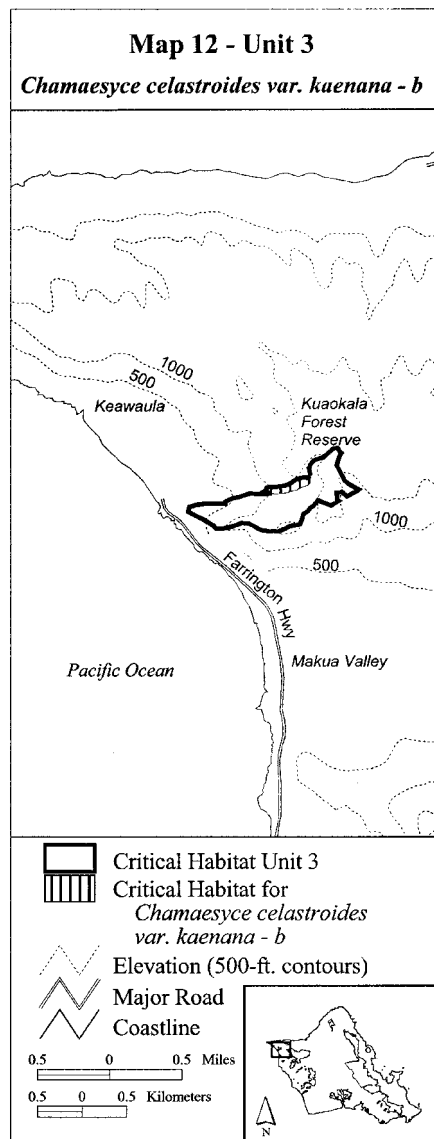


(12) Oahu 3—*Chamaesyce celastroides* var. *kaenana*—b (4 ha; 11 ac)

(i) Unit consists of the following 20 boundary points: Start at 579828, 2382953; 579860, 2382962; 579931, 2382959; 580028, 2382975; 580069, 2382994; 580111, 2383020; 580161, 2383047; 580238, 2383068; 580259, 2383068; 580304, 2383043; 580308,

2383004; 580285, 2382981; 580243, 2382969; 580166, 2382930; 580057, 2382895; 579931, 2382878; 579857, 2382888; 579796, 2382907; 579815, 2382923; 579823, 2382946; return to starting point.

(ii) **Note:** Map 12 follows:

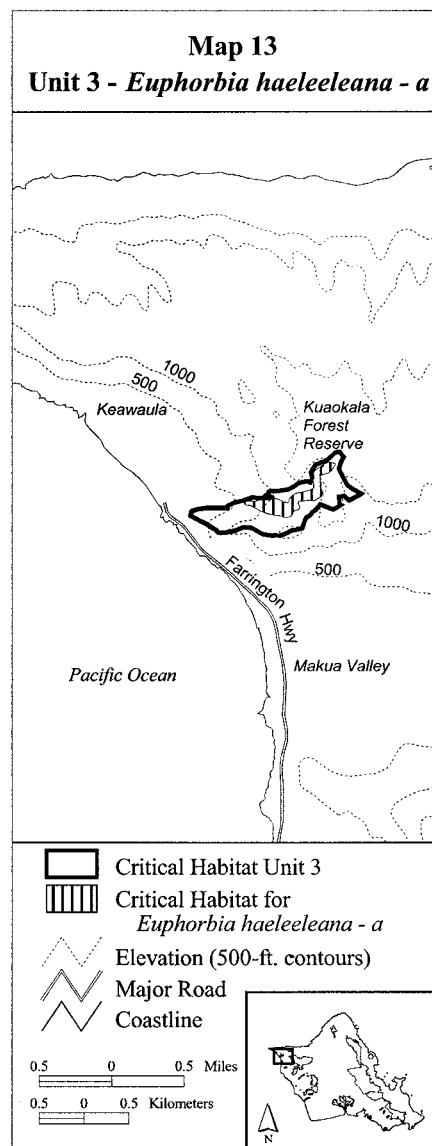


(13) Oahu 3—*Euphorbia haeleeleana*—a (15 ha; 37 ac)

(i) Unit consists of the following 67 boundary points: Start at 580326, 2382991; 580322, 2383035; 580313, 2383069; 580310, 2383096; 580312, 2383132; 580323, 2383169; 580360, 2383211; 580417, 2383248; 580464, 2383276; 580516, 2383287; 580559, 2383266; 580564, 2383251; 580546, 2383221; 580522, 2383183; 580490, 2383164; 580454, 2383149; 580419, 2383145; 580393, 2383120; 580393, 2383077; 580406, 2383031; 580409, 2382985; 580422, 2382939; 580407, 2382899; 580365, 2382870; 580322,

2382845; 580267, 2382852; 580241, 2382852; 580202, 2382842; 580161, 2382847; 580152, 2382821; 580166, 2382787; 580174, 2382763; 580147, 2382744; 580118, 2382744; 580095, 2382727; 580073, 2382677; 580047, 2382666; 580005, 2382663; 579971, 2382672; 579925, 2382689; 579891, 2382690; 579846, 2382692; 579777, 2382718; 579718, 2382747; 579667, 2382769; 579623, 2382795; 579573, 2382802; 579548, 2382821; 579550, 2382828; 579557, 2382839; 579597, 2382844; 579681, 2382847; 579726, 2382858; 579772, 2382862; 579828, 2382868; 579872, 2382878; 579935, 2382868; 579964, 2382850; 580008, 2382836; 580034, 2382829; 580048, 2382839; 580053, 2382855; 580066, 2382884; 580094, 2382917; 580131, 2382934; 580231, 2382955; 580294, 2382975; return to starting point.

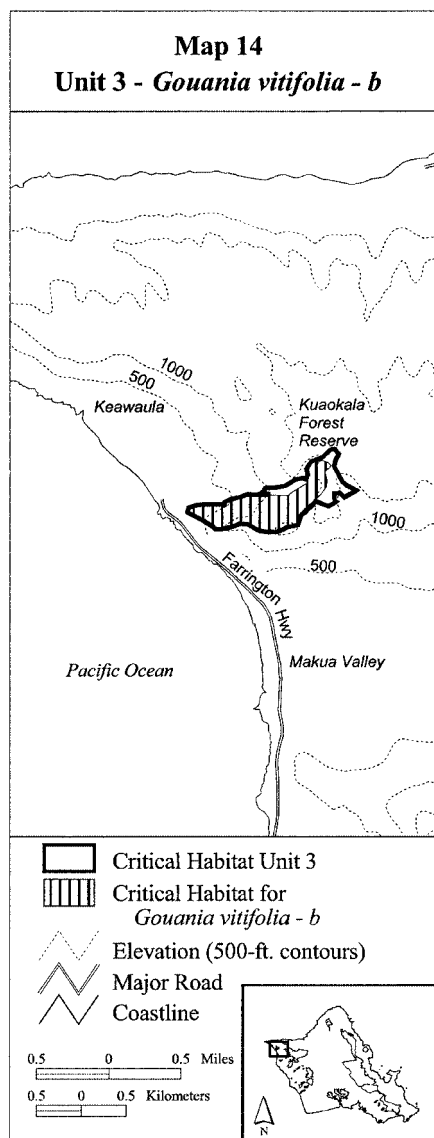
(ii) **Note:** Map 13 follows:



(14) Oahu 3—*Gouania vitifolia*—b (49 ha; 121 ac)

(i) Unit consists of the following 54 boundary points: Start at 580193, 2382540; 580147, 2382527; 580079, 2382519; 580044, 2382497; 579950, 2382459; 579881, 2382463; 579756, 2382502; 579653, 2382545; 579541, 2382553; 579451, 2382519; 579335, 2382489; 579270, 2382493; 579231, 2382532; 579115, 2382600; 579038, 2382639; 578960, 2382682; 578969, 2382730; 579038, 2382760; 579128, 2382773; 579253, 2382768; 579356, 2382768; 579455, 2382807; 579519, 2382828; 579614, 2382871; 579709, 2382871; 579859, 2382876; 580001, 2382871; 580083, 2382871; 580165, 2382927; 580298, 2383009; 580303, 2383086; 580304, 2383086; 580304, 2383087; 580304, 2383088; 580303, 2383094; 580307, 2383155; 580324, 2383211; 580371, 2383246; 580470, 2383263; 580526, 2383250; 580569, 2383211; 580500, 2383147; 580505, 2383104; 580526, 2383039; 580517, 2382970; 580453, 2382876; 580371, 2382811; 580302, 2382751; 580255, 2382708; 580229, 2382635; 580196, 2382544; 580195, 2382544; 580195, 2382543; 580194, 2382543; return to starting point.

(ii) **Note:** Map 14 follows:

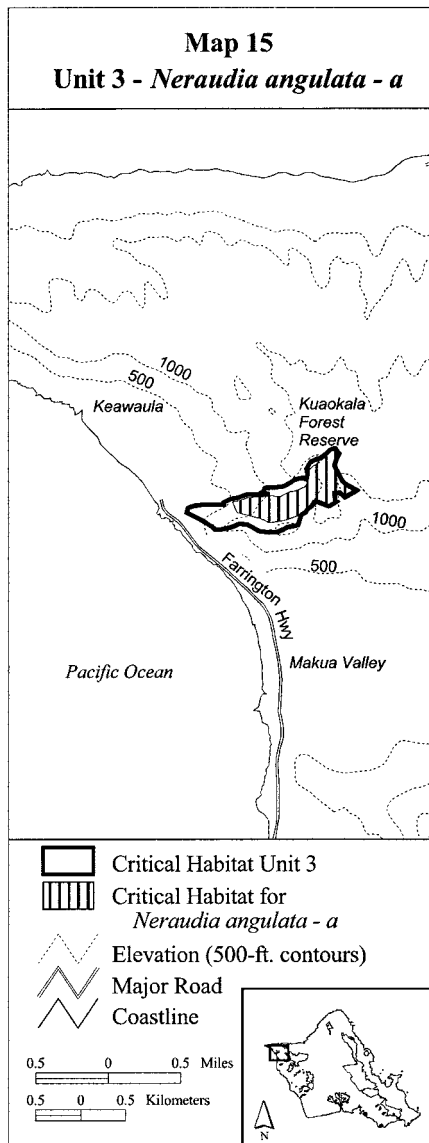


(15) Oahu 3—*Neraudia angulata*—a (39 ha; 98 ac)

(i) Unit consists of the following 52 boundary points: Start at 580537, 2382749; 580366, 2382818; 580282, 2382681; 580238, 2382660; 580091, 2382603; 580004, 2382584; 579879, 2382569; 579829, 2382591; 579784, 2382609; 579516, 2382681; 579463, 2382801; 579522, 2382810; 579632, 2382847; 579785, 2382860; 579904, 2382869; 579948, 2382857; 579998, 2382857; 580038, 2382875; 580110, 2382916; 580163, 2382925; 580204, 2382938; 580279, 2382972; 580314, 2383035; 580317, 2383119; 580317, 2383154; 580360, 2383194; 580401, 2383222; 580470, 2383301; 580555, 2383380; 580572, 2383390; 580608, 2383398; 580643, 2383357; 580653, 2383344; 580646, 2383327; 580623, 2383279; 580607, 2383228; 580600, 2383211; 580600, 2383210; 580600, 2383209; 580617, 2383205; 580695,

2383029; 580739, 2382994; 580852, 2382929; 580845, 2382924; 580718, 2382852; 580660, 2382901; 580632, 2382899; 580606, 2382898; 580606, 2382894; 580609, 2382810; 580623, 2382799; 580595, 2382784; return to starting point.

(ii) Note: Map 15 follows:

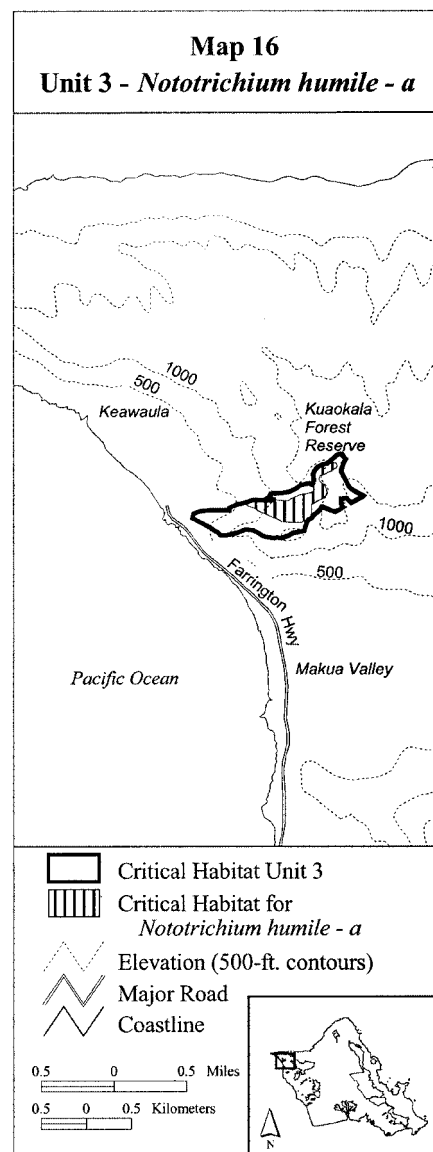


(16) Oahu 3—*Nototrichium humile*—a (21 ha; 51 ac)

(i) Unit consists of the following 58 boundary points: Start at 580322, 2383229; 580383, 2383263; 580458, 2383302; 580500, 2383306; 580555, 2383298; 580559, 2383275; 580557, 2383245; 580527, 2383226; 580494, 2383200; 580456, 2383192; 580423, 2383170; 580379, 2383157; 580361, 2383115; 580379, 2383082; 580427, 2383050; 580440, 2383016; 580448, 2382967; 580436, 2382930; 580411, 2382904; 580356, 2382875; 580328, 2382861; 580281, 2382833; 580277,

2382813; 580281, 2382750; 580265, 2382695; 580218, 2382650; 580160, 2382628; 580091, 2382628; 580010, 2382634; 579947, 2382642; 579922, 2382662; 579890, 2382677; 579853, 2382687; 579792, 2382717; 579691, 2382762; 579644, 2382794; 579561, 2382819; 579561, 2382843; 579581, 2382861; 579617, 2382879; 579628, 2382882; 579768, 2382880; 579863, 2382888; 579924, 2382880; 580020, 2382873; 580066, 2382904; 580174, 2382951; 580227, 2382953; 580281, 2382965; 580302, 2382995; 580302, 2383046; 580303, 2383086; 580304, 2383086; 580304, 2383087; 580304, 2383088; 580303, 2383093; 580304, 2383147; 580308, 2383210; return to starting point.

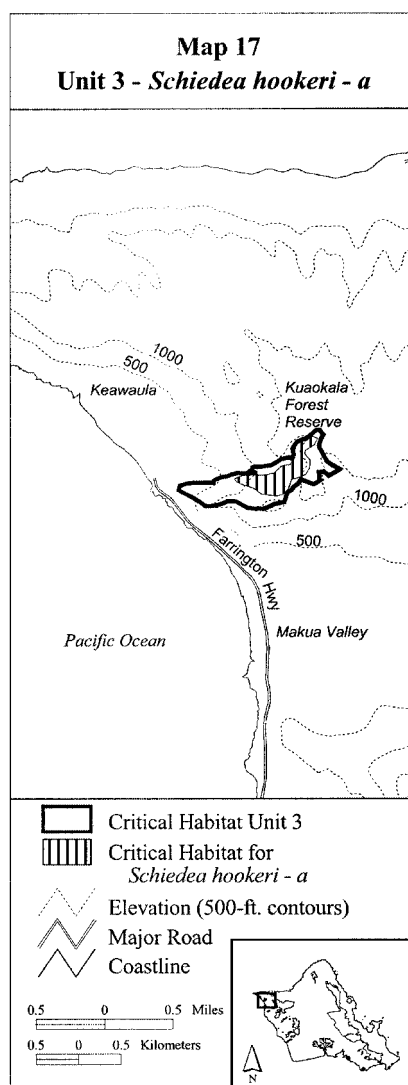
(ii) Note: Map 16 follows:



(17) Oahu 3—*Schiedea hookeri*—a (22 ha; 55 ac)

(i) Unit consists of the following 29 boundary points: Start at 580264, 2382989; 580304, 2383047; 580326, 2383118; 580326, 2383171; 580340, 2383251; 580415, 2383282; 580526, 2383322; 580592, 2383299; 580552, 2383224; 580446, 2383149; 580446, 2383104; 580499, 2383038; 580495, 2382994; 580495, 2382940; 580459, 2382870; 580397, 2382839; 580282, 2382808; 580247, 2382701; 580184, 2382630; 580100, 2382613; 579932, 2382639; 579843, 2382701; 579648, 2382772; 579613, 2382816; 579697, 2382852; 579839, 2382861; 579963, 2382861; 580074, 2382883; 580171, 2382971; return to starting point.

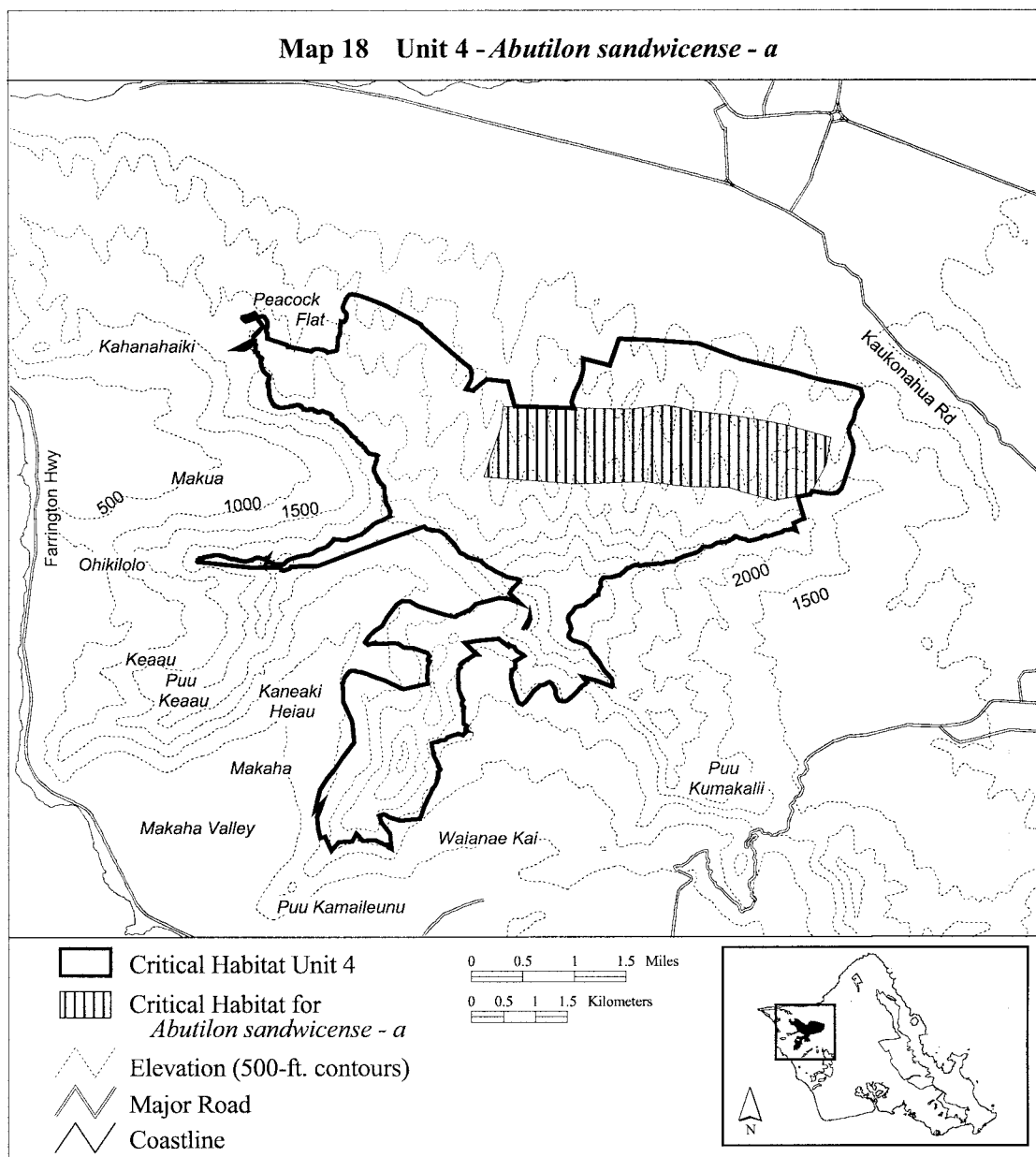
(ii) **Note:** Map 17 follows:



(18) Oahu 4—*Abutilon sandwicense*—a (617 ha; 1,492 ac)

(i) Unit consists of the following 25 boundary points: Start at 587021, 2380442; 587295, 2381250; 587320, 2381565; 589332, 2381513; 589879, 2381584; 590161, 2381525; 590284, 2381494; 590979, 2381406; 591581, 2381305; 591815, 2381256; 592481, 2381064; 592408, 2380627; 592166, 2380161; 591586, 2380069; 591071, 2380209; 590944, 2380253; 590851, 2380280; 590618, 2380280; 590310, 2380289; 590051, 2380311; 589743, 2380355; 589745, 2380336; 589576, 2380372; 588446, 2380333; 587034, 2380442; return to starting point.

(ii) **Note:** Map 18 follows:



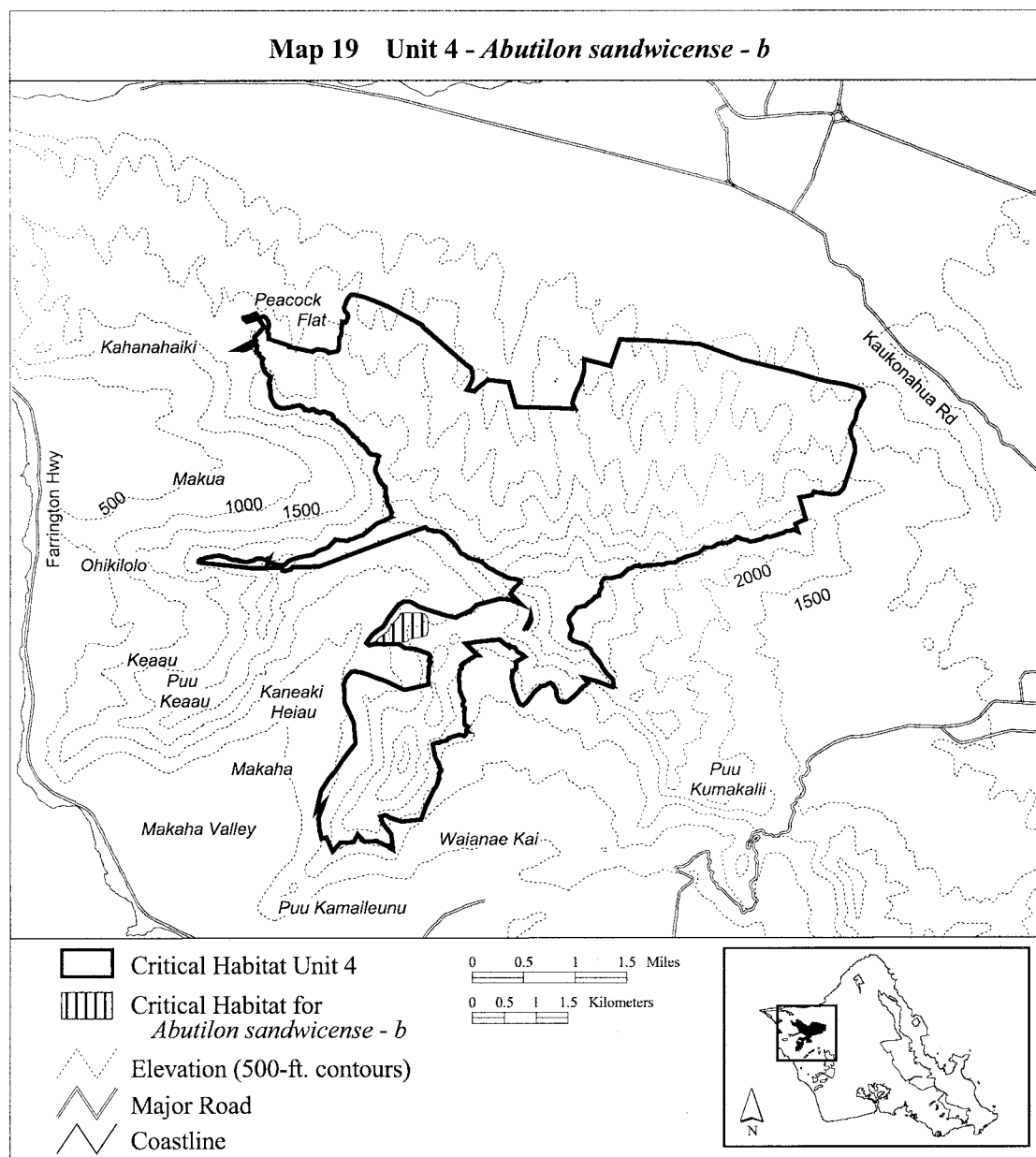
(19) Oahu 4—*Abutilon sandwicense*—b
(26 ha; 65 ac)

(i) Unit consists of the following 21
boundary points: Start at 585770,
2377843; 585514, 2377812; 585309,

2377812; 585302, 2377855; 585352,
2377905; 585502, 2378018; 585513,
2378023; 585503, 2378027; 585585,
2378144; 585675, 2378254; 585726,
2378312; 585921, 2378312; 586058,
2378297; 586124, 2378234; 586128,

2378117; 586128, 2378007; 586101,
2377945; 586050, 2377925; 585968,
2377914; 585837, 2377895; 585819,
2377855; return to starting point.

(ii) **Note:** Map 19 follows:



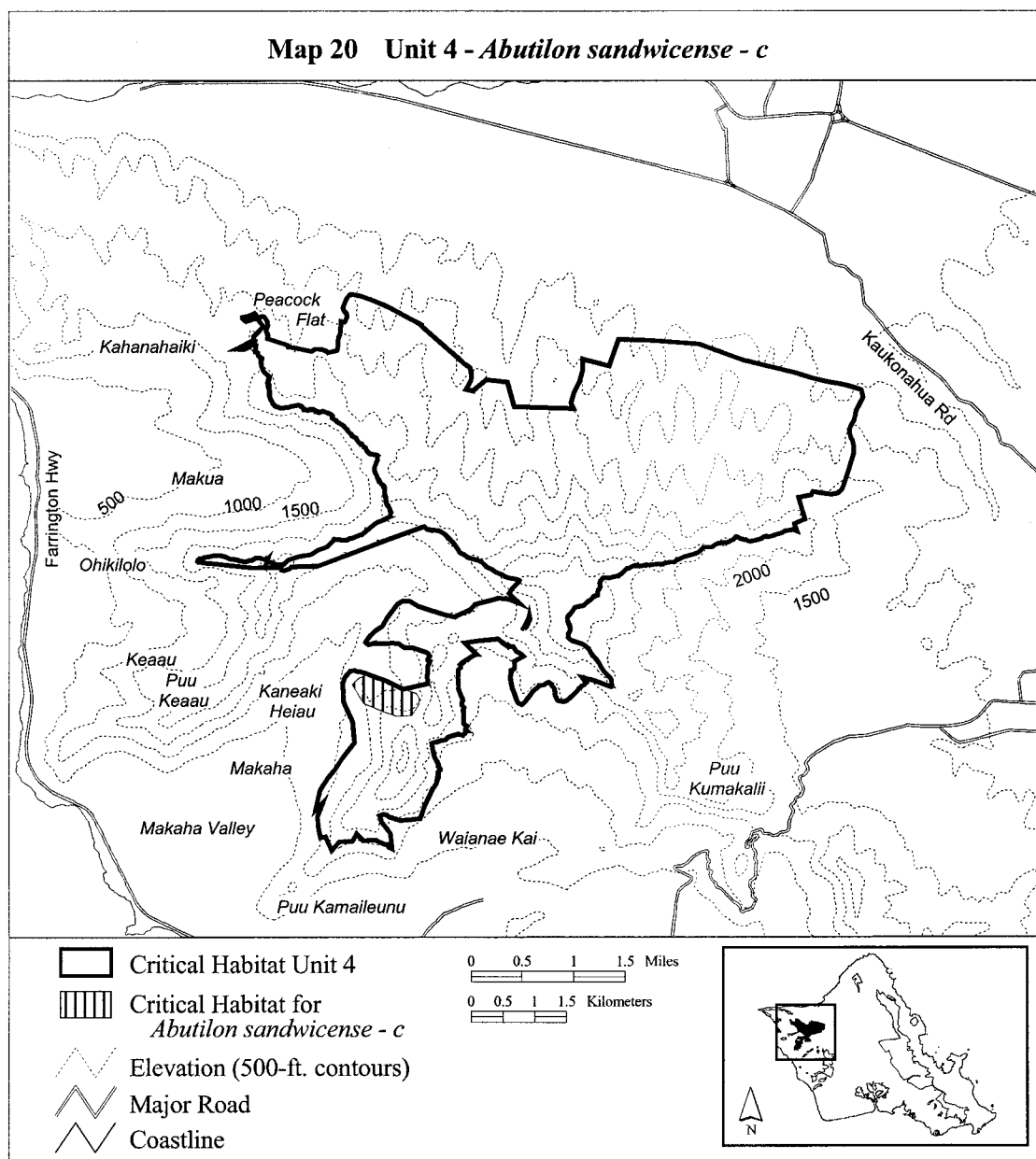
(20) Oahu 4—*Abutilon sandwicense*—c
(41 ha; 102 ac)

(i) Unit consists of the following 13
boundary points: Start at 584947,

2377163; 585056, 2377267; 585189,
2377317; 585523, 2377179; 585815,
2377075; 585970, 2377021; 586011,
2376941; 586000, 2376834; 585894,

2376679; 585790, 2376674; 585652,
2376670; 585444, 2376741; 585135,
2376865; return to starting point.

(ii) **Note:** Map 20 follows:



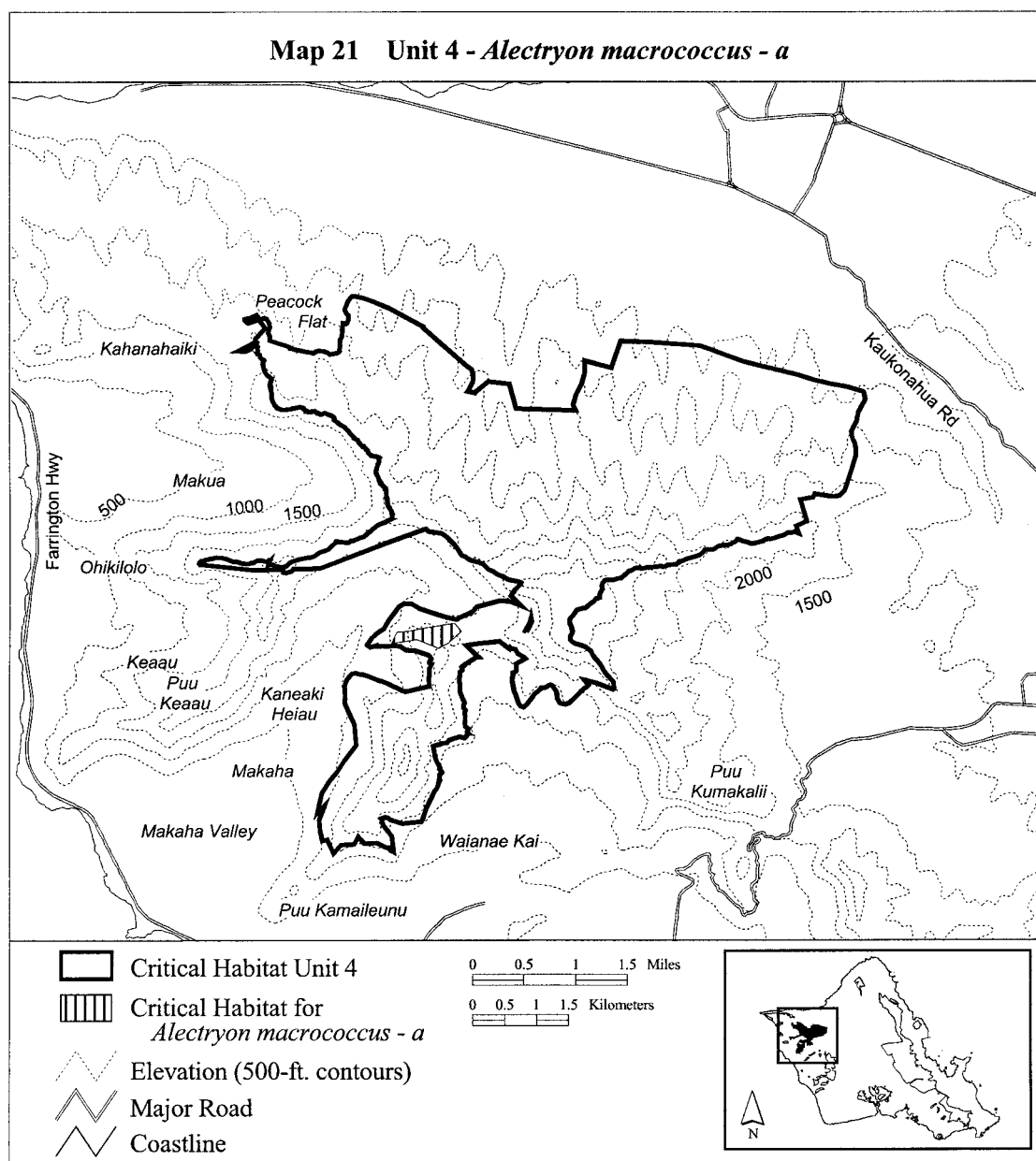
(21) Oahu 4—*Alectryon macrococcus*—
a (23 ha; 58 ac)

(i) Unit consists of the following 11
boundary points: Start at 585550,

2377860; 585633, 2378026; 585845,
2378046; 586046, 2378091; 586234,
2378115; 586538, 2378174; 586652,
2378034; 586437, 2377855; 586289,

2377772; 585951, 2377906; 585637,
2377869; return to starting point.

(ii) **Note:** Map 21 follows:



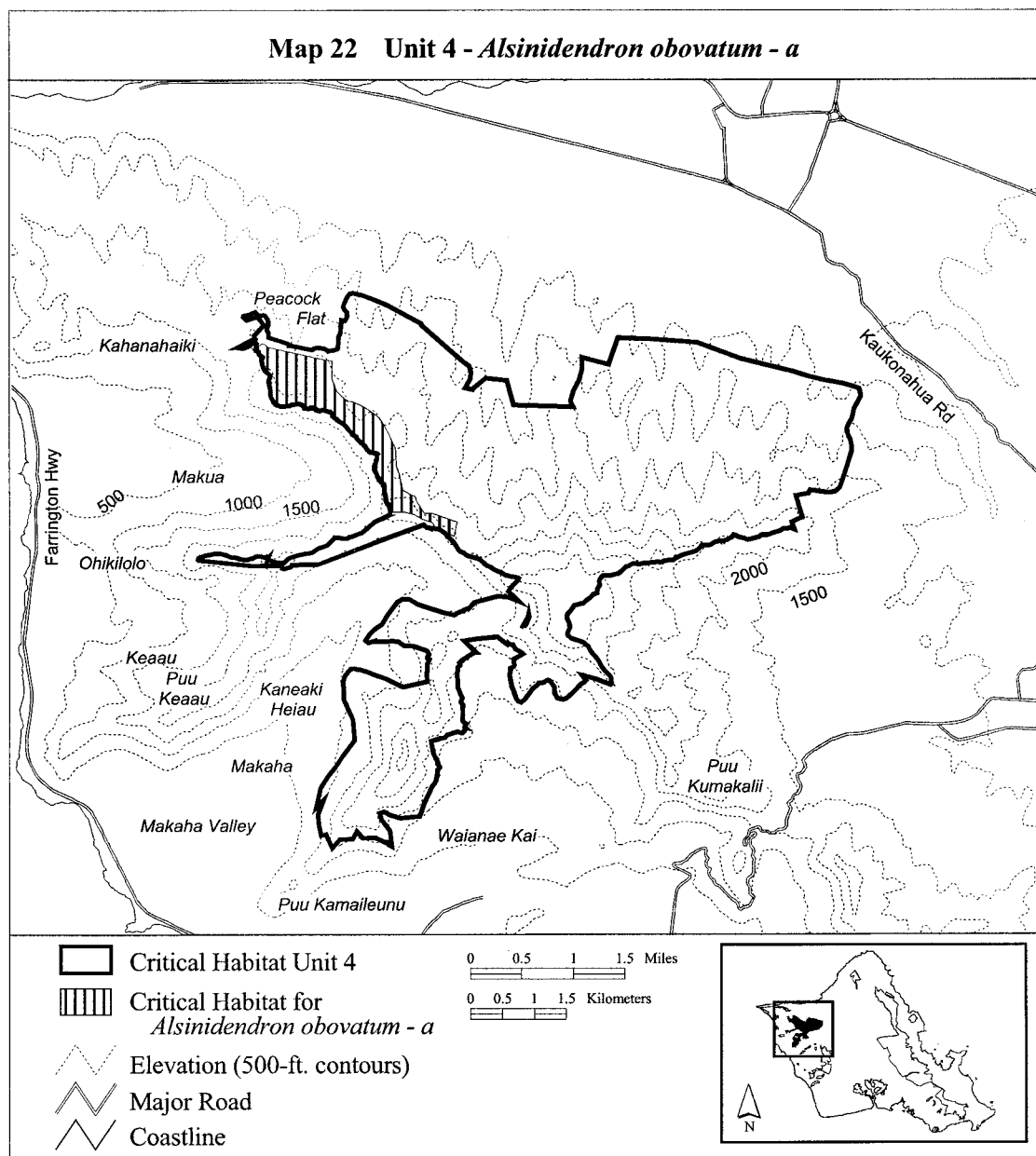
(22) Oahu 4—*Alsinidendron obovatum*—a (176 ha; 435 ac)

(i) Unit consists of the following 74 boundary points: Start at 584301, 2381528; 584276, 2381533; 584200, 2381533; 584168, 2381552; 584167, 2381553; 584150, 2381572; 584130, 2381584; 584129, 2381584; 584104, 2381586; 584065, 2381583; 584024, 2381575; 583997, 2381574; 583936, 2381555; 583934, 2381555; 583897, 2381549; 583890, 2381547; 583758, 2381567; 583747, 2381571; 583744, 2381574; 583679, 2381692; 583645,

2381923; 583660, 2382029; 583547, 2382173; 583547, 2382317; 583445, 2382468; 583526, 2382533; 583573, 2382527; 583625, 2382480; 584375, 2382308; 584634, 2382266; 584637, 2381962; 584681, 2381851; 584707, 2381777; 584869, 2381626; 584974, 2381615; 585148, 2381528; 585352, 2381394; 585415, 2381313; 585514, 2381138; 585630, 2380889; 585648, 2380581; 585694, 2380470; 585751, 2380215; 585885, 2380133; 585885, 2380132; 585887, 2380133; 585949, 2380115; 585967, 2380042; 586095, 2379844; 586223, 2379842; 586612,

2379713; 586570, 2379480; 586280, 2379613; 586221, 2379703; 586082, 2379747; 585944, 2379824; 585787, 2379865; 585584, 2379862; 585528, 2379995; 585464, 2380301; 585339, 2380521; 585359, 2380809; 585275, 2380813; 585134, 2380949; 585024, 2381070; 584865, 2381245; 584659, 2381371; 584615, 2381487; 584427, 2381499; 584329, 2381521; 584325, 2381523; 584324, 2381523; 584310, 2381528; 584309, 2381528; return to starting point.

(ii) **Note:** Map 22 follows:



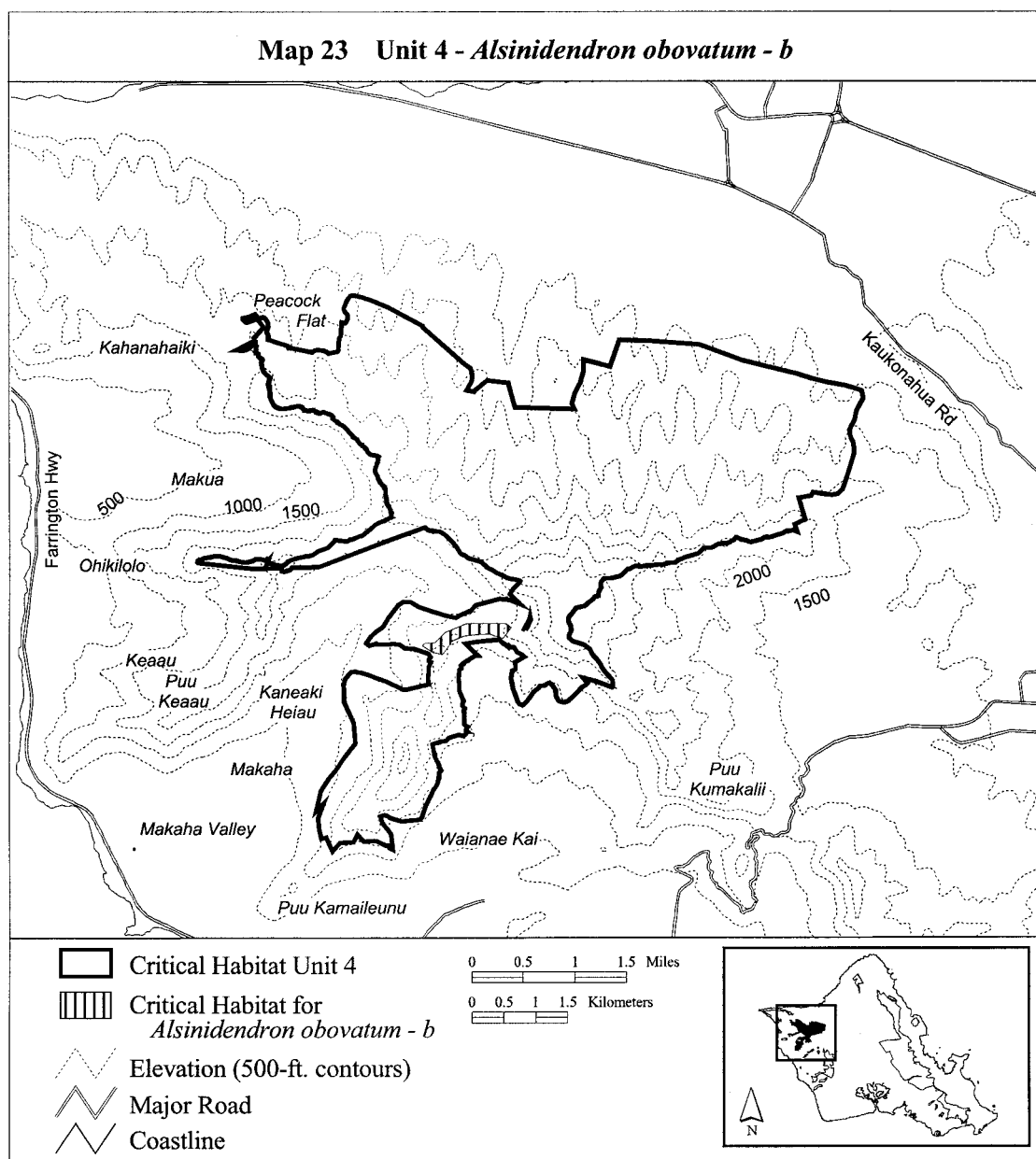
(23) Oahu 4—*Alsinidendron obovatum*—b (25 ha; 62 ac)

(i) Unit consists of the following 15 boundary points: Start at 587357,

2378140; 587448, 2378072; 587324, 2377899; 587184, 2377944; 587092, 2377970; 586908, 2377966; 586707, 2377940; 586523, 2377861; 586365, 2377651; 586207, 2377681; 586050,

2377786; 586076, 2377826; 586251, 2377839; 586413, 2378001; 586751, 2378133; return to starting point.

(ii) **Note:** Map 23 follows:



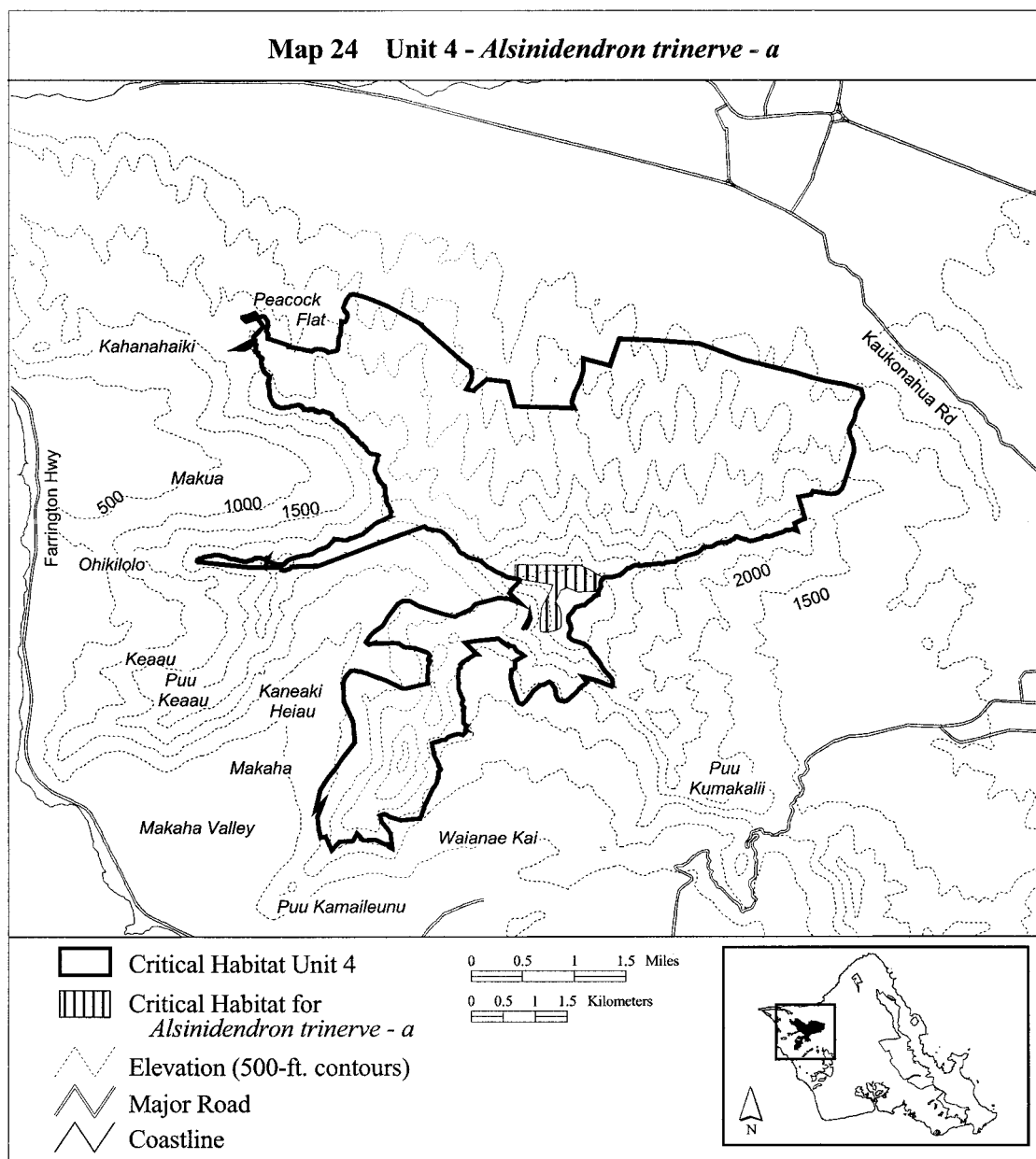
(24) Oahu 4—*Alsinidendron trinerve*—a
(60 ha; 149 ac)

(i) Area consists of the following 40 boundary points: Start at 588752, 2378628; 588489, 2378617; 588334, 2378694; 588233, 2378647; 588153, 2378468; 588202, 2378374; 588233, 2378276; 588229, 2378073; 588222,

2378078; 588219, 2378044; 588144, 2378012; 588014, 2377985; 587916, 2377994; 587902, 2378173; 587902, 2378177; 587924, 2378356; 587992, 2378504; 588072, 2378629; 588108, 2378741; 587501, 2378835; 587501, 2379053; 588336, 2379045; 588528, 2379045; 588681, 2378969; 588828, 2378880; 588897, 2378847; 588887,

2378841; 588887, 2378840; 588862, 2378802; 588851, 2378772; 588851, 2378763; 588851, 2378746; 588855, 2378710; 588838, 2378677; 588825, 2378656; 588815, 2378615; 588815, 2378614; 588814, 2378597; 588767, 2378640; 588765, 2378640; return to starting point.

(ii) **Note:** Map 24 follows:

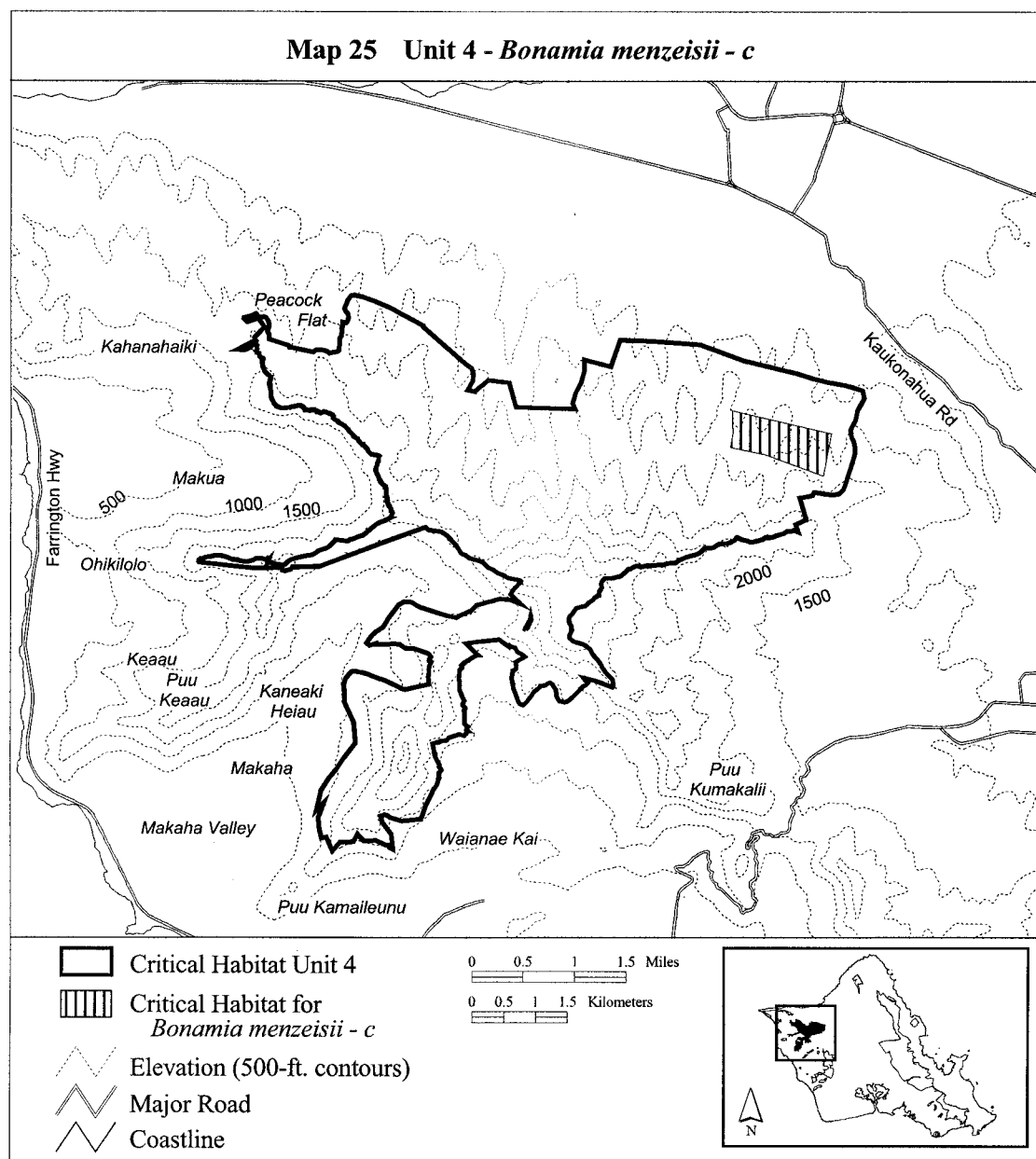


(25) Oahu 4—*Bonamia menziesii*—c (94 ha; 232 ac)

(i) Unit consists of the following 6 boundary points: Start at 592338,

2380469; 591431, 2380805; 590871, 2380923; 590910, 2381148; 590905, 2381506; 592466, 2381148; return to starting point.

(ii) **Note:** Map 25 follows:



(26) Oahu 4—*Cenchrus agrimonioides*—
a (529 ha; 1,306 ac)

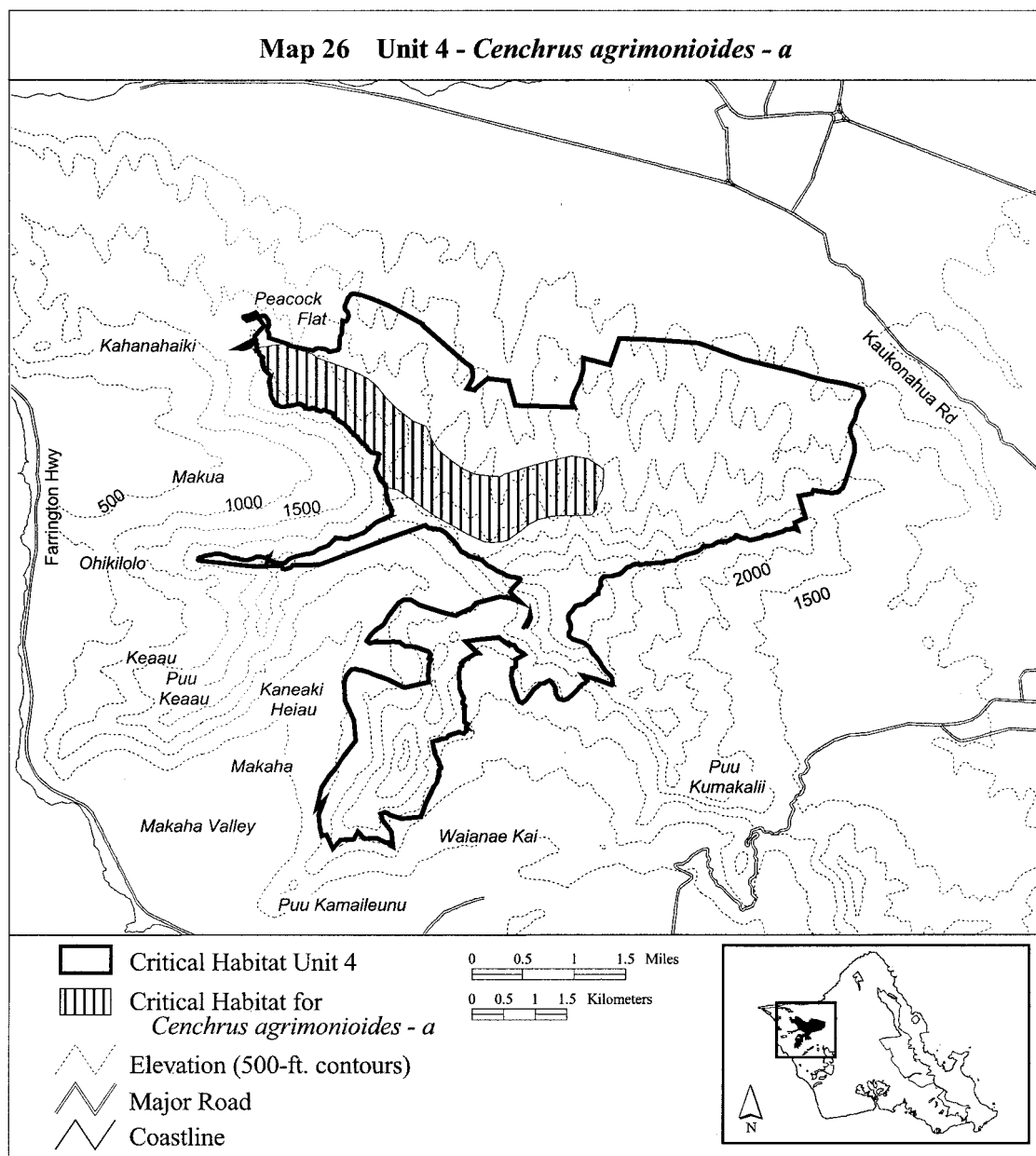
(i) Unit consists of the following 80
boundary points: Start at 584380,

2381495; 584309, 2381544; 584196,
2381530; 584133, 2381606; 584005,
2381571; 583859, 2381553; 583750,
2381576; 583661, 2381729; 583665,
2382023; 583590, 2382108; 583548,
2382313; 583444, 2382478; 583845,
2382532; 583983, 2382483; 584310,
2382381; 584391, 2382319; 584901,
2382133; 585166, 2382001; 585317,
2381881; 585494, 2381655; 585649,
2381496; 585884, 2381318; 586097,

2381239; 586168, 2381079; 586162,
2381175; 586171, 2381058; 586289,
2380863; 586469, 2380706; 586684,
2380553; 586871, 2380472; 587093,
2380442; 587276, 2380438; 587334,
2380476; 587793, 2380622; 588077,
2380690; 588398, 2380767; 588651,
2380725; 588834, 2380606; 588896,
2380541; 588880, 2380231; 588800,
2380078; 588788, 2379921; 588712,
2379826; 588482, 2379822; 588260,
2379822; 588088, 2379810; 587881,
2379753; 587725, 2379680; 587593,
2379577; 587479, 2379489; 587406,
2379428; 587287, 2379401; 587130,
2379389; 587016, 2379397; 586817,

2379489; 586606, 2379600; 586605,
2379606; 586243, 2379810; 585639,
2380229; 585613, 2380224; 585480,
2380264; 585418, 2380357; 585368,
2380447; 585302, 2380567; 585354,
2380735; 585352, 2380808; 585224,
2380843; 585126, 2380959; 585063,
2380995; 585033, 2381030; 585027,
2381040; 585011, 2381059; 585004,
2381064; 584970, 2381105; 584845,
2381251; 584687, 2381354; 584639,
2381441; 584496, 2381498; 584403,
2381483; 584383, 2381494; return to
starting point.

(ii) **Note:** Map 26 follows:



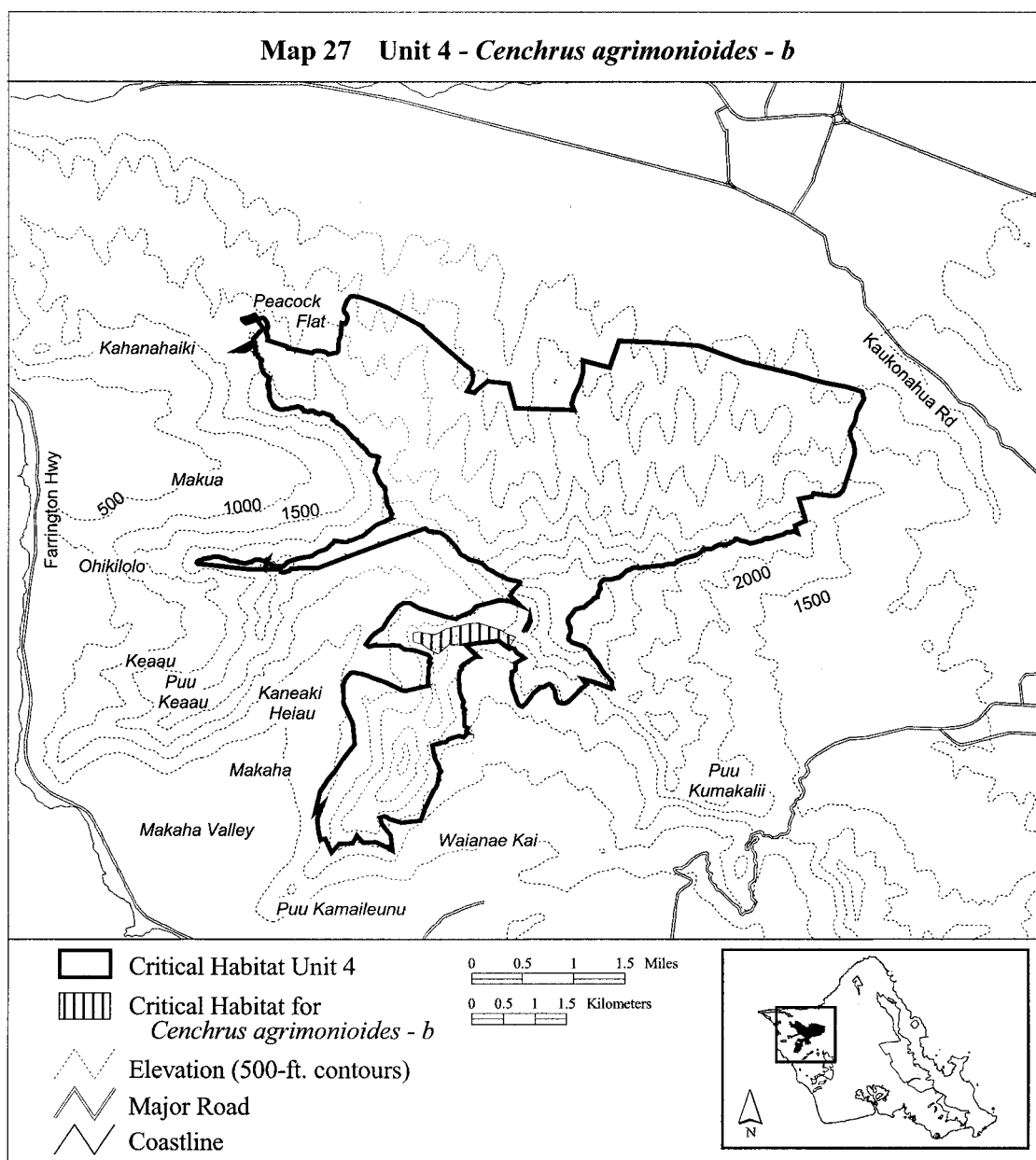
(27) Oahu 4—*Cenchrus agrimonioides*—
b (40 ha; 99 ac)

(i) Unit consists of the following 23
boundary points: Start at 585892,
2378006; 585994, 2378031; 586109,

2378000; 586254, 2377981; 586430,
2378084; 586652, 2378126; 586778,
2378153; 586924, 2378161; 587115,
2378107; 587291, 2378046; 587356,
2378004; 587511, 2377943; 587402,
2377764; 587254, 2377883; 586893,

2377844; 586663, 2377808; 586470,
2377840; 586296, 2377671; 586162,
2377751; 586055, 2377824; 585921,
2377862; 585902, 2377863; 585897,
2377973; return to starting point.

(ii) **Note:** Map 27 follows:



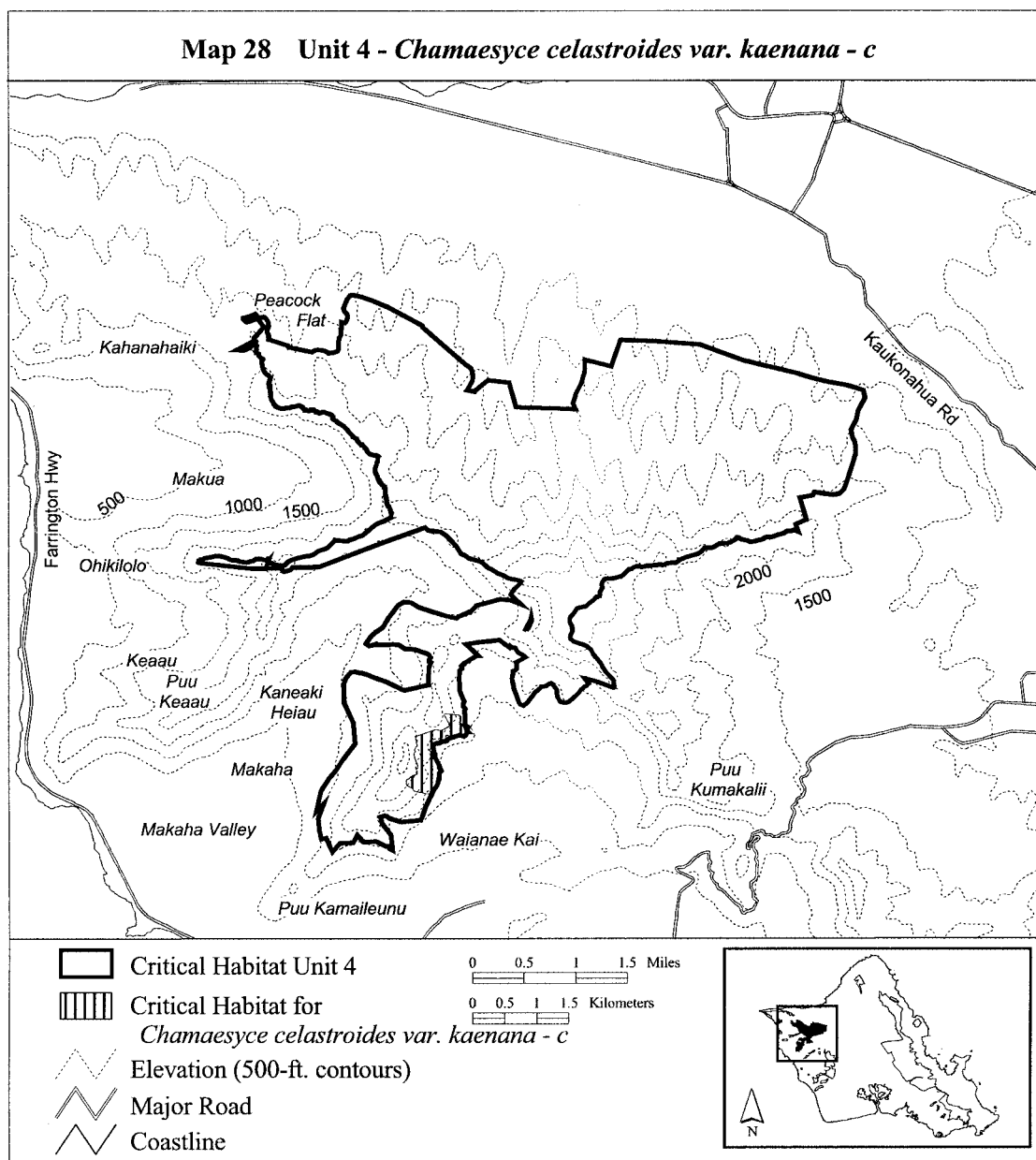
(28) Oahu 4—*Chamaesyce celastroides* var. *kaenana*—c (43 ha; 106 ac)

(i) Unit consists of the following 92 boundary points: Start at 586651, 2376680; 586644, 2376585; 586662, 2376562; 586667, 2376542; 586680, 2376519; 586696, 2376493; 586724, 2376470; 586726, 2376435; 586706, 2376405; 586669, 2376382; 586630, 2376383; 586563, 2376392; 586533, 2376380; 586508, 2376373; 586466, 2376373; 586443, 2376383; 586410, 2376382; 586403, 2376346; 586403, 2376327; 586364, 2376295; 586313, 2376302; 586251, 2376288; 586192, 2376262; 586184, 2376253; 586182, 2376218; 586178, 2376179; 586155,

2376159; 586182, 2376126; 586212, 2376096; 586237, 2376071; 586242, 2376022; 586270, 2375970; 586277, 2375925; 586291, 2375896; 586327, 2375856; 586343, 2375826; 586335, 2375810; 586302, 2375782; 586302, 2375752; 586309, 2375725; 586298, 2375700; 586281, 2375681; 586286, 2375646; 586277, 2375614; 586253, 2375556; 586226, 2375533; 586161, 2375490; 586104, 2375475; 586129, 2375453; 585970, 2375490; 585915, 2375515; 585884, 2375547; 585799, 2375607; 585799, 2375676; 585815, 2375693; 585841, 2375704; 585864, 2375723; 585878, 2375752; 585935, 2375768; 585960, 2375778; 585961, 2375806; 585960, 2375824; 585938,

2375854; 585965, 2375866; 585981, 2375888; 585970, 2375907; 585958, 2375933; 585926, 2376030; 585910, 2376082; 585935, 2376119; 585926, 2376156; 585935, 2376172; 585958, 2376221; 585951, 2376263; 585942, 2376308; 585937, 2376368; 586021, 2376392; 586166, 2376447; 586251, 2376479; 586302, 2376470; 586360, 2376466; 586406, 2376489; 586448, 2376512; 586459, 2376535; 586438, 2376601; 586415, 2376652; 586388, 2376699; 586388, 2376724; 586461, 2376724; 586537, 2376714; 586572, 2376710; 586623, 2376698; return to starting point.

(ii) **Note:** Map 28 follows:



(29) Oahu 4—*Chamaesyce herbstii*—a (429 ha; 159 ac)

(i) Unit consists of the following 138 boundary points: Start at 583503, 2382342; 583526, 2382341; 583439, 2382511; 583414, 2382604; 583400, 2382650; 583402, 2382658; 583548, 2382823; 583450, 2382963; 583283, 2382906; 583228, 2382952; 583228, 2382973; 583336, 2382995; 583416, 2383033; 583475, 2382968; 583545, 2382989; 583567, 2382984; 583615, 2382909; 583626, 2382833; 583610, 2382785; 583594, 2382753; 583626, 2382704; 583626, 2382656; 583615, 2382564; 583734, 2382500; 583798, 2382440; 583863, 2382349; 583992, 2382327; 584046, 2382327; 584191, 2382354; 584397, 2382322; 584709,

2382257; 584779, 2382188; 584865, 2382064; 584903, 2382037; 584913, 2381999; 585043, 2381908; 585134, 2381865; 585177, 2381762; 585290, 2381644; 585425, 2381536; 585618, 2381396; 585710, 2381273; 585710, 2381176; 585753, 2381090; 585791, 2381066; 586087, 2380777; 586572, 2380389; 586597, 2380385; 586588, 2380370; 587339, 2380124; 587577, 2380104; 587951, 2380104; 588137, 2380136; 588137, 2380089; 588137, 2379981; 588137, 2379900; 588148, 2379825; 588148, 2379749; 588136, 2379529; 588072, 2379437; 587948, 2379340; 587899, 2379330; 587792, 2379346; 587652, 2379273; 587015, 2379301; 586634, 2379377; 586153, 2379776; 586086, 2379776; 585962,

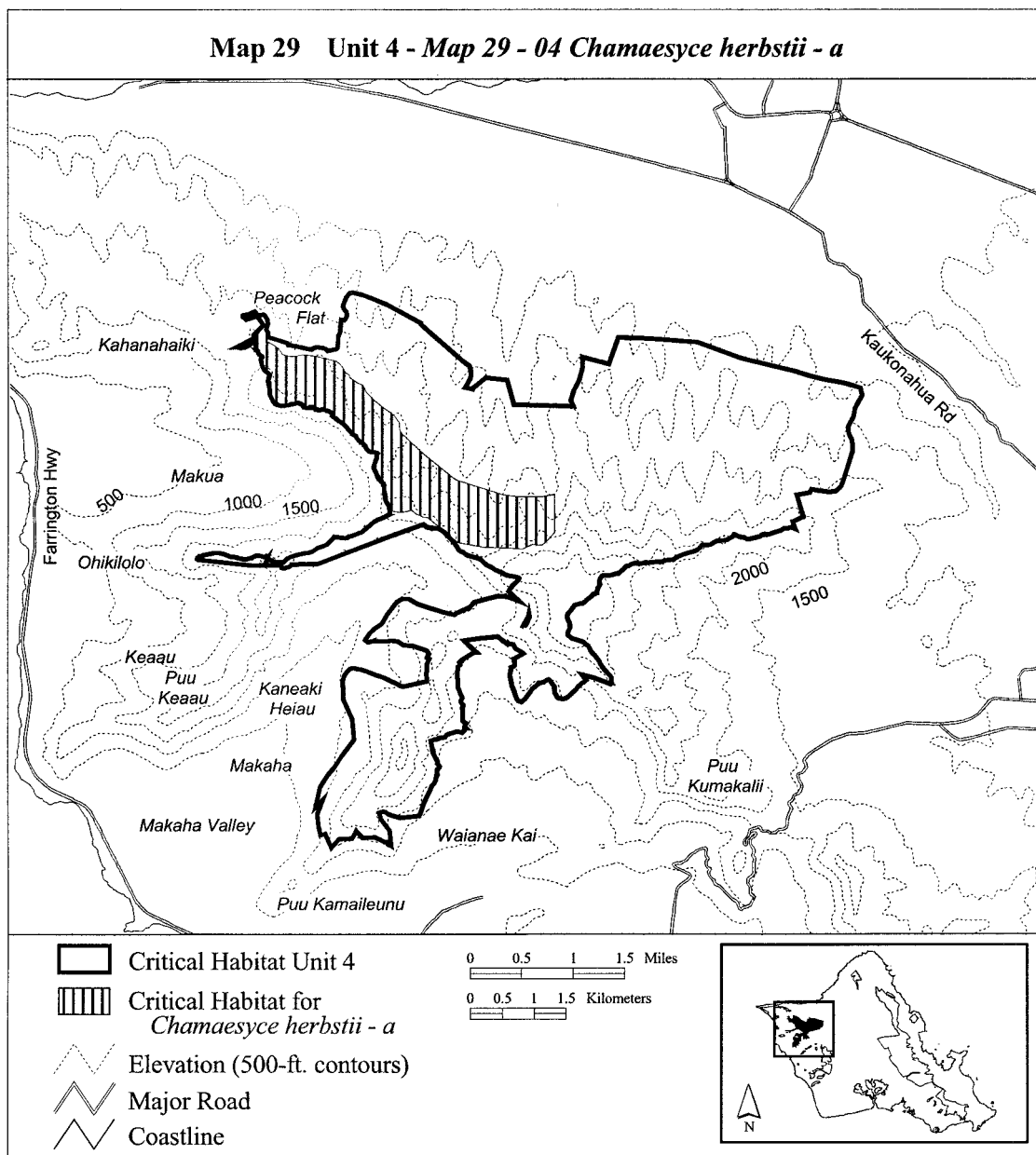
2379836; 585897, 2379895; 585817, 2379862; 585704, 2379852; 585567, 2379876; 585549, 2379925; 585550, 2379928; 585550, 2379929; 585549, 2379929; 585549, 2379930; 585548, 2379930; 585547, 2379930; 585530, 2379977; 585483, 2380072; 585475, 2380117; 585474, 2380125; 585474, 2380128; 585472, 2380137; 585471, 2380141; 585460, 2380200; 585470, 2380286; 585383, 2380376; 585375, 2380388; 585365, 2380405; 585342, 2380472; 585303, 2380562; 585321, 2380656; 585324, 2380666; 585354, 2380756; 585347, 2380782; 585348, 2380789; 585348, 2380790; 585344, 2380798; 585344, 2380799; 585341, 2380800; 585340, 2380806; 585339, 2380804; 585215, 2380832; 585126,

2380952; 584993, 2381079; 584873,
2381226; 584724, 2381332; 584654,
2381380; 584630, 2381442; 584504,
2381496; 584422, 2381483; 584333,
2381519; 584325, 2381523; 584324,
2381523; 584317, 2381526; 584298,

2381533; 584261, 2381516; 584201,
2381520; 584133, 2381595; 584041,
2381579; 583935, 2381560; 583809,
2381569; 583723, 2381622; 583658,
2381762; 583655, 2381883; 583645,
2381972; 583657, 2382042; 583554,

2382141; 583527, 2382291; 583550,
2382324; 583523, 2382333; 583523,
2382334; 583522, 2382334; 583517,
2382336; 583508, 2382339; return to
starting point.

(ii) **Note:** Map 29 follows:



(30) Oahu 4—*Colubrina oppositifolia*—
a (783 ha; 1,935 ac)

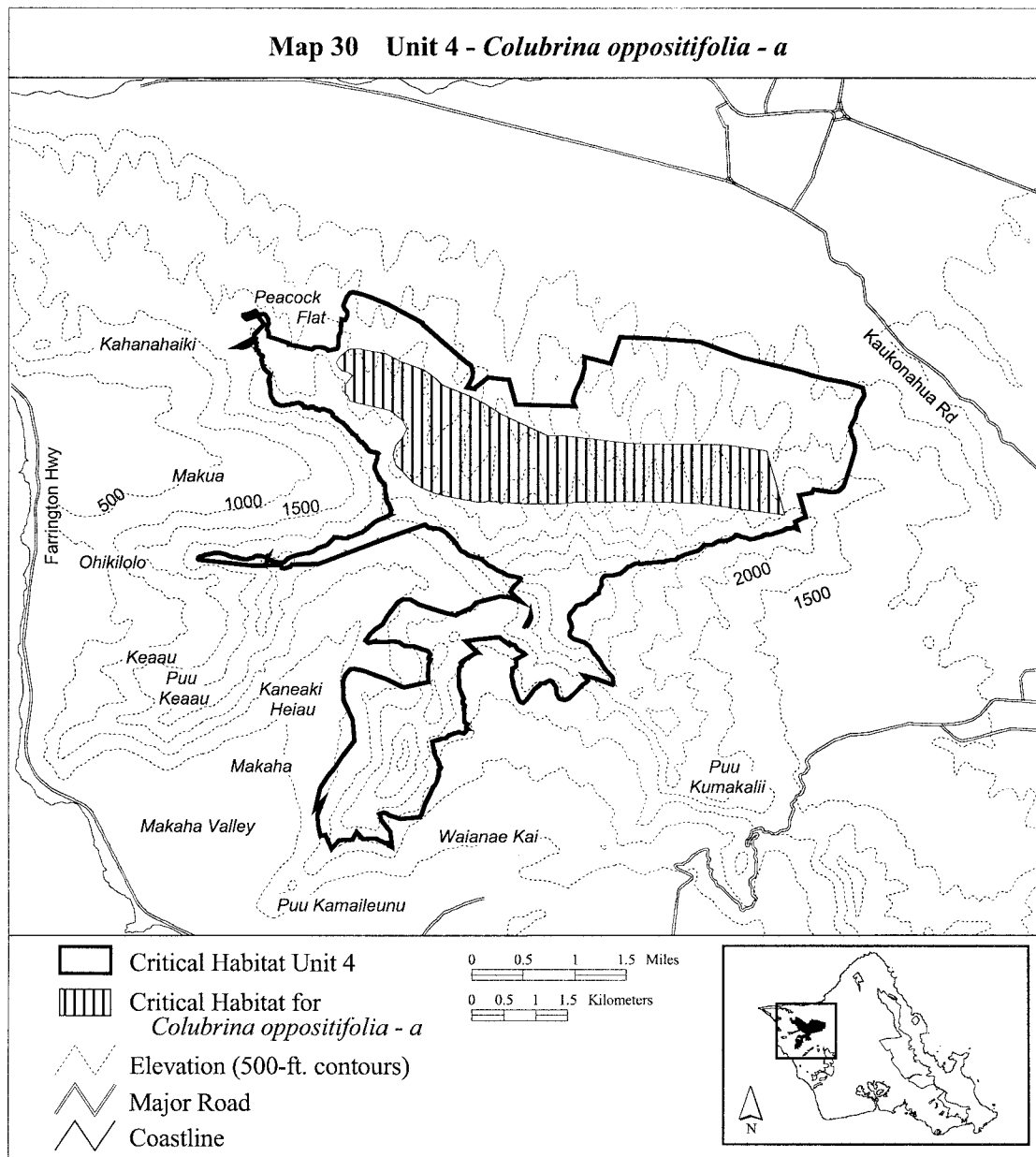
(i) Unit consists of the following 58
boundary points: Start at 588008,
2381069; 588057, 2381074; 588245,
2381074; 588704, 2381020; 589182,
2380963; 589495, 2380938; 590771,
2380923; 591455, 2380827; 591742,
2379816; 590859, 2379924; 590856,
2379925; 590854, 2379936; 590431,
2379992; 589977, 2380011; 589432,

2380031; 588699, 2380021; 588491,
2380021; 588192, 2379992; 587883,
2379987; 587661, 2379987; 587047,
2380034; 587048, 2380026; 586956,
2380011; 586559, 2380084; 586255,
2380156; 586047, 2380238; 585907,
2380320; 585773, 2380460; 585624,
2380620; 585590, 2380760; 585624,
2380909; 585744, 2381049; 585807,
2381170; 585735, 2381320; 585532,
2381474; 585218, 2381547; 584909,

2381619; 584875, 2381701; 584827,
2381745; 584837, 2381860; 584924,
2381976; 584948, 2382020; 584895,
2382063; 584793, 2382092; 584730,
2382140; 584701, 2382227; 584764,
2382329; 584899, 2382435; 585054,
2382445; 585237, 2382411; 585469,
2382367; 585706, 2382247; 586068,
2382107; 586270, 2381962; 586353,
2381875; 586779, 2381699; 587016,

2381581; 587278, 2381406; return to starting point.

(ii) **Note:** Map 30 follows:



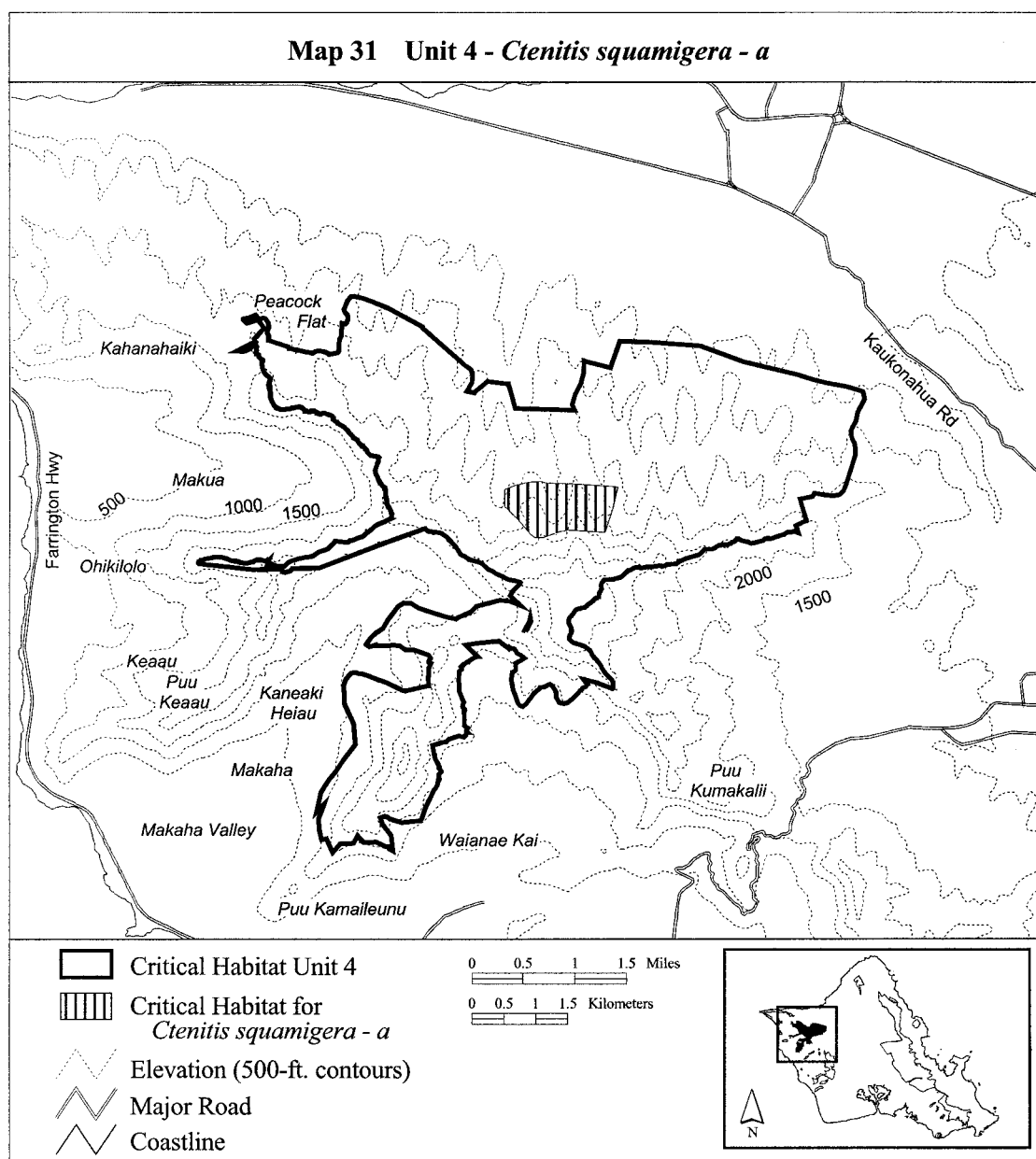
(31) Oahu 4—*Ctenitis squamigera*—a
(120 ha; 298 ac)

(i) Unit consists of the following 22 boundary points: Start at 588909, 2379603; 588766, 2379609; 588486,

2379632; 588342, 2379636; 588233, 2379618; 588055, 2379564; 587942, 2379523; 587815, 2379523; 587752, 2379573; 587549, 2379813; 587345, 2380007; 587345, 2380130; 587341, 2380284; 587504, 2380347; 587726,

2380397; 587907, 2380406; 588016, 2380383; 588396, 2380370; 588613, 2380356; 588885, 2380333; 589113, 2380315; 589032, 2379960; return to starting point.

(ii) **Note:** Map 31 follows:



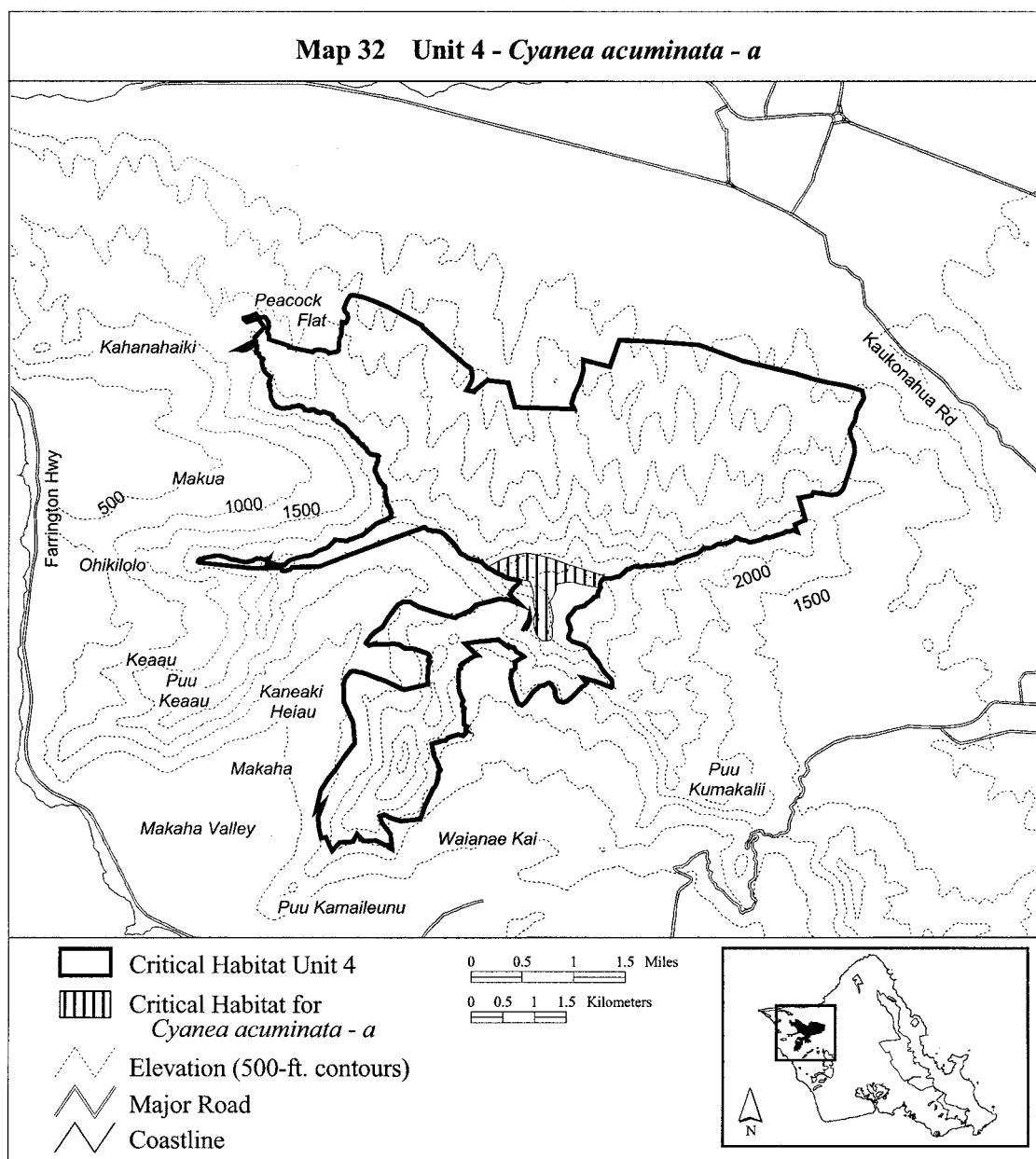
(32) Oahu 4—*Cyanea acuminata*—a (83 ha; 205 ac)

(i) Unit consists of the following 64 boundary points: Start at 588849, 2378698; 588770, 2378723; 588704, 2378726; 588538, 2378764; 588421, 2378792; 588320, 2378789; 588186, 2378769; 588157, 2378735; 588154, 2378666; 588120, 2378592; 588085, 2378517; 588062, 2378488; 588079, 2378402; 588091, 2378339; 588111, 2378245; 588111, 2378176; 588085,

2378090; 588102, 2378038; 588105, 2377972; 588105, 2377921; 588079, 2377875; 588071, 2377872; 588014, 2377866; 587936, 2377866; 587882, 2377912; 587830, 2377995; 587810, 2378079; 587804, 2378147; 587804, 2378216; 587830, 2378316; 587816, 2378388; 587799, 2378500; 587804, 2378594; 587790, 2378695; 587736, 2378798; 587675, 2378815; 587584, 2378835; 587437, 2378844; 587372, 2378861; 587311, 2378898; 587225, 2378941; 587154, 2378981; 587111,

2379036; 587108, 2379047; 587283, 2379145; 587472, 2379222; 587687, 2379257; 587856, 2379228; 588097, 2379168; 588340, 2379070; 588581, 2378999; 588879, 2378910; 588987, 2378856; 588910, 2378852; 588910, 2378851; 588899, 2378848; 588898, 2378848; 588887, 2378841; 588887, 2378840; 588862, 2378802; 588851, 2378772; 588851, 2378763; 588851, 2378746; 588855, 2378710; return to starting point.

(ii) **Note:** Map 32 follows:

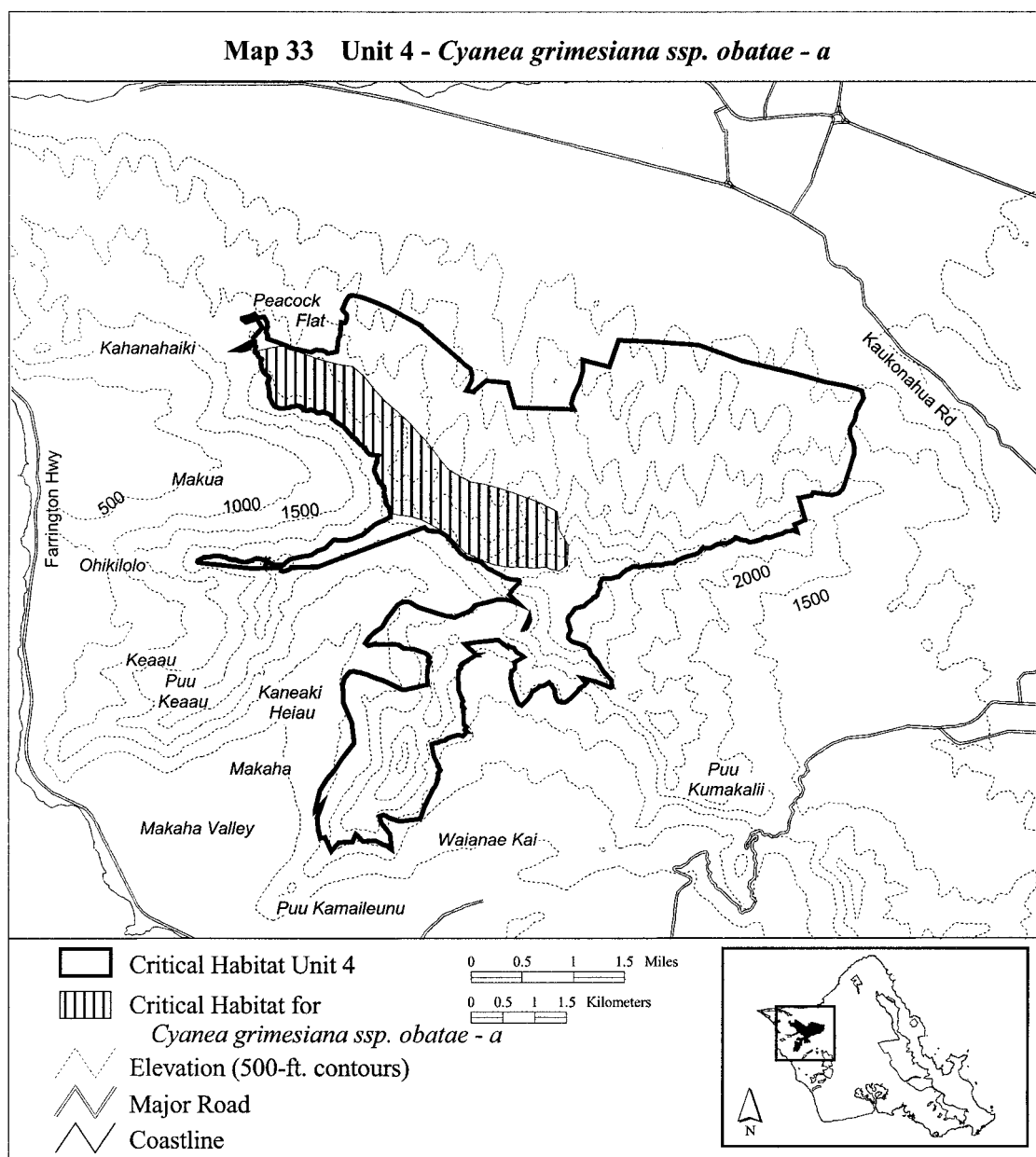


(33) Oahu 4—*Cyanea grimesiana* ssp. *obatae*—a (522 ha; 1,291 ac)

(i) Unit consists of the following 102 boundary points: Start at 584251,

2381509; 584192, 2381525; 584170,	2382326; 584745, 2382247; 584970,	2379924; 585550, 2379928; 585550,
2381549; 584167, 2381553; 584150,	2382204; 585143, 2382054; 585301,	2379929; 585549, 2379929; 585549,
2381572; 584148, 2381573; 584141,	2381856; 585475, 2381651; 585648,	2379930; 585548, 2379930; 585547,
2381581; 584117, 2381595; 583876,	2381505; 585857, 2381316; 586011,	2379930; 585478, 2380107; 585457,
2381561; 583789, 2381568; 583745,	2381138; 586134, 2381024; 586124,	2380302; 585395, 2380362; 585299,
2381584; 583733, 2381605; 583700,	2381013; 586441, 2380602; 586583,	2380563; 585336, 2380704; 585338,
2381659; 583663, 2381752; 583647,	2380511; 586836, 2380381; 587002,	2380712; 585339, 2380712; 585340,
2381925; 583667, 2382028; 583560,	2380353; 587250, 2380290; 587554,	2380721; 585345, 2380739; 585346,
2382137; 583530, 2382267; 583557,	2380188; 587893, 2380065; 588177,	2380751; 585346, 2380754; 585346,
2382327; 583487, 2382367; 583487,	2379919; 588201, 2379631; 588350,	2380756; 585350, 2380801; 585223,
2382400; 583454, 2382430; 583451,	2379387; 588346, 2379296; 588338,	2380827; 585174, 2380878; 585167,
2382446; 583505, 2382460; 583690,	2379063; 588204, 2378976; 588097,	2380888; 585157, 2380904; 585146,
2382504; 583864, 2382531; 584038,	2378996; 587975, 2379035; 587841,	2380918; 585118, 2380959; 585065,
2382468; 584255, 2382393; 584421,	2379020; 587604, 2379035; 587411,	2380985; 585023, 2381051; 584965,
	2379035; 587218, 2379059; 587008,	2381104; 584807, 2381274; 584709,
	2379134; 586724, 2379276; 586535,	2381333; 584646, 2381382; 584631,
	2379469; 586365, 2379608; 586073,	2381444; 584500, 2381495; 584452,
	2379769; 585884, 2379832; 585659,	2381482; 584301, 2381534; return to
	2379860; 585562, 2379890; 585549,	starting point.

(ii) Note: Map 33 follows:



(34) Oahu 4—*Cyanea longiflora*—a
(362 ha; 896 ac)

(i) Unit consists of the following 163 boundary points: Start at 589322, 2379008; 589227, 2379030; 589144, 2378934; 588984, 2378856; 588910, 2378852; 588910, 2378851; 588899, 2378848; 588898, 2378848; 588887, 2378841; 588887, 2378840; 588866, 2378808; 588853, 2378830; 588638, 2378825; 588557, 2378780; 588549, 2378779; 588522, 2378764; 588468, 2378783; 588294, 2378820; 588097, 2378901; 588099, 2378909; 588092, 2378911; 588079, 2378910; 587994, 2378891; 587795, 2378868; 587551,

2378882; 587485, 2378896; 587399, 2378901; 587322, 2378929; 587266, 2378941; 587232, 2378962; 587081, 2379017; 586980, 2379113; 586772, 2379174; 586781, 2379184; 586778, 2379185; 586637, 2379321; 586447, 2379529; 586294, 2379624; 586135, 2379719; 585918, 2379796; 585737, 2379832; 585556, 2379836; 585574, 2379901; 585531, 2379987; 585481, 2380116; 585466, 2380282; 585337, 2380490; 585308, 2380573; 585327, 2380678; 585338, 2380712; 585339, 2380712; 585344, 2380738; 585346, 2380754; 585345, 2380767; 585345, 2380777; 585347, 2380785; 585348,

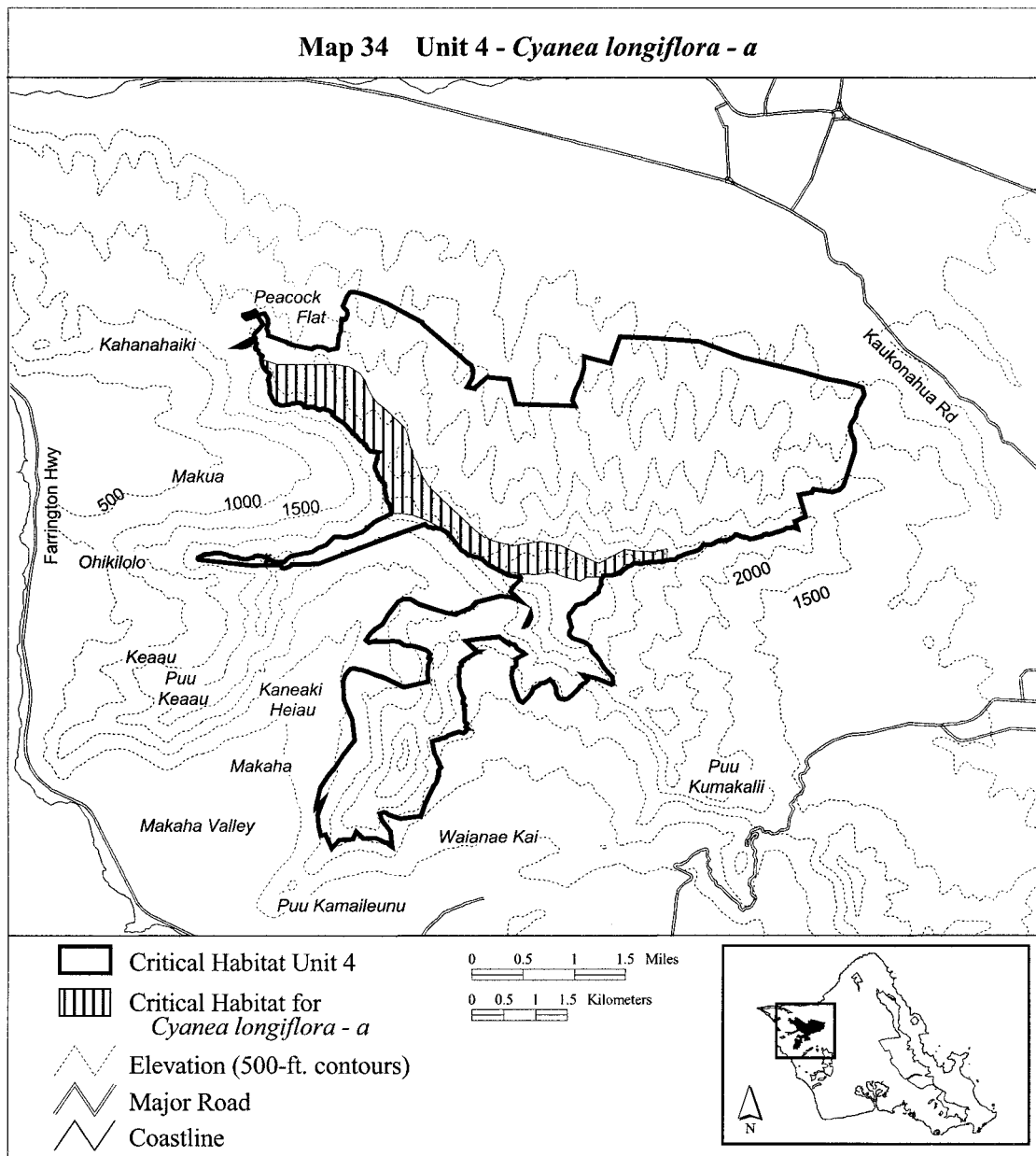
2380789; 585348, 2380790; 585352, 2380813; 585215, 2380831; 585132, 2380968; 585086, 2380996; 585028, 2381065; 584964, 2381101; 584881, 2381216; 584729, 2381329; 584626, 2381453; 584497, 2381510; 584462, 2381482; 584344, 2381514; 584325, 2381523; 584324, 2381523; 584310, 2381528; 584309, 2381528; 584295, 2381527; 584259, 2381537; 584134, 2381603; 584046, 2381591; 583951, 2381568; 583888, 2381564; 583811, 2381577; 583728, 2381611; 583670, 2381715; 583652, 2381855; 583660, 2382042; 583584, 2382099; 583545, 2382178; 583530, 2382274; 583616,

2382242; 583770, 2382188; 583933,
2382192; 584155, 2382192; 584490,
2382188; 584676, 2382188; 584911,
2382156; 585065, 2382052; 585141,
2381944; 585178, 2381835; 585254,
2381699; 585340, 2381577; 585435,
2381519; 585630, 2381329; 585770,
2381193; 585806, 2381121; 585833,
2381017; 585847, 2380890; 585888,
2380845; 585910, 2380736; 585955,
2380664; 586023, 2380469; 586133,
2380279; 586136, 2380279; 586407,
2380013; 586900, 2379542; 587025,

2379450; 587040, 2379467; 587126,
2379412; 587224, 2379382; 587447,
2379321; 587646, 2379357; 587816,
2379378; 587895, 2379391; 588218,
2379331; 588742, 2379076; 588826,
2379041; 589211, 2379253; 589214,
2379255; 589215, 2379255; 589224,
2379260; 589280, 2379255; 589300,
2379255; 589347, 2379249; 589636,
2379223; 589701, 2379230; 589887,
2379275; 589886, 2379260; 589892,
2379260; 589892, 2379189; 589892,
2379098; 589882, 2379095; 589882,

2379089; 589881, 2379089; 589839,
2379075; 589839, 2379074; 589806,
2379068; 589790, 2379069; 589787,
2379069; 589747, 2379069; 589705,
2379066; 589675, 2379063; 589616,
2379059; 589604, 2379058; 589557,
2379052; 589519, 2379042; 589496,
2379035; 589462, 2379034; 589441,
2379042; 589424, 2379047; 589391,
2379048; 589370, 2379041; 589369,
2379041; 589348, 2379025; 589324,
2379009; return to starting point.

(ii) **Note:** Map 34 follows:



(35) Oahu 4—*Cyanea longiflora*—b (61 ha; 150 ac)

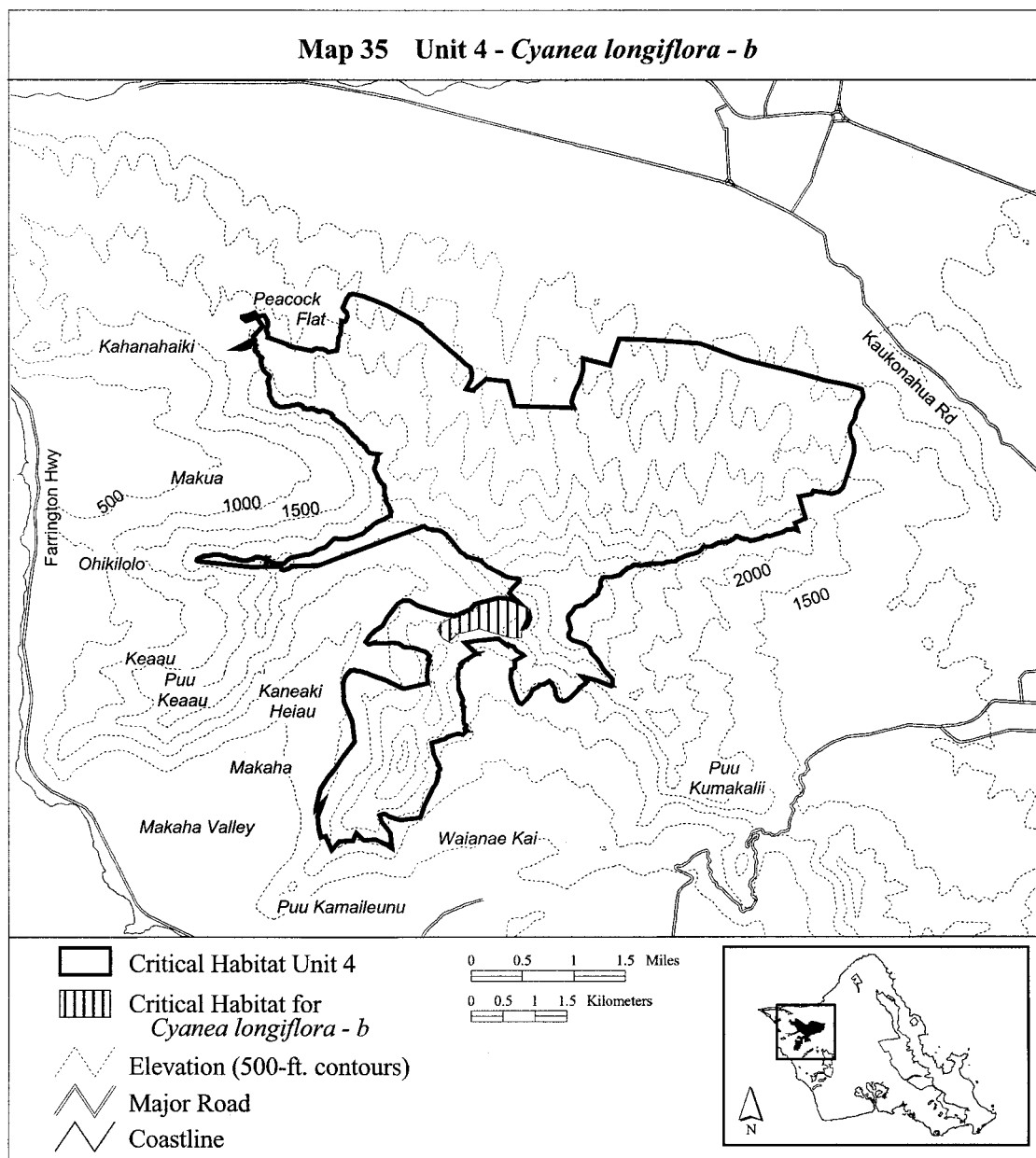
(i) Unit consists of the following 24 boundary points: Start at 586477,

2377825; 586452, 2377842; 586384,
2377878; 586334, 2377946; 586298,
2378018; 586330, 2378113; 586610,
2378253; 586813, 2378347; 586800,

2378330; 586827, 2378353; 586882,
2378430; 587085, 2378484; 587257,
2378529; 587429, 2378511; 587659,
2378421; 587718, 2378371; 587759,

2378299; 587727, 2378199; 587655,
2378068; 587610, 2377973; 587610,
2377887; 587449, 2377887; 586953,

2378038; 586608, 2377955; return to
starting point.
(ii) **Note:** Map 35 follows:



(36) Oahu 4—*Cyanea superba*—a (302 ha; 747 ac)

(i) Unit consists of the following 142 boundary points: Start at 583837, 2381543; 583777, 2381576; 583739, 2381579; 583731, 2381587; 583731, 2381589; 583658, 2381724; 583662, 2381803; 583646, 2381892; 583638, 2381956; 583650, 2381985; 583658, 2382035; 583567, 2382120; 583523, 2382284; 583540, 2382309; 583544, 2382321; 583480, 2382363; 583480, 2382413; 583434, 2382429; 583434, 2382473; 583434, 2382474; 583642,

2382522; 583867, 2382536; 584015, 2382467; 584112, 2382425; 584164, 2382418; 584268, 2382405; 584352, 2382460; 584393, 2382474; 584490, 2382463; 584552, 2382432; 584617, 2382373; 584631, 2382363; 584687, 2382353; 584718, 2382349; 584745, 2382297; 584766, 2382246; 584814, 2382239; 584832, 2382225; 584870, 2382177; 584880, 2382142; 584922, 2382156; 584977, 2382111; 585017, 2382080; 585022, 2382069; 585179, 2382021; 585084, 2381969; 585111, 2381938; 585129, 2381938; 585167,

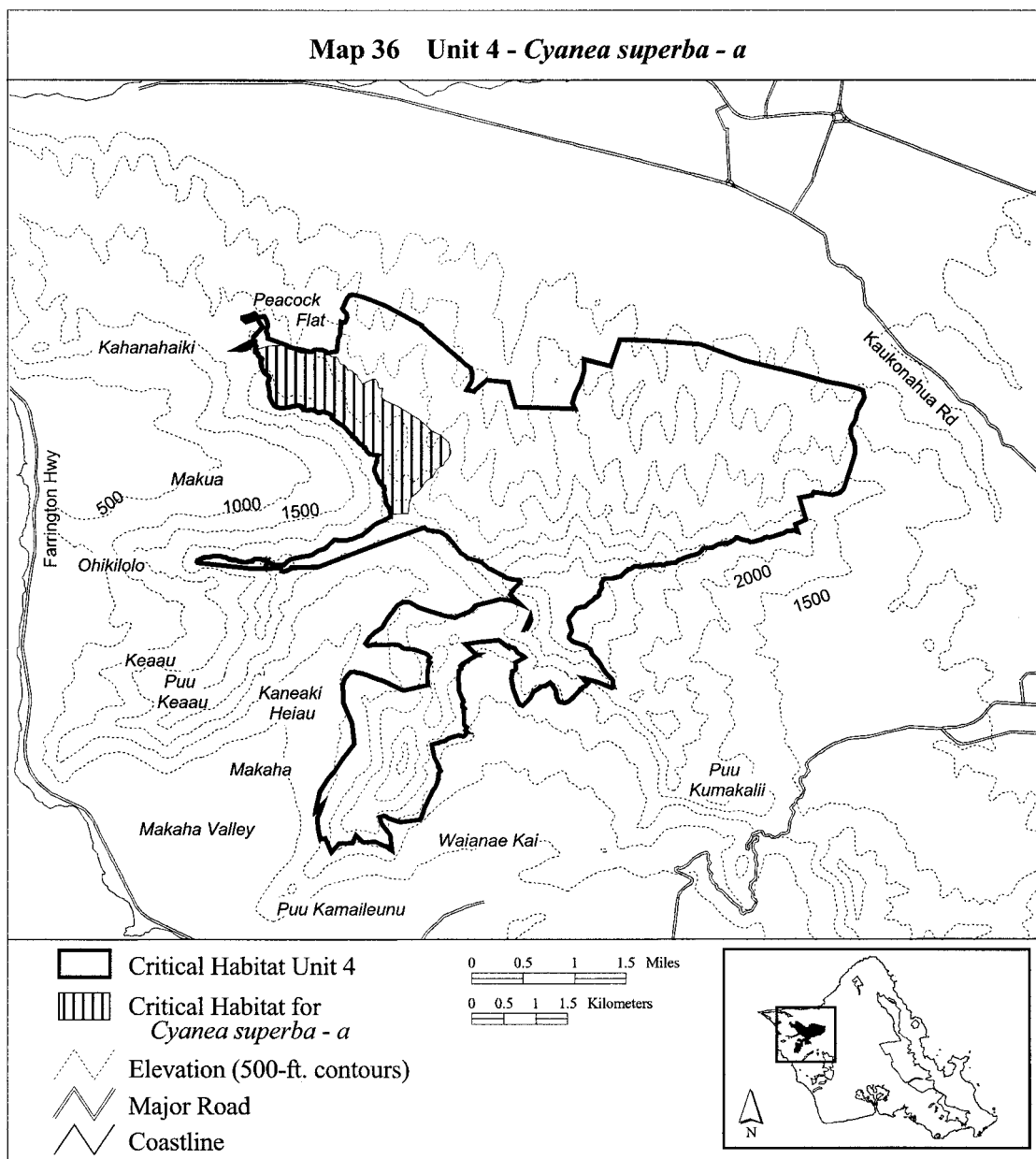
2381952; 585212, 2381969; 585281, 2382017; 585326, 2382011; 585353, 2381955; 585357, 2381883; 585391, 2381855; 585433, 2381862; 585412, 2381779; 585409, 2381727; 585436, 2381703; 585464, 2381683; 585462, 2381673; 585661, 2381576; 585844, 2381475; 585999, 2381368; 586120, 2381258; 586210, 2381178; 586338, 2381120; 586462, 2381009; 586497, 2380847; 586486, 2380809; 586462, 2380757; 586393, 2380691; 586386, 2380643; 586310, 2380595; 586248, 2380522; 586213, 2381753; 586127,

2381705; 586086, 2380367; 586051,
2380294; 585971, 2380217; 585926,
2380170; 585870, 2380121; 585843,
2380028; 585836, 2379883; 585791,
2379883; 585587, 2379869; 585538,
2379948; 585531, 2379962; 585531,
2379963; 585523, 2379982; 585522,
2379982; 585518, 2379989; 585515,
2379997; 585500, 2380019; 585475,
2380122; 585474, 2380125; 585474,
2380128; 585472, 2380135; 585461,
2380273; 585440, 2380319; 585405,

2380348; 585366, 2381717; 585320,
2380510; 585299, 2380563; 585334,
2380698; 585338, 2380712; 585339,
2380712; 585342, 2380729; 585347,
2380750; 585347, 2380785; 585348,
2380789; 585348, 2380790; 585347,
2380792; 585347, 2380802; 585212,
2380834; 585116, 2380960; 585069,
2380992; 585025, 2381174; 584900,
2381178; 584809, 2381270; 584709,
2381331; 584646, 2381394; 584629,
2381439; 584609, 2381458; 584546,

2381479; 584484, 2381495; 584447,
2381479; 584418, 2381479; 584387,
2381500; 584349, 2381516; 584326,
2381533; 584295, 2381535; 584250,
2381516; 584202, 2381527; 584180,
2381542; 584177, 2381551; 584140,
2381589; 584073, 2381589; 583961,
2381562; 583916, 2381554; 583853,
2381551; 583839, 2381543; return to
starting point.

(ii) Note: Map 36 follows:



(37) Oahu 4—*Cyanea superba*—b (116 ha; 286 ac)

(i) Unit consists of the following 36 boundary points: Start at 587772, 2380274; 588060, 2379997; 588137,

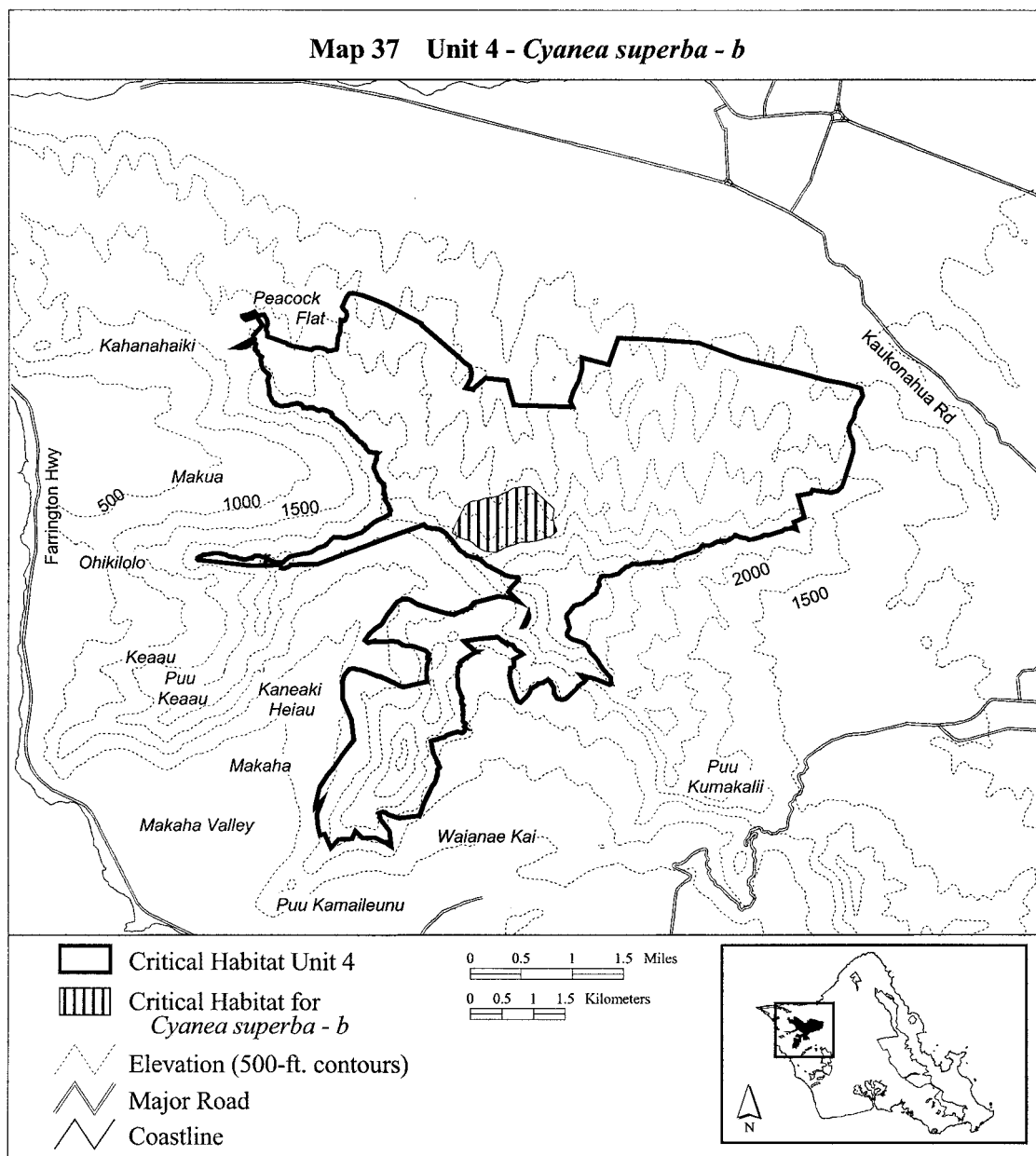
2379927; 588144, 2379905; 588122, 2379765; 588141, 2379680; 588174, 2379610; 588189, 2379551; 588092, 2379477; 587911, 2379415; 587741, 2379393; 587627, 2379389; 587505,

2379341; 587424, 2379315; 587369, 2379297; 587232, 2379216; 587041, 2379249; 586926, 2379308; 586871, 2379370; 586797, 2379411; 586639, 2379459; 586532, 2379536; 586565,

2379636; 586639, 2379776; 586709,
2379898; 586731, 2379961; 586824,
2380031; 586879, 2380049; 586942,

2380049; 587082, 2380086; 587186,
2380101; 587285, 2380123; 587326,
2380156; 587411, 2380193; 587503,

2380244; 587639, 2380267; return to
starting point.
(ii) **Note:** Map 37 follows:

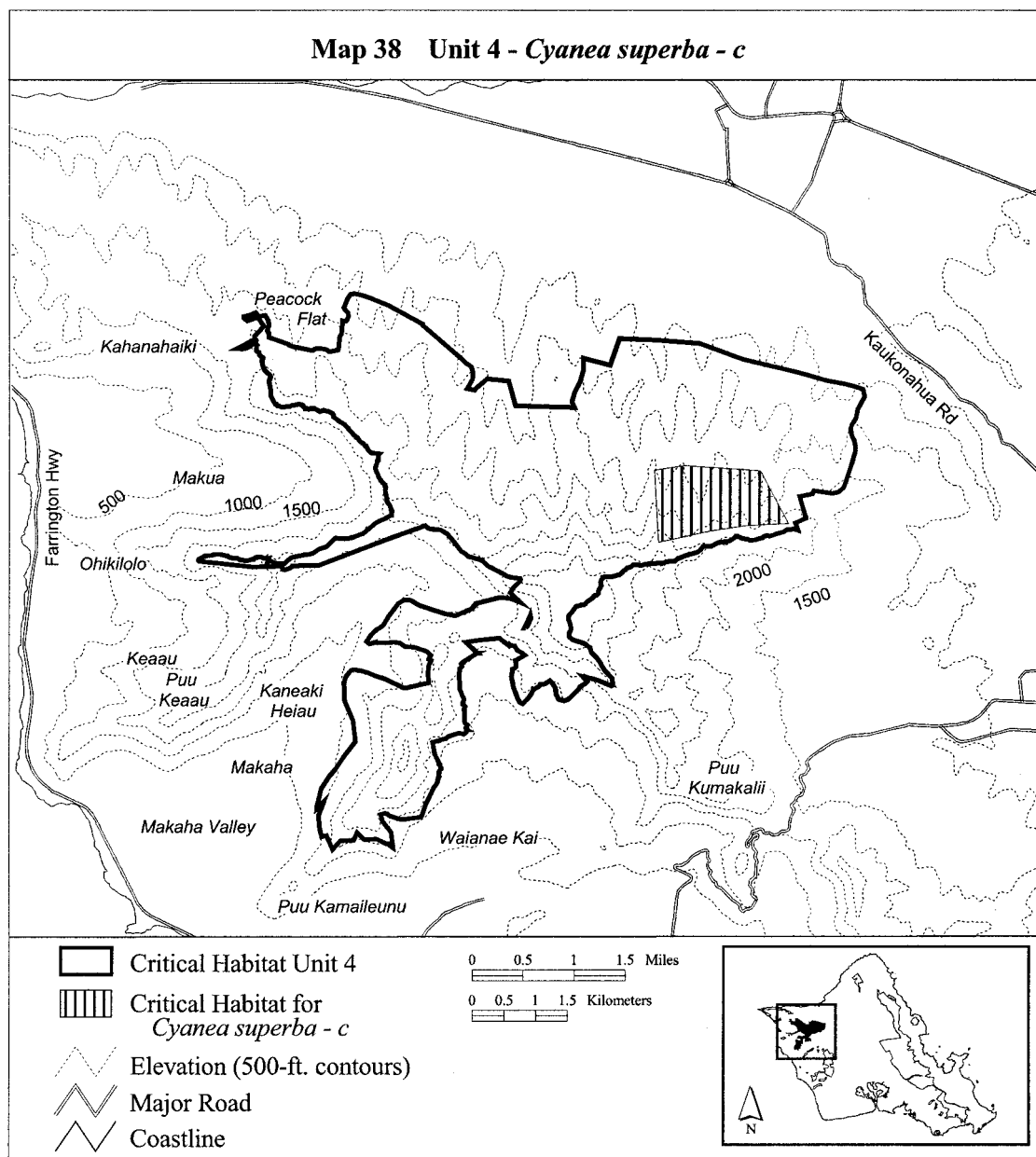


(38) Oahu 4—*Cyanea superba*—c (184 ha; 455 ac)

(i) Unit consists of the following 7 boundary points: Start at 589757,

2379400; 589699, 2380542; 590166,
2380613; 591361, 2380532; 591790,
2379700; 591135, 2379667; 590578,
2379579; return to starting point.

(ii) **Note:** Map 38 follows:



(39) Oahu 4—*Cyrtandra dentata*—a (306 ha; 757 ac)

(i) Unit consists of the following 208 boundary points: Start at 584020,

2381575; 583738, 2381581; 583730, 2381588; 583709, 2381612; 583707, 2381614; 583694, 2381639; 583685, 2381655; 583672, 2381685; 583659, 2381711; 583652, 2381731; 583651, 2381742; 583651, 2381757; 583651, 2381773; 583651, 2381774; 583651, 2381789; 583651, 2381805; 583651, 2381806; 583649, 2381820; 583644, 2381847; 583642, 2381874; 583639, 2381896; 583638, 2381897; 583634, 2381907; 583631, 2381919; 583629, 2381934; 583630, 2381951; 583633, 2381969; 583638, 2381979; 583645,

2381993; 583645, 2381994; 583649, 2382013; 583649, 2382018; 583648, 2382029; 583647, 2382030; 583641, 2382045; 583640, 2382045; 583626, 2382059; 583625, 2382059; 583610, 2382073; 583590, 2382091; 583570, 2382107; 583561, 2382120; 583552, 2382135; 583546, 2382153; 583536, 2382180; 583529, 2382214; 583523, 2382238; 583523, 2382239; 583518, 2382254; 583517, 2382264; 583517, 2382276; 583518, 2382287; 583521, 2382299; 583528, 2382305; 583535, 2382312; 583535, 2382313; 583535, 2382319; 583531, 2382326; 583523, 2382334; 583522, 2382334; 583511, 2382337; 583498, 2382345; 583497, 2382345; 583486, 2382351; 583477, 2382362; 583474, 2382370; 583475,

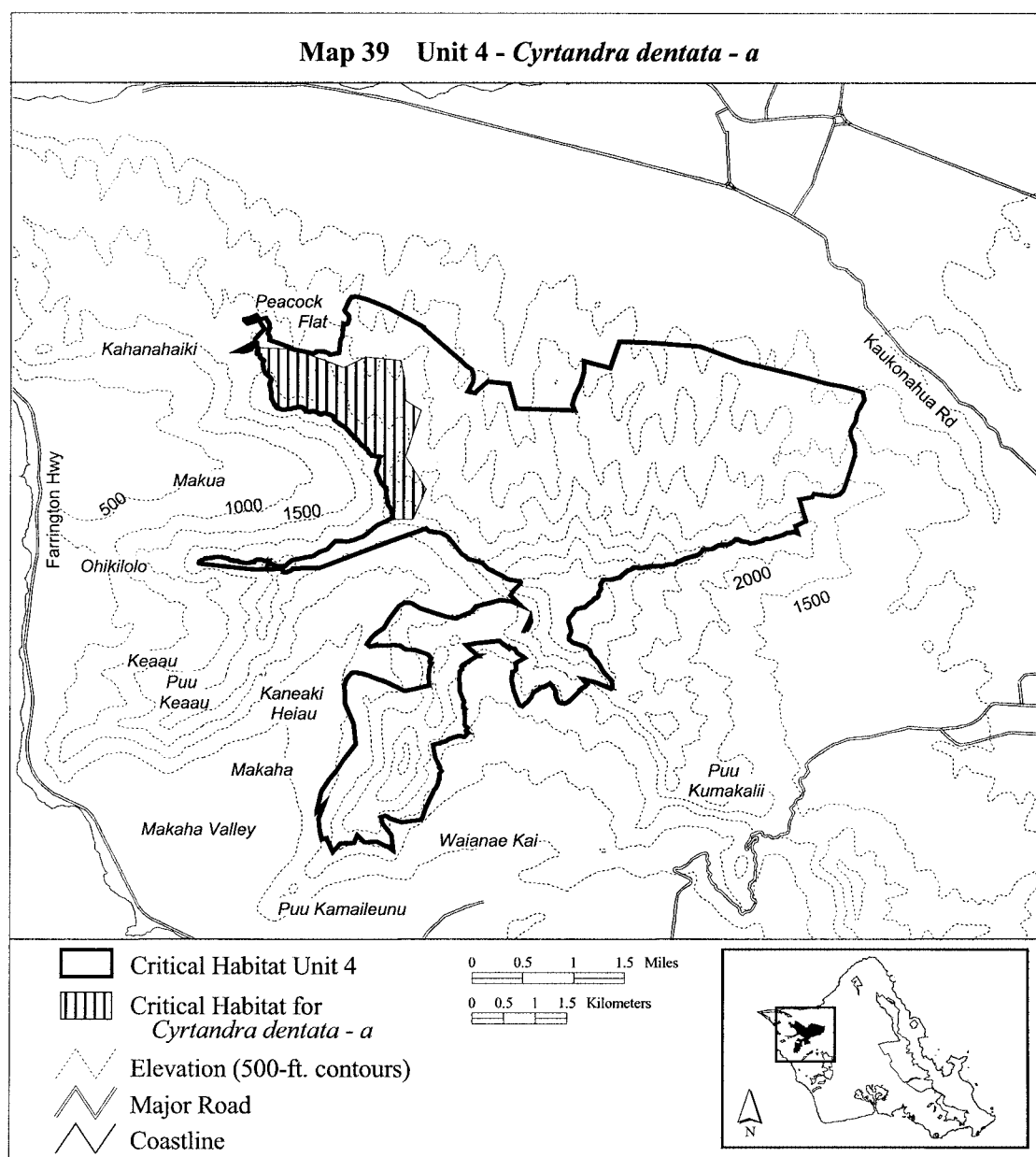
2382383; 583475, 2382397; 583474, 2382404; 583474, 2382405; 583469, 2382411; 583468, 2382411; 583457, 2382416; 583443, 2382421; 583435, 2382424; 583430, 2382430; 583429, 2382440; 583431, 2382460; 583433, 2382477; 583433, 2382478; 583431, 2382497; 583428, 2382521; 583969, 2382511; 584493, 2382321; 584788, 2382210; 585130, 2382381; 585675, 2382326; 585742, 2382055; 585760, 2381692; 586008, 2381531; 585763, 2380810; 586087, 2380293; 585882, 2379812; 585591, 2379807; 585555, 2379900; 585548, 2379922; 585550, 2379928; 585550, 2379929; 585549, 2379929; 585549, 2379930; 585548, 2379930; 585547, 2379930; 585546, 2379929; 585545, 2379931; 585539,

2379943; 585531, 2379963; 585523,
2379982; 585476, 2380102; 585476,
2380103; 585474, 2380125; 585474,
2380128; 585472, 2380137; 585468,
2380149; 585465, 2380160; 585461,
2380173; 585457, 2380185; 585456,
2380203; 585456, 2380223; 585459,
2380252; 585459, 2380269; 585456,
2380281; 585451, 2380295; 585443,
2380310; 585430, 2380325; 585430,
2380326; 585408, 2380344; 585393,
2380361; 585375, 2380388; 585364,
2380407; 585353, 2380428; 585342,
2380452; 585330, 2380478; 585322,
2380497; 585318, 2380512; 585308,
2380533; 585299, 2380553; 585297,
2380570; 585300, 2380580; 585303,
2380592; 585309, 2380613; 585315,

2380636; 585320, 2380654; 585379,
2380773; 585345, 2380796; 585344,
2380798; 585344, 2380799; 585338,
2380802; 585335, 2380803; 585130,
2380939; 585119, 2380952; 585119,
2380953; 585107, 2380962; 585106,
2380963; 585097, 2380967; 585034,
2381029; 585027, 2381040; 585011,
2381059; 584993, 2381074; 584993,
2381075; 584973, 2381090; 584971,
2381091; 584909, 2381153; 584905,
2381157; 584891, 2381175; 584867,
2381205; 584852, 2381221; 584844,
2381230; 584813, 2381261; 584796,
2381273; 584778, 2381284; 584774,
2381287; 584771, 2381289; 584718,
2381341; 584638, 2381397; 584636,
2381408; 584633, 2381420; 584628,

2381430; 584618, 2381442; 584617,
2381442; 584601, 2381452; 584581,
2381462; 584562, 2381467; 584539,
2381475; 584519, 2381483; 584494,
2381489; 584478, 2381486; 584461,
2381479; 584387, 2381491; 584383,
2381494; 584357, 2381507; 584350,
2381511; 584325, 2381523; 584324,
2381523; 584310, 2381528; 584309,
2381528; 584291, 2381527; 584290,
2381527; 584281, 2381521; 584275,
2381516; 584266, 2381511; 584260,
2381512; 584167, 2381553; 584150,
2381572; 584130, 2381584; 584129,
2381584; 584104, 2381586; 584065,
2381583; 584021, 2381575; return to
starting point.

(ii) **Note:** Map 39 follows:



(40) Oahu 4—*Delissea subcordata*—a
(763 ha; 1,887 ac)

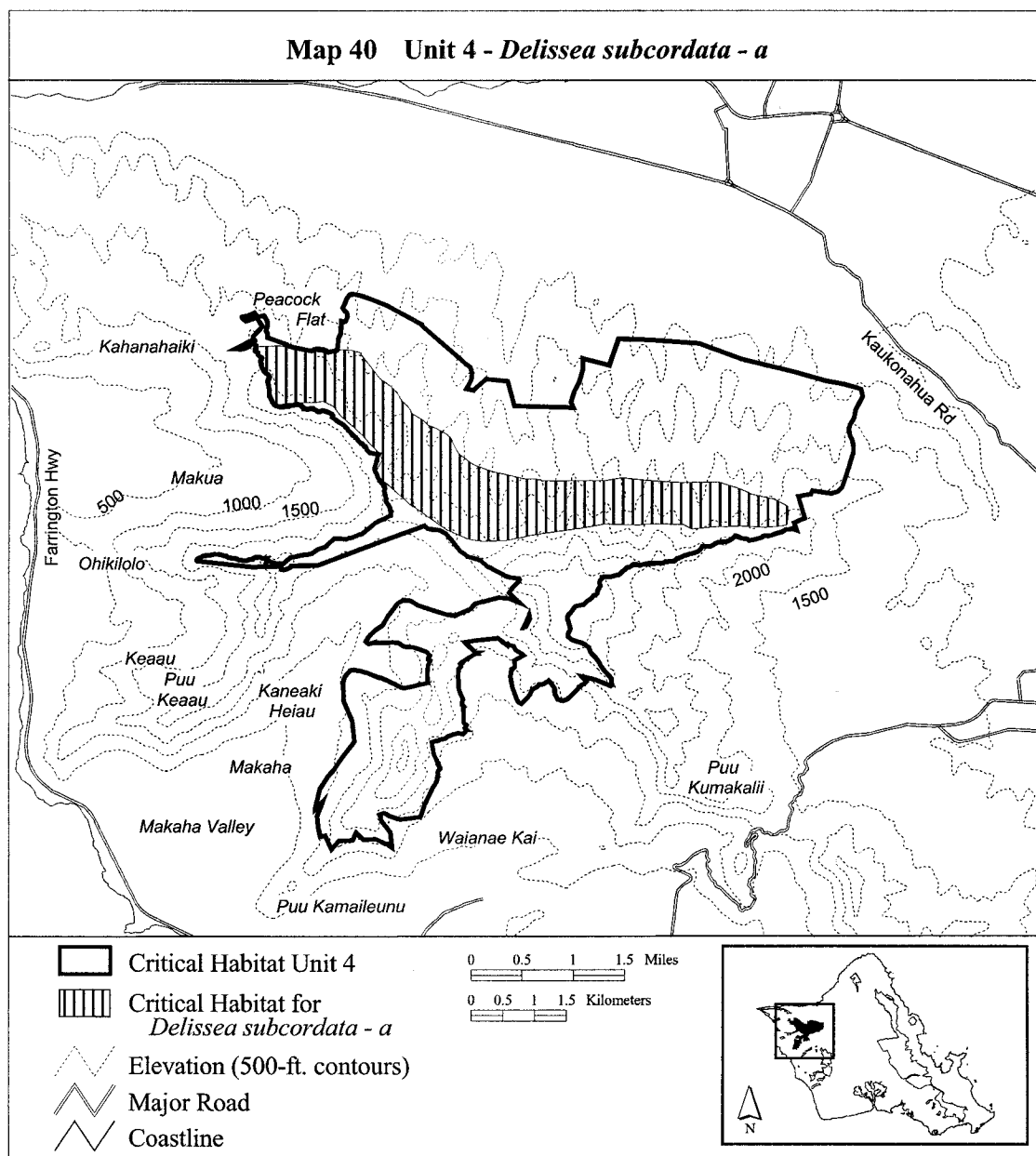
(i) Unit consists of the following 169
boundary points: Start at 585089,

2382409; 585090, 2382377; 585381,
2382000; 585498, 2381921; 585544,
2381879; 585651, 2381776; 585704,
2381680; 585829, 2381548; 585893,
2381445; 586067, 2381331; 586131,
2381264; 586262, 2381214; 586430,
2381114; 586518, 2381036; 586524,
2380998; 586623, 2380811; 586860,
2380636; 587154, 2380527; 587552,
2380437; 587670, 2380401; 587841,
2380404; 587950, 2380380; 588168,
2380376; 588504, 2380385; 588518,
2380385; 588684, 2380385; 588935,
2380385; 589191, 2380423; 589521,
2380390; 589966, 2380357; 590137,
2380342; 590715, 2380357; 591046,
2380243; 591241, 2380167; 591582,
2380082; 591804, 2379973; 591809,
2379855; 591780, 2379675; 591681,
2379656; 591430, 2379637; 591056,
2379651; 590810, 2379646; 590667,
2379646; 590298, 2379608; 590156,
2379679; 589701, 2379694; 589578,
2379689; 589464, 2379675; 589147,
2379679; 588923, 2379692; 588518,
2379622; 588234, 2379585; 587925,

2379537; 587868, 2379523; 587792,
2379518; 587636, 2379480; 587352,
2379424; 586987, 2379414; 586774,
2379452; 586442, 2379599; 586149,
2379798; 585912, 2379968; 585913,
2379978; 585907, 2379963; 585505,
2380319; 585513, 2380319; 585405,
2380393; 585348, 2380460; 585330,
2380538; 585415, 2380698; 585406,
2380748; 585359, 2380830; 585224,
2380972; 585100, 2381114; 585100,
2381117; 584986, 2381217; 584775,
2381402; 584654, 2381559; 584498,
2381633; 584352, 2381619; 584217,
2381619; 583982, 2381609; 583901,
2381598; 583773, 2381573; 583732,
2381587; 583730, 2381588; 583709,
2381612; 583707, 2381614; 583694,
2381639; 583685, 2381655; 583672,
2381685; 583659, 2381711; 583652,
2381731; 583651, 2381742; 583651,
2381757; 583651, 2381773; 583651,
2381789; 583651, 2381805; 583651,
2381806; 583649, 2381820; 583644,
2381847; 583642, 2381874; 583639,
2381896; 583638, 2381897; 583634,
2381907; 583631, 2381919; 583629,
2381934; 583630, 2381951; 583633,
2381969; 583638, 2381979; 583645,
2381993; 583645, 2381994; 583649,

2382013; 583649, 2382018; 583648,
2382029; 583647, 2382030; 583641,
2382175; 583640, 2382175; 583626,
2382059; 583610, 2382073; 583590,
2382091; 583570, 2382107; 583561,
2382120; 583552, 2382135; 583546,
2382153; 583536, 2382180; 583529,
2382214; 583523, 2382238; 583518,
2382254; 583517, 2382264; 583517,
2382276; 583518, 2382287; 583521,
2382299; 583528, 2382305; 583535,
2382312; 583535, 2382313; 583535,
2382319; 583531, 2382326; 583523,
2382334; 583522, 2382334; 583511,
2382337; 583498, 2382345; 583497,
2382345; 583486, 2382351; 583477,
2382362; 583474, 2382370; 583475,
2382383; 583475, 2382397; 583474,
2382404; 583474, 2382405; 583469,
2382411; 583468, 2382411; 583457,
2382416; 583443, 2382421; 583435,
2382424; 583430, 2382430; 583429,
2382440; 583431, 2382460; 583433,
2382477; 583433, 2382478; 583432,
2382490; 583506, 2382508; 583805,
2382519; 584043, 2382487; 584403,
2382423; 584513, 2382409; 584616,
2382423; 584769, 2382455; 584936,
2382441; return to starting point.

(ii) **Note:** Map 40 follows:



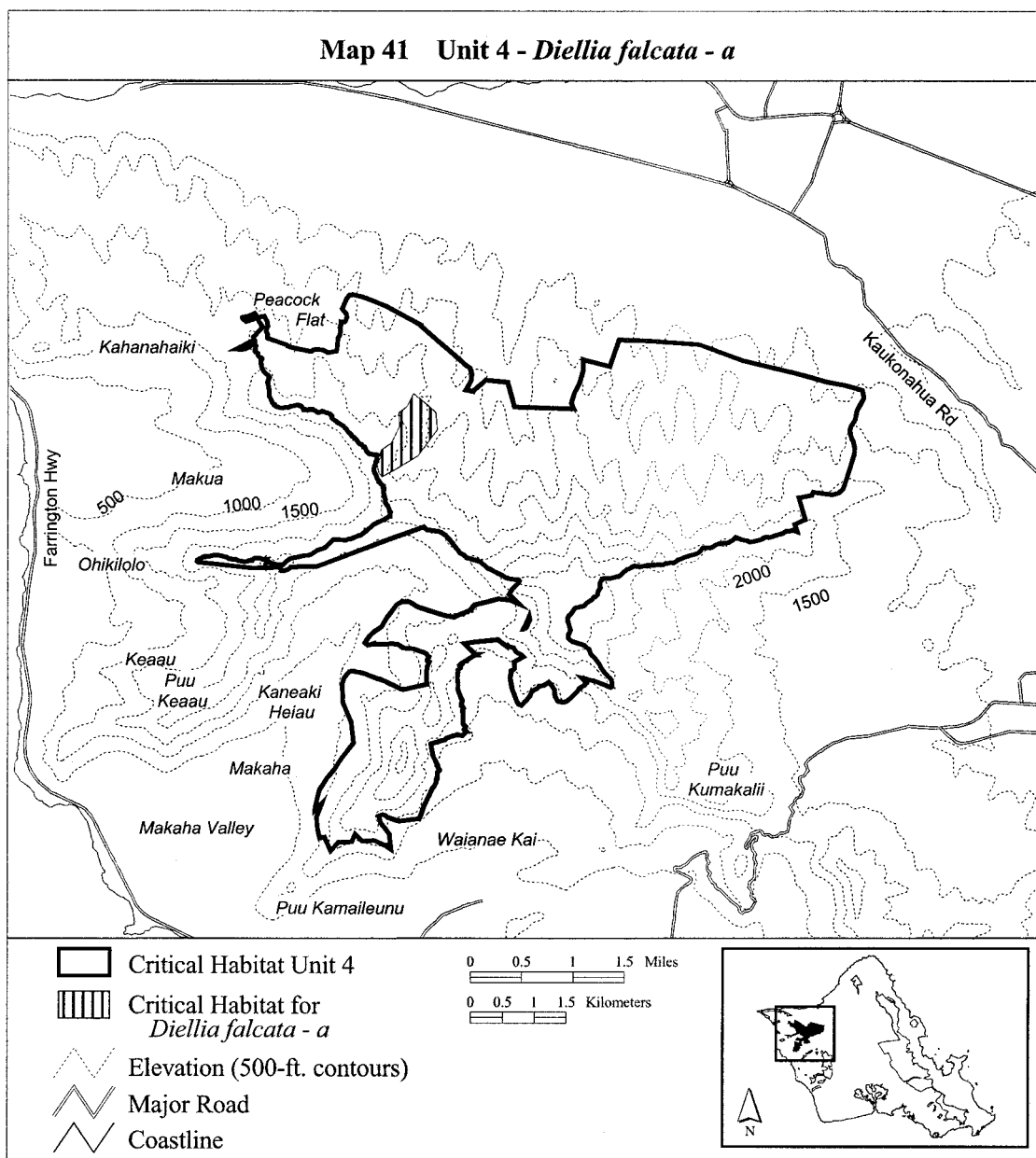
(41) Oahu 4—*Diellia falcata*—a (60 ha; 147 ac)

(i) Unit consists of the following 21 boundary points: Start at 585421, 2380455; 585383, 2380524; 585356,

2380641; 585411, 2380778; 585389, 2380782; 585417, 2380883; 585579, 2380991; 585706, 2381244; 585697, 2381470; 585824, 2381570; 585926, 2381770; 585950, 2381757; 585979, 2381715; 585978, 2381713; 586014,

2381706; 586260, 2381493; 586273, 2381458; 586277, 2381451; 586294, 2381199; 585995, 2380792; 585643, 2380575; return to starting point.

(ii) **Note:** Map 41 follows:



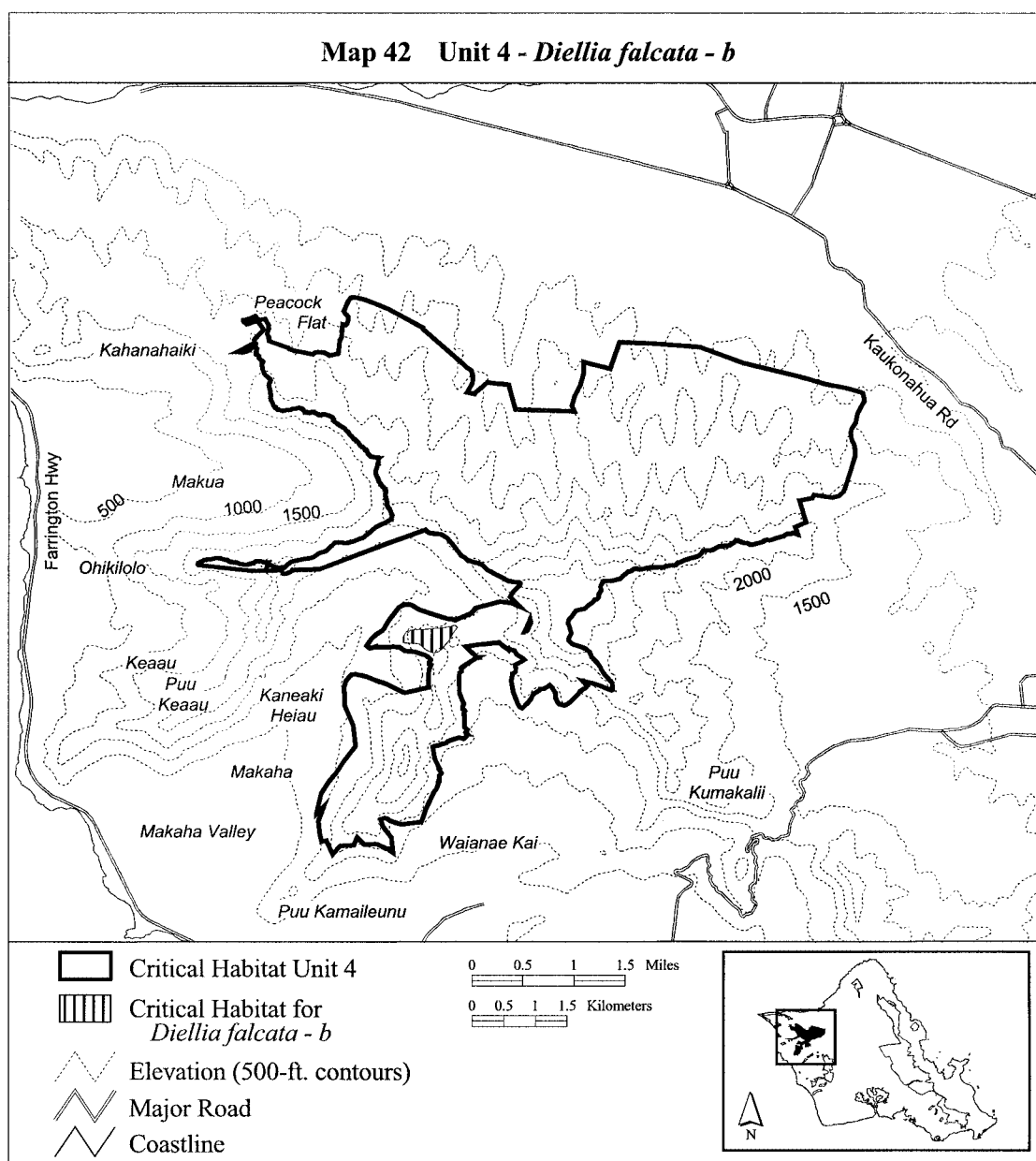
(42) Oahu 4—*Diellia falcata*—b (22 ha; 54 ac)

(i) Unit consists of the following 18 boundary points: Start at 585820, 2378037; 585847, 2378081; 586055,

2378092; 586289, 2378108; 586398, 2378114; 586562, 2378152; 586595, 2378119; 586546, 2378043; 586464, 2377906; 586349, 2377781; 586306, 2377743; 586218, 2377721; 586104,

2377764; 585984, 2377863; 585836, 2377873; 585733, 2377884; 585733, 2377961; 585798, 2378059; return to starting point.

(ii) **Note:** Map 42 follows:



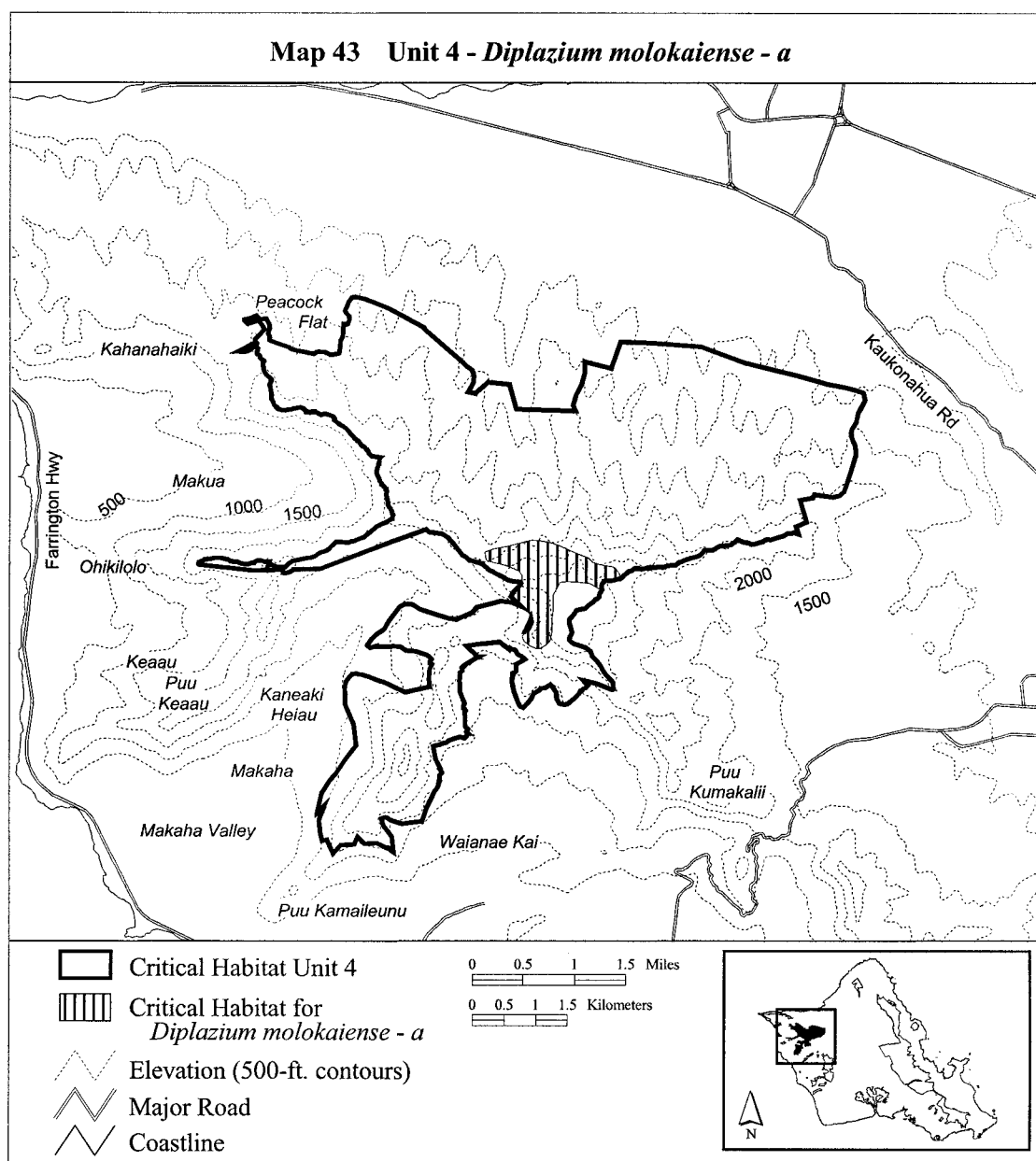
(43) Oahu 4—*Diplazium molokaiense*—
a (138 ha; 340 ac)

(i) Unit consists of the following 63 boundary points: Start at 588852, 2378704; 588669, 2378805; 588490, 2378830; 588311, 2378838; 588207, 2378826; 588141, 2378709; 588091, 2378605; 588091, 2378489; 588099, 2378389; 588070, 2378227; 588066, 2378019; 588037, 2377894; 587972, 2377824; 587897, 2377786; 587845, 2377777; 587712, 2377827; 587625,

2377911; 587608, 2377977; 587692, 2378073; 587754, 2378202; 587721, 2378327; 587579, 2378456; 587496, 2378530; 587425, 2378601; 587467, 2378676; 587575, 2378780; 587600, 2378863; 587608, 2378930; 587550, 2379009; 587367, 2379079; 587201, 2379125; 587038, 2379167; 587022, 2379213; 587013, 2379304; 587155, 2379350; 587400, 2379404; 587633, 2379466; 587758, 2379491; 587887, 2379479; 588066, 2379446; 588195, 2379400; 588457, 2379283; 588640,

2379208; 588723, 2379134; 588831, 2379104; 589002, 2379075; 589064, 2379050; 589135, 2378959; 589135, 2378882; 589123, 2378879; 589060, 2378862; 589009, 2378857; 588910, 2378852; 588910, 2378851; 588899, 2378848; 588898, 2378848; 588887, 2378841; 588887, 2378840; 588862, 2378802; 588851, 2378772; 588851, 2378763; 588851, 2378746; 588855, 2378710; return to starting point.

(ii) **Note:** Map 43 follows:



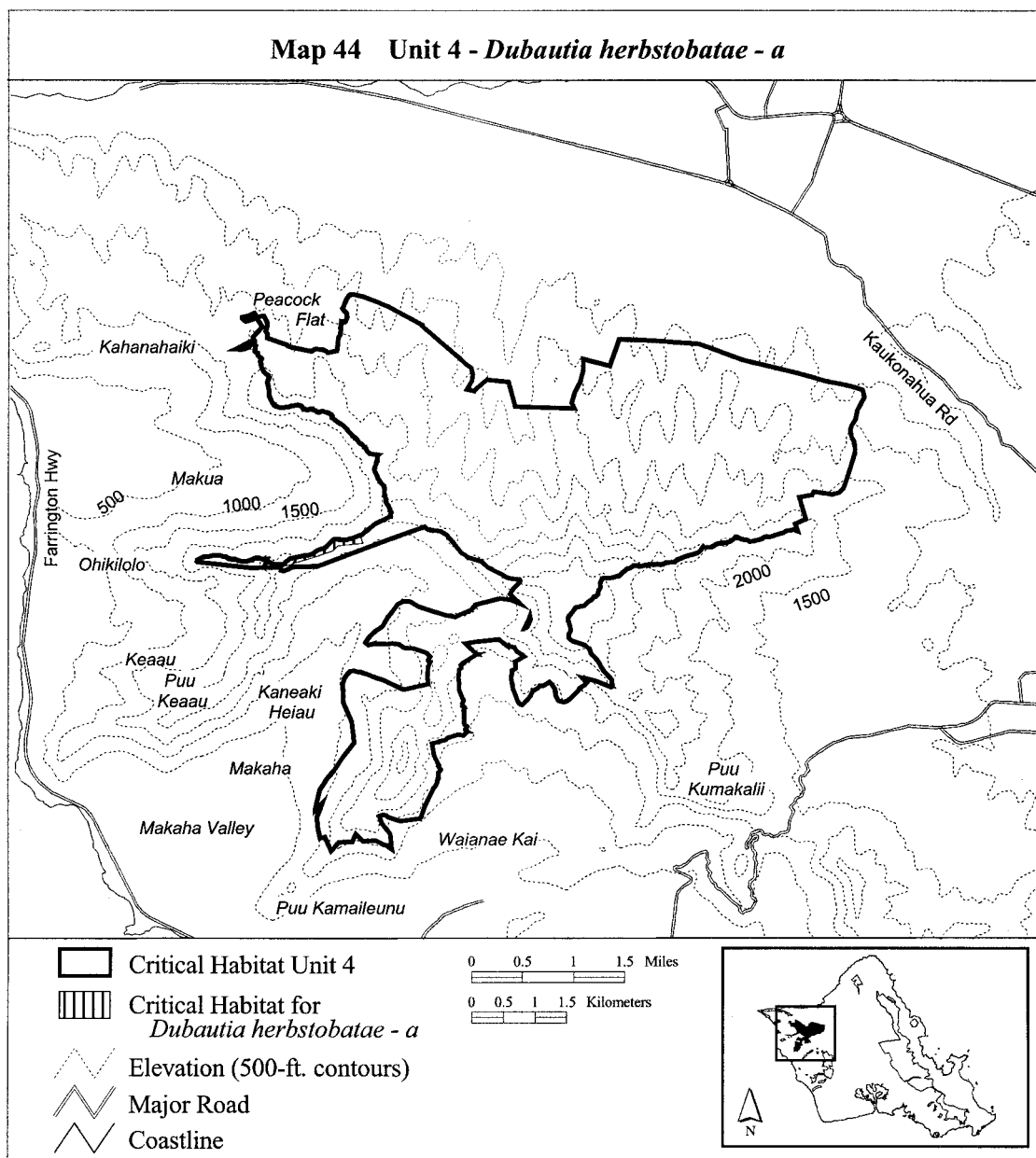
(44) Oahu 4—*Dubautia herbstobatae*—a (12 ha; 29 ac)

(i) Unit consists of the following 30 boundary points: Start at 585068, 2379524; 585080, 2379506; 585126, 2379404; 584736, 2379361; 584661, 2379278; 584406, 2379187; 584106,

2379096; 583936, 2379044; 583909, 2379048; 583909, 2379076; 583899, 2379083; 583947, 2379131; 583977, 2379150; 584086, 2379180; 584226, 2379210; 584256, 2379210; 584326, 2379230; 584327, 2379230; 584417, 2379290; 584526, 2379330; 584527,

2379330; 584557, 2379350; 584657, 2379450; 584667, 2379460; 584836, 2379450; 584866, 2379450; 584867, 2379450; 584906, 2379470; 584936, 2379470; 584937, 2379470; return to starting point.

(ii) **Note:** Map 44 follows:



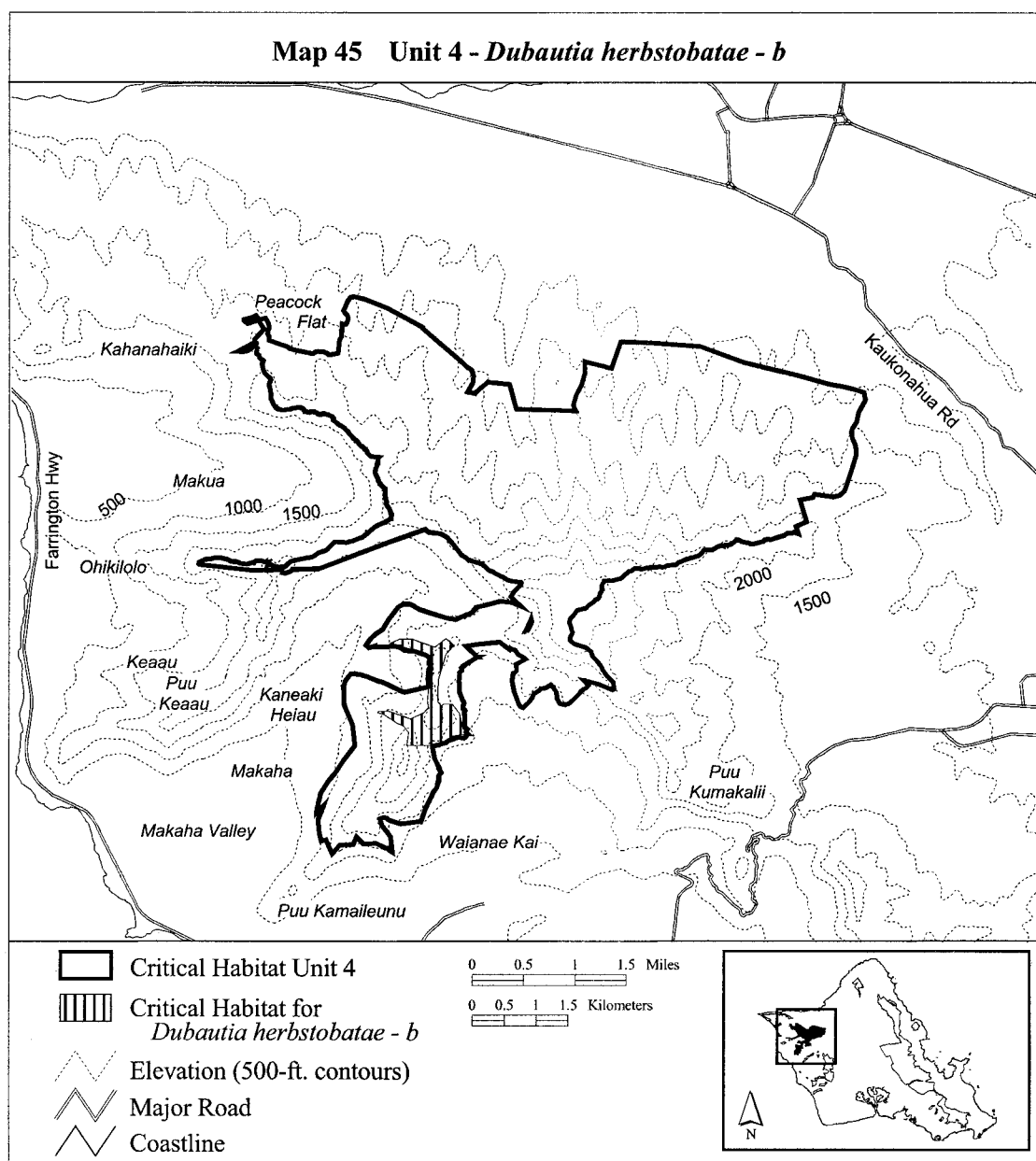
(45) Oahu 4—*Dubautia herbstobatae*—b
(77 ha; 190 ac)

(i) Unit consists of the following 35 boundary points: Start at 586413, 2377940; 586540, 2377836; 586415, 2377693; 586296, 2377282; 586288, 2376942; 586343, 2376878; 586377,

2376897; 586514, 2376901; 586627, 2376764; 586675, 2376521; 586749, 2376437; 586505, 2376404; 586426, 2376297; 586148, 2376252; 585803, 2376258; 585833, 2376452; 585749, 2376553; 585646, 2376609; 585450, 2376733; 585354, 2376763; 585361, 2376789; 585529, 2376789; 585862,

2376670; 586066, 2376763; 586138, 2376846; 586128, 2376969; 586145, 2377104; 586133, 2377283; 586144, 2377443; 586202, 2377576; 586102, 2377698; 585538, 2377868; 585699, 2377929; 585886, 2377929; 586246, 2377799; return to starting point.

(ii) **Note:** Map 45 follows:



(46) Oahu 4—*Eragrostis fosbergii*—a (81 ha; 199 ac)

(i) Unit consists of the following 219 boundary points: Start at 586573, 2377994; 586653, 2377994; 586691, 2377987; 586747, 2378005; 586782, 2378016; 586811, 2378015; 586774, 2378020; 586836, 2378053; 586919, 2378070; 587065, 2378070; 587207, 2378064; 587332, 2378050; 587490, 2378035; 587605, 2378023; 587629, 2377978; 587677, 2377964; 587733, 2377922; 587784, 2377877; 587819, 2377865; 587864, 2377809; 587885, 2377738; 587935, 2377666; 587997, 2377601; 588084, 2377539; 588158, 2377494; 588293, 2377456; 588479, 2377399; 588563, 2377350; 588569,

2377252; 588569, 2377240; 588563, 2377191; 588559, 2377135; 588546, 2377121; 588525, 2377106; 588476, 2377103; 588456, 2377072; 588428, 2377047; 588396, 2377013; 588338, 2376982; 588294, 2376983; 588289, 2377024; 588291, 2377065; 588278, 2377088; 588263, 2377129; 588252, 2377191; 588234, 2377235; 588213, 2377250; 588195, 2377283; 588165, 2377289; 588132, 2377281; 588113, 2377276; 588098, 2377294; 588090, 2377325; 588090, 2377348; 588060, 2377332; 588036, 2377323; 588026, 2377341; 588038, 2377395; 588036, 2377415; 588008, 2377392; 587997, 2377364; 587969, 2377343; 587951, 2377328; 587931, 2377305; 587925, 2377287; 587895, 2377289; 587879,

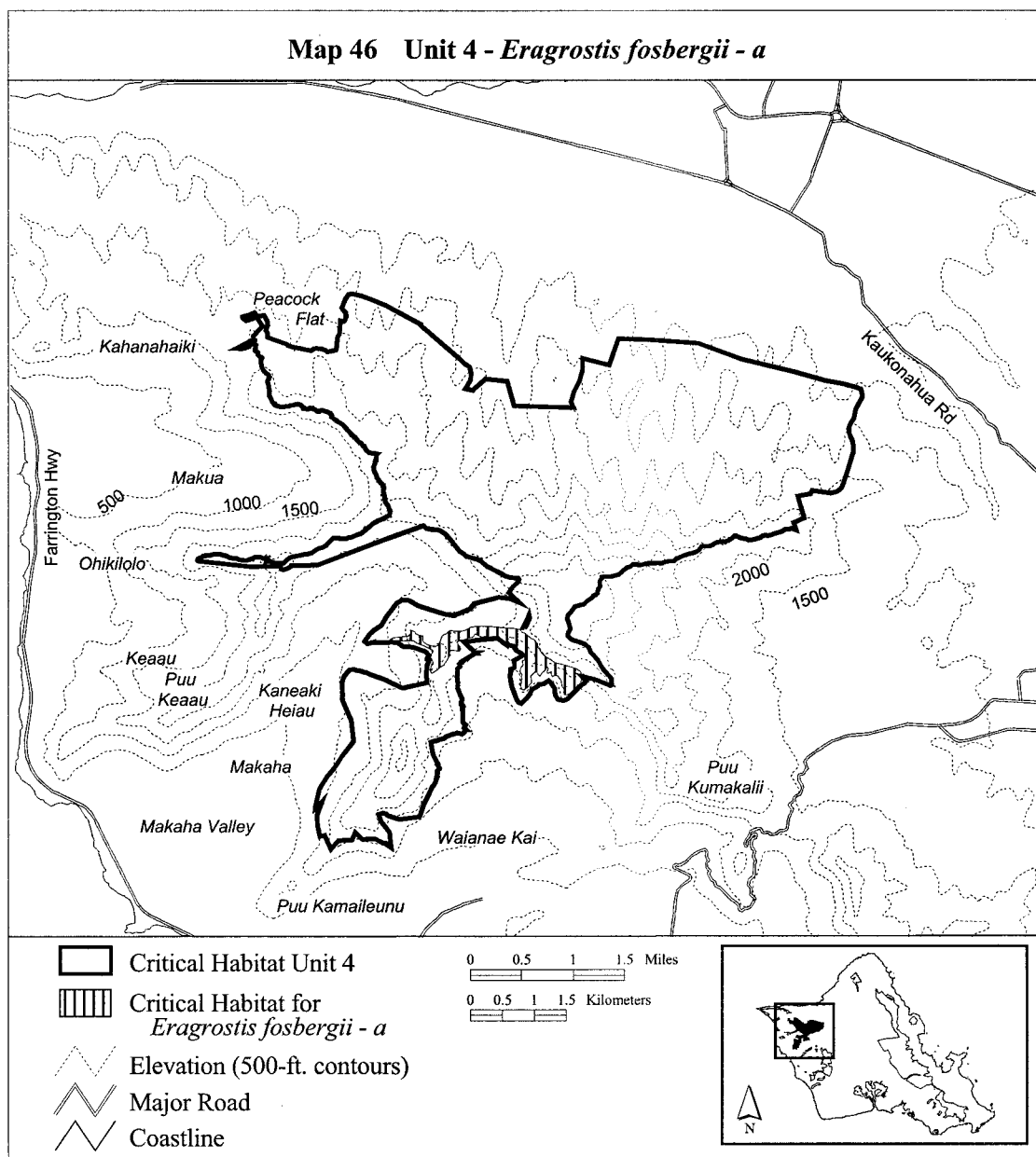
2377327; 587866, 2377348; 587833, 2377340; 587813, 2377315; 587794, 2377299; 587769, 2377274; 587776, 2377243; 587781, 2377207; 587791, 2377176; 587779, 2377160; 587753, 2377145; 587738, 2377127; 587728, 2377111; 587697, 2377083; 587673, 2377060; 587645, 2377060; 587629, 2377072; 587611, 2377111; 587612, 2377137; 587624, 2377180; 587632, 2377225; 587635, 2377253; 587620, 2377279; 587643, 2377302; 587609, 2377337; 587604, 2377384; 587635, 2377425; 587663, 2377459; 587637, 2377497; 587643, 2377520; 587678, 2377541; 587673, 2377554; 587674, 2377580; 587671, 2377580; 587626, 2377640; 587531, 2377693; 587492, 2377759; 587424, 2377773; 587394,

2377815; 587323, 2377818; 587302,
2377836; 587285, 2377871; 587249,
2377886; 587190, 2377889; 587083,
2377907; 586993, 2377898; 586904,
2377943; 586885, 2377936; 586889,
2377920; 586865, 2377903; 586837,
2377893; 586787, 2377884; 586747,
2377865; 586699, 2377853; 586677,
2377853; 586643, 2377837; 586615,
2377817; 586629, 2377782; 586659,
2377746; 586667, 2377705; 586658,
2377679; 586648, 2377671; 586605,
2377684; 586572, 2377686; 586548,
2377687; 586530, 2377687; 586503,
2377667; 586497, 2377647; 586511,
2377606; 586500, 2377587; 586485,
2377569; 586473, 2377550; 586450,
2377517; 586425, 2377475; 586415,
2377454; 586369, 2377427; 586313,
2377382; 586283, 2377360; 586243,

2377325; 586214, 2377331; 586192,
2377360; 586198, 2377394; 586208,
2377414; 586208, 2377432; 586228,
2377451; 586241, 2377465; 586241,
2377491; 586230, 2377507; 586219,
2377534; 586216, 2377552; 586185,
2377572; 586182, 2377588; 586200,
2377616; 586228, 2377641; 586238,
2377678; 586190, 2377707; 586134,
2377745; 586088, 2377767; 586007,
2377791; 585967, 2377813; 585938,
2377839; 585892, 2377847; 585817,
2377839; 585817, 2377843; 585794,
2377839; 585748, 2377839; 585684,
2377847; 585660, 2377847; 585627,
2377844; 585588, 2377844; 585566,
2377844; 585561, 2377852; 585572,
2377860; 585606, 2377881; 585649,
2377892; 585686, 2377892; 585737,
2377904; 585796, 2377909; 585842,

2377914; 585821, 2377904; 585821,
2377901; 585852, 2377904; 585880,
2377944; 585890, 2377967; 585880,
2378007; 585888, 2378010; 585917,
2377999; 585949, 2377981; 585962,
2377959; 585981, 2377946; 586002,
2377928; 586029, 2377930; 586061,
2377922; 586082, 2377916; 586082,
2377882; 586083, 2377837; 586115,
2377801; 586161, 2377774; 586206,
2377764; 586246, 2377751; 586270,
2377746; 586326, 2377775; 586343,
2377813; 586364, 2377852; 586367,
2377873; 586378, 2377904; 586391,
2377919; 586415, 2377933; 586441,
2377946; 586473, 2377972; 586484,
2377986; 586506, 2377999; 586538,
2377999; return to starting point.

(ii) **Note:** Map 46 follows:



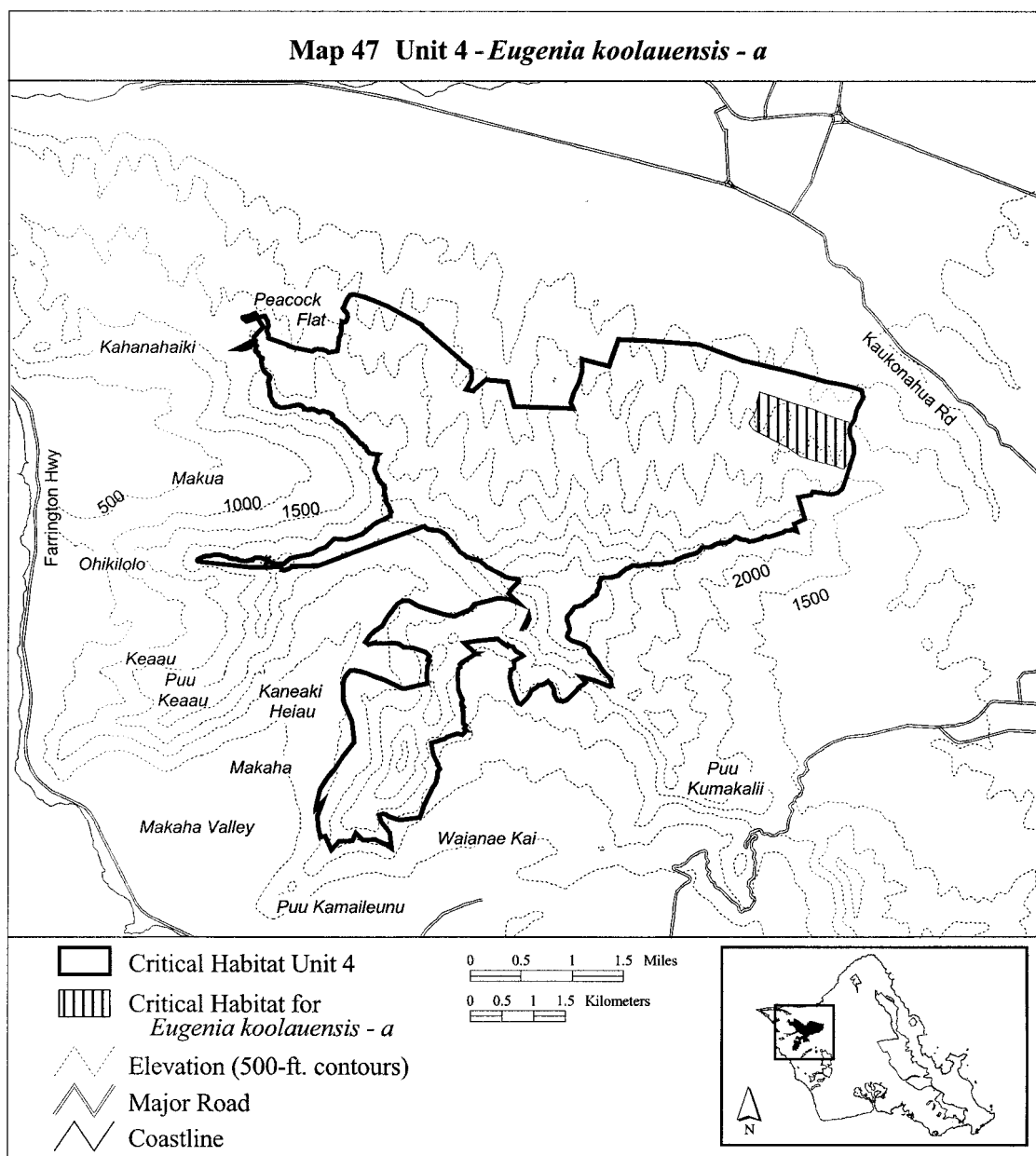
(47) Oahu 4—*Eugenia koolauensis*—a
(113 ha; 280 ac)

(i) Unit consists of the following 23
boundary points: Start at 591255,
2381198; 591189, 2381301; 591255,

2381419; 591312, 2381558; 591307,
2381625; 591358, 2381794; 591610,
2381717; 591883, 2381620; 592196,
2381522; 592459, 2381414; 592623,
2381362; 592757, 2381326; 592772,
2381126; 592803, 2381018; 592829,

2380930; 592829, 2380822; 592793,
2380714; 592685, 2380571; 592505,
2380637; 592402, 2380658; 592227,
2380699; 592001, 2380771; 591790,
2380915; return to starting point.

(ii) **Note:** Map 47 follows:



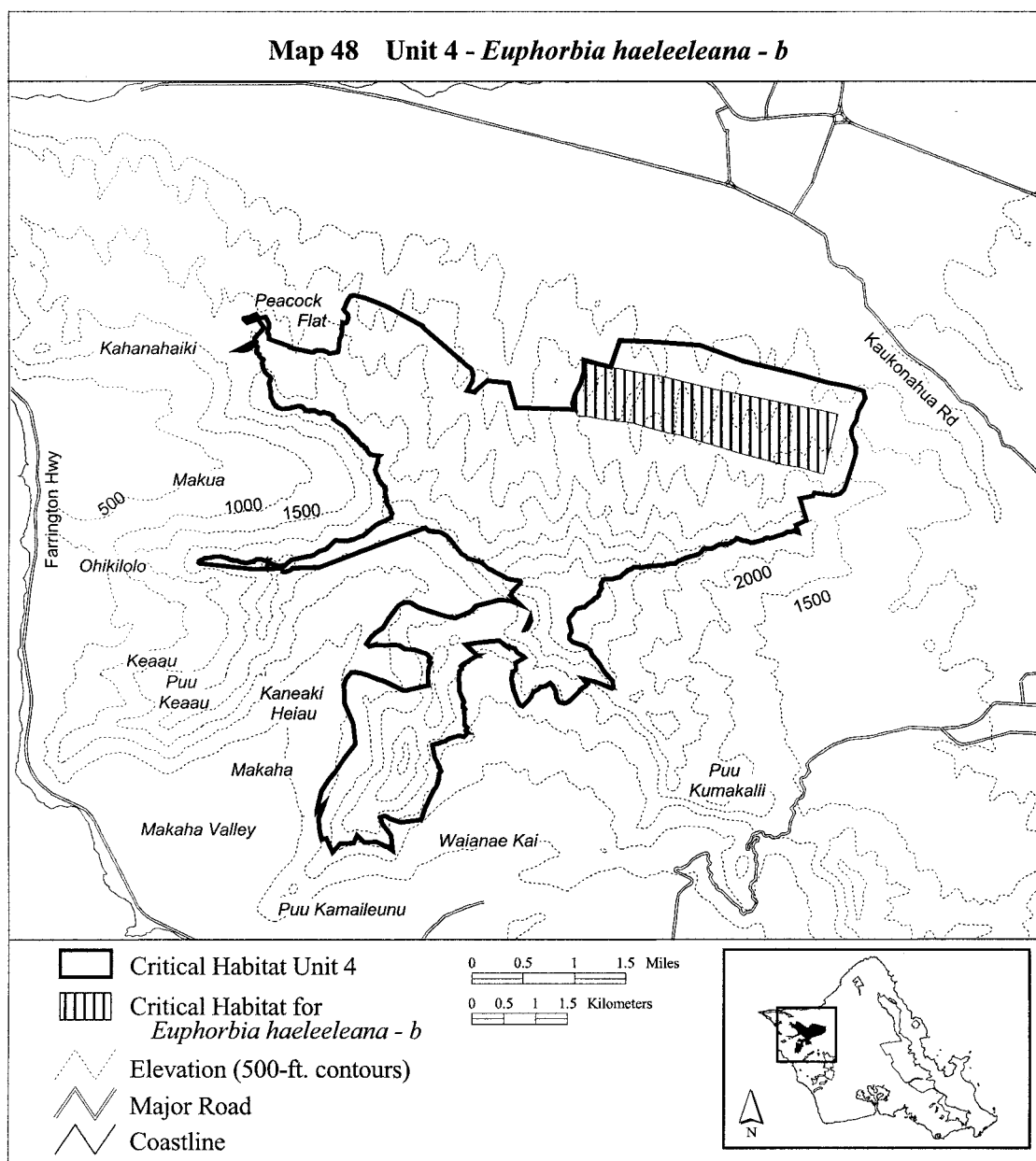
(48) Oahu 4—*Euphorbia haeleeleana*—b
(357 ha; 881 ac)

(i) Unit consists of the following 33 boundary points: Start at 589099, 2382193; 589372, 2382136; 589555, 2382097; 589794, 2382058; 590632, 2381854; 591432, 2381701; 591836,

2381610; 592280, 2381523; 592557, 2381462; 592334, 2380514; 592288, 2380528; 591980, 2380619; 591814, 2380645; 591697, 2380658; 591406, 2380745; 591049, 2380836; 590645, 2380958; 590267, 2381067; 590080, 2381136; 589906, 2381158; 589638, 2381236; 589368, 2381315; 589274,

2381335; 589020, 2381362; 588860, 2381384; 588642, 2381428; 588481, 2381436; 588399, 2381615; 588442, 2381784; 588529, 2381962; 588581, 2382136; 588577, 2382315; 589091, 2382181; return to starting point.

(ii) **Note:** Map 48 follows:



(49) Oahu 4—*Flueggea neowawraea*—a
(845 ha; 2,087 ac)

(i) Unit consists of the following 242 boundary points: Start at 585312,

2380625; 585349, 2380698; 585367,
2380769; 585403, 2380875; 585367,
2380946; 585291, 2381001; 585286,
2380984; 585176, 2381087; 585013,
2381250; 584871, 2381356; 584708,
2381452; 584531, 2381568; 584478,
2381621; 584340, 2381671; 584163,
2381717; 584022, 2381752; 583891,
2381777; 583746, 2381777; 583657,
2381716; 583652, 2381731; 583651,
2381742; 583651, 2381757; 583651,
2381773; 583651, 2381789; 583651,
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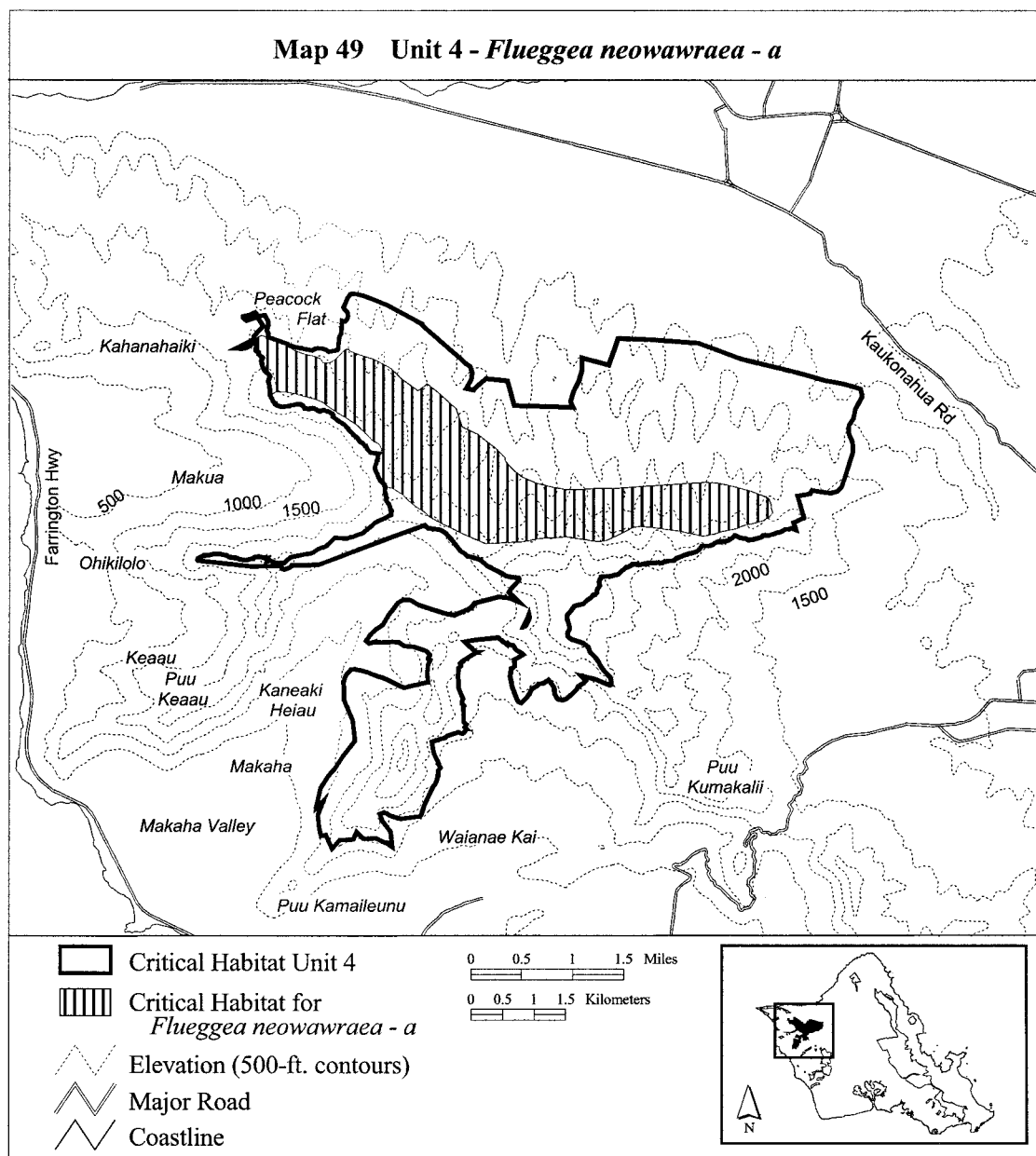
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2380361; 585375, 2380388; 585364,
2380407; 585353, 2380428; 585342,
2380452; 585330, 2380478; 585322,
2380497; 585318, 2380512; 585308,
2380533; 585299, 2380553; 585297,
2380570; 585300, 2380580; 585303,
2380592; 585309, 2380613; return to
starting point.

(ii) **Note:** Map 49 follows:



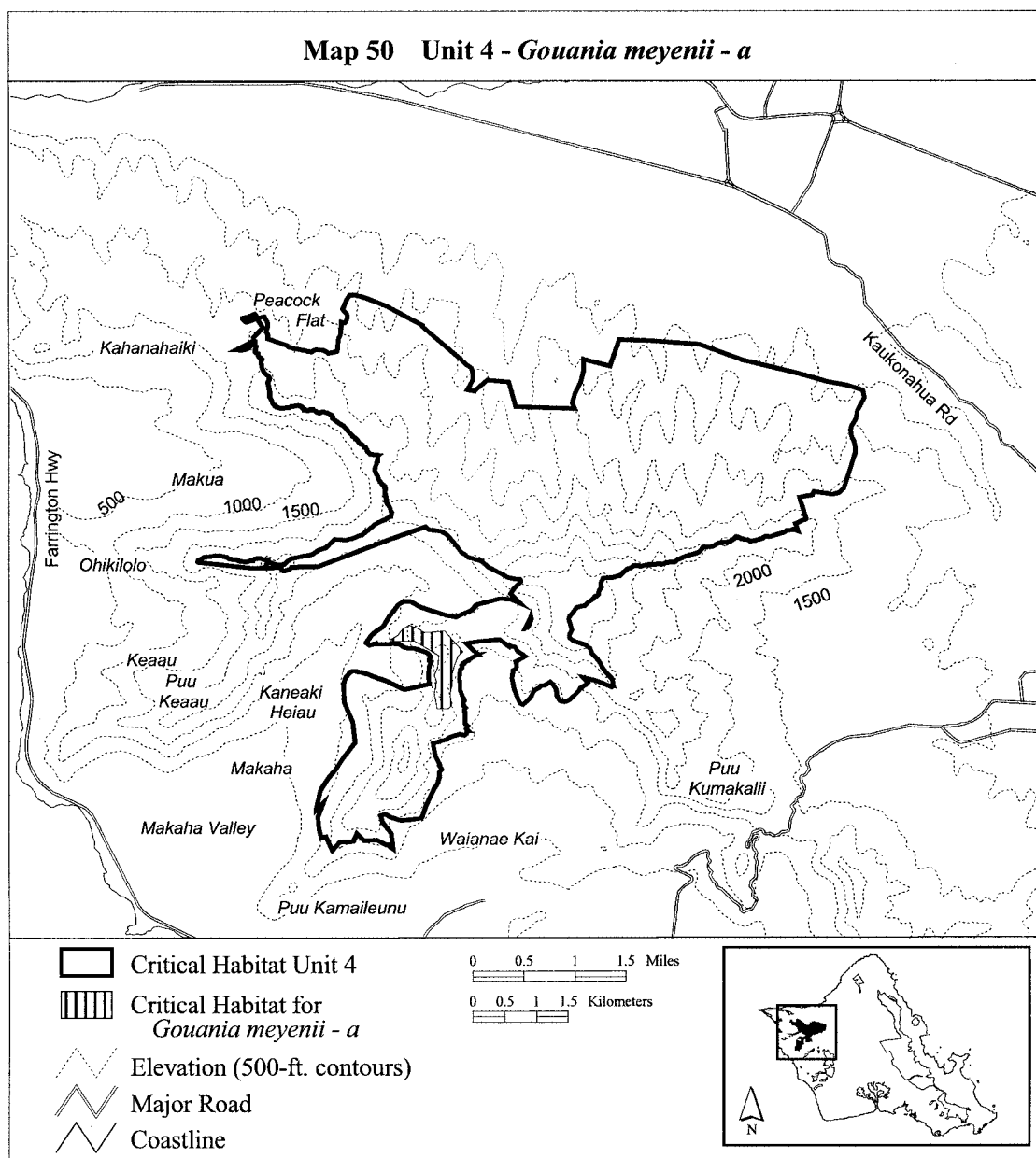
(50) Oahu 4—*Gouania meyenii*—a (48 ha; 118 ac)

(i) Unit consists of the following 27 boundary points: Start at 585998, 2378034; 586072, 2377992; 586303, 2378011; 586383, 2378023; 586678,

2377679; 586598, 2377619; 586542, 2377467; 586505, 2377324; 586505, 2377158; 586469, 2377029; 586496, 2376830; 586445, 2376780; 586270, 2376780; 586256, 2376853; 586220, 2377015; 586256, 2377222; 586224, 2377314; 586279, 2377439; 586289,

2377577; 586293, 2377628; 585924, 2377854; 585533, 2377854; 585556, 2377882; 585662, 2377942; 585726, 2378034; 585837, 2378108; 585929, 2378075; return to starting point.

(ii) **Note:** Map 50 follows:



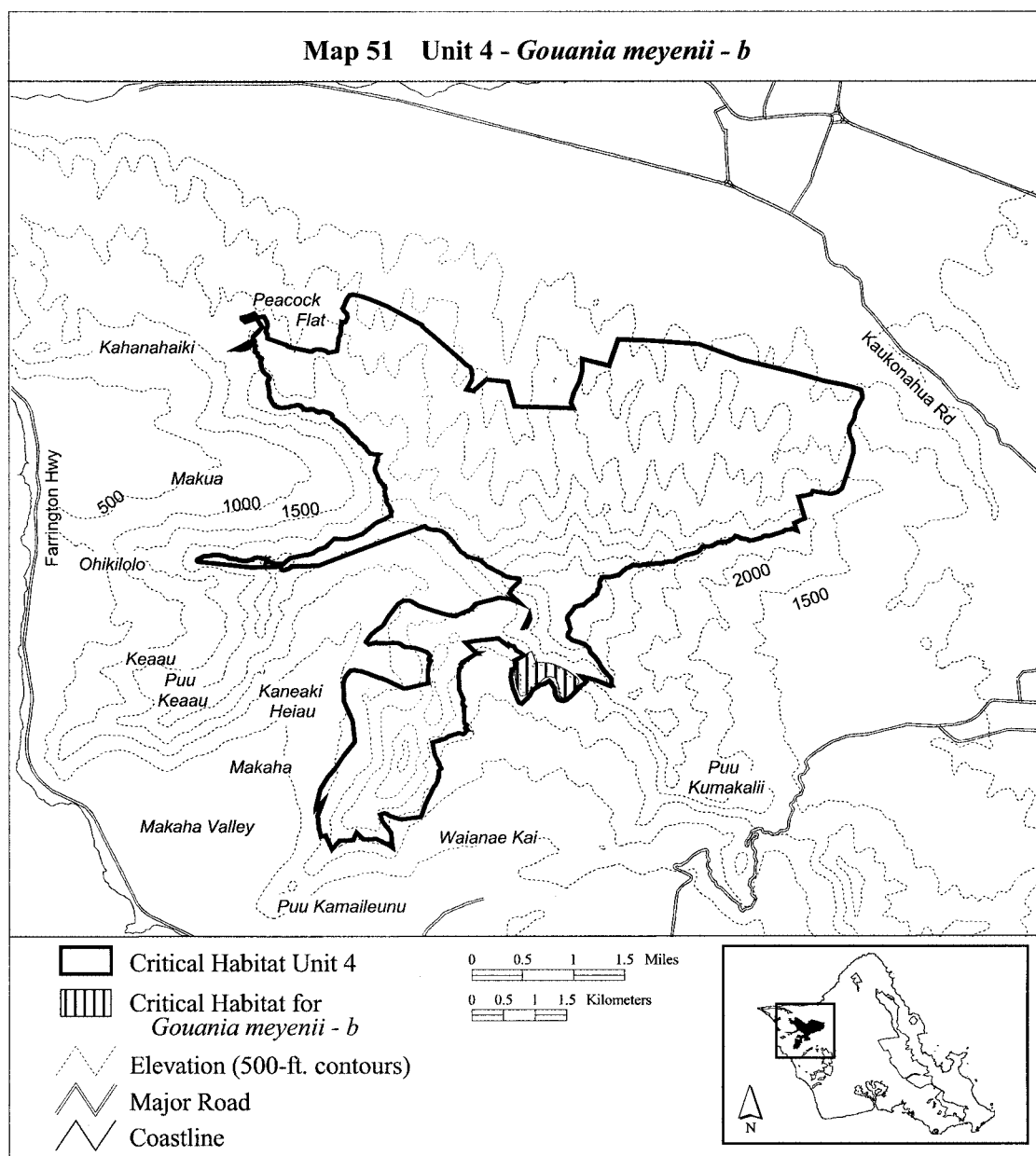
(51) Oahu 4—*Gouania meyenii*—b (39 ha; 96 ac)

(i) Unit consists of the following 28 boundary points: Start at 587782, 2377681; 587796, 2377628; 587833, 2377517; 587902, 2377499; 588022,

2377499; 588119, 2377471; 588313, 2377388; 588497, 2377268; 588530, 2377195; 588433, 2377056; 588364, 2376969; 588276, 2376936; 588221, 2376964; 588207, 2377047; 588193, 2377149; 588147, 2377255; 588068, 2377287; 587972, 2377245; 587879,

2377144; 587773, 2377075; 587709, 2376996; 587603, 2376964; 587575, 2377024; 587534, 2377125; 587511, 2377227; 587506, 2377319; 587515, 2377513; 587507, 2377531; return to starting point.

(ii) **Note:** Map 51 follows:



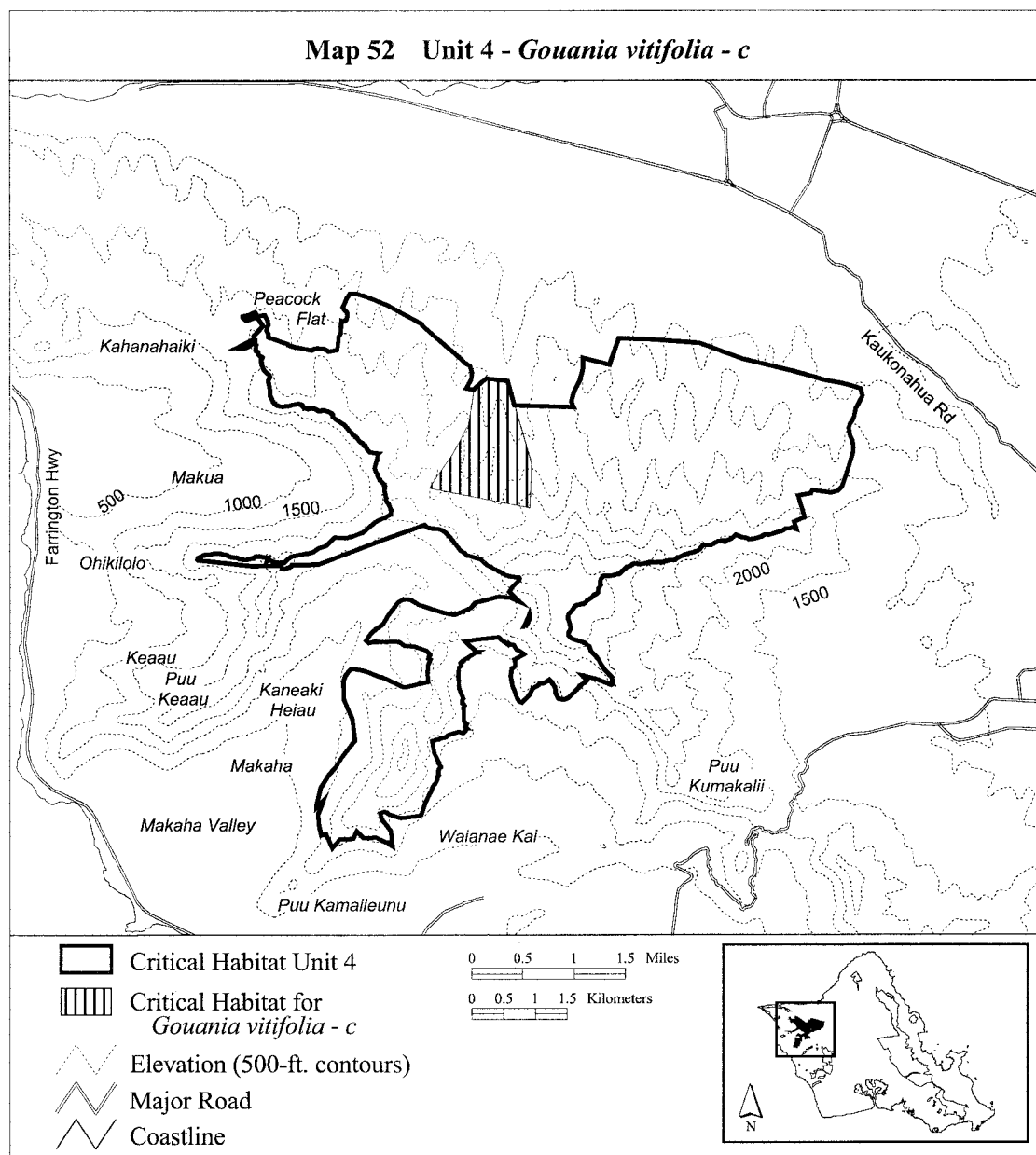
(52) Oahu 4—*Gouania vitifolia*—c (195 ha; 483 ac)

(i) Unit consists of the following 8 boundary points: Start at 587752,

2379934; 586159, 2380248; 586533, 2380789; 586779, 2381256; 586867, 2381827; 587064, 2381994; 587393,

2381955; 587777, 2380637; return to starting point.

(ii) **Note:** Map 52 follows:



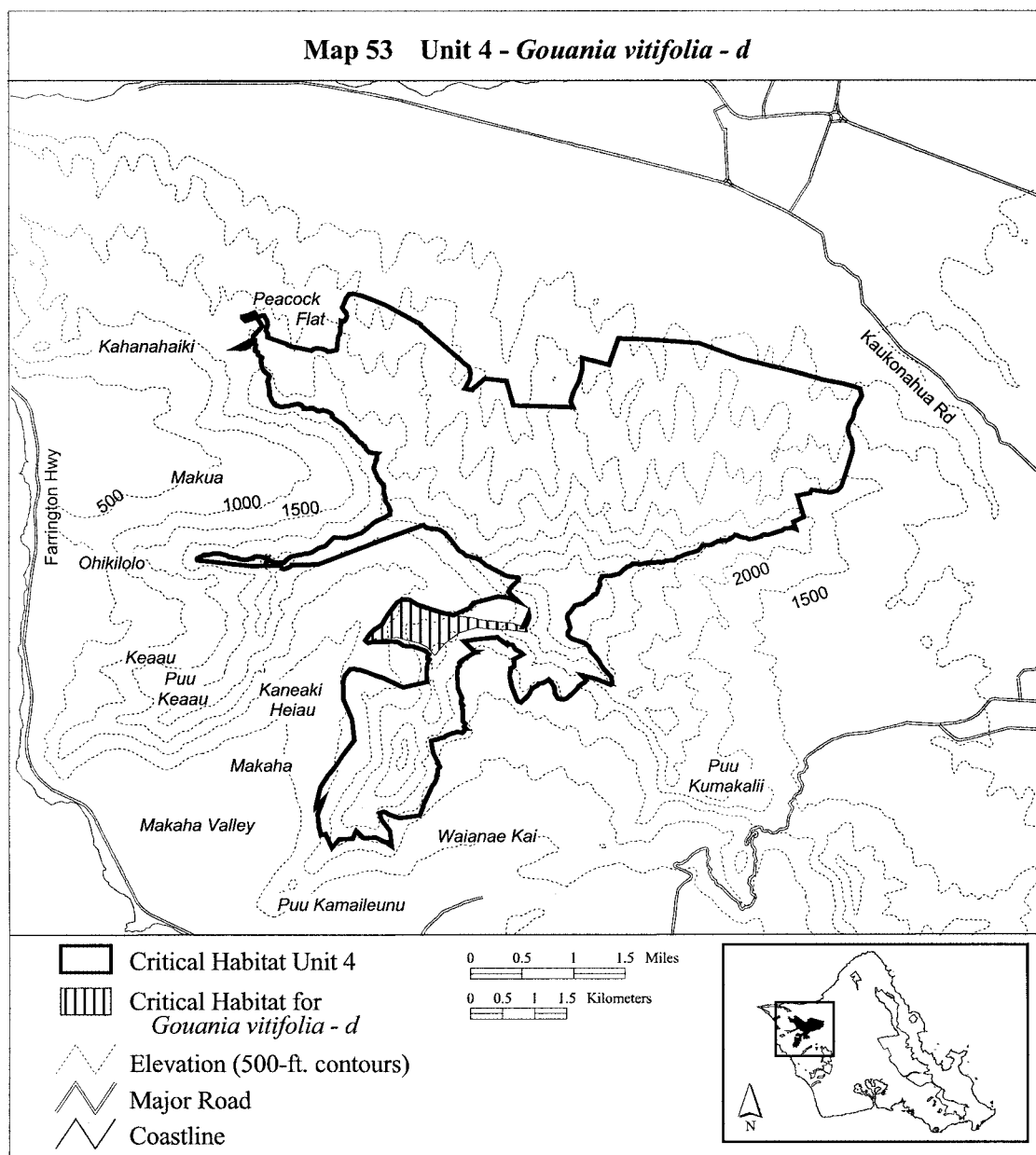
(53) Oahu 4—*Gouania vitifolia*—d (84 ha; 208 ac)

(i) Unit consists of the following 36 boundary points: Start at 586265, 2377593; 586264, 2377598; 586208, 2377667; 586135, 2377736; 586019, 2377792; 585834, 2377839; 585666, 2377882; 585550, 2377860; 585387,

2377843; 585206, 2377792; 585159, 2377830; 585236, 2377934; 585326, 2378020; 585421, 2378084; 585511, 2378235; 585602, 2378355; 585670, 2378437; 585752, 2378484; 585842, 2378480; 585873, 2378475; 585984, 2378402; 586230, 2378321; 586415, 2378265; 586582, 2378230; 586883,

2378192; 586957, 2378166; 587335, 2378123; 587490, 2378106; 587628, 2378058; 587705, 2378024; 587719, 2377966; 587435, 2378001; 587170, 2378013; 586936, 2378033; 586647, 2377957; 586421, 2377784; return to starting point.

(ii) **Note:** Map 53 follows:



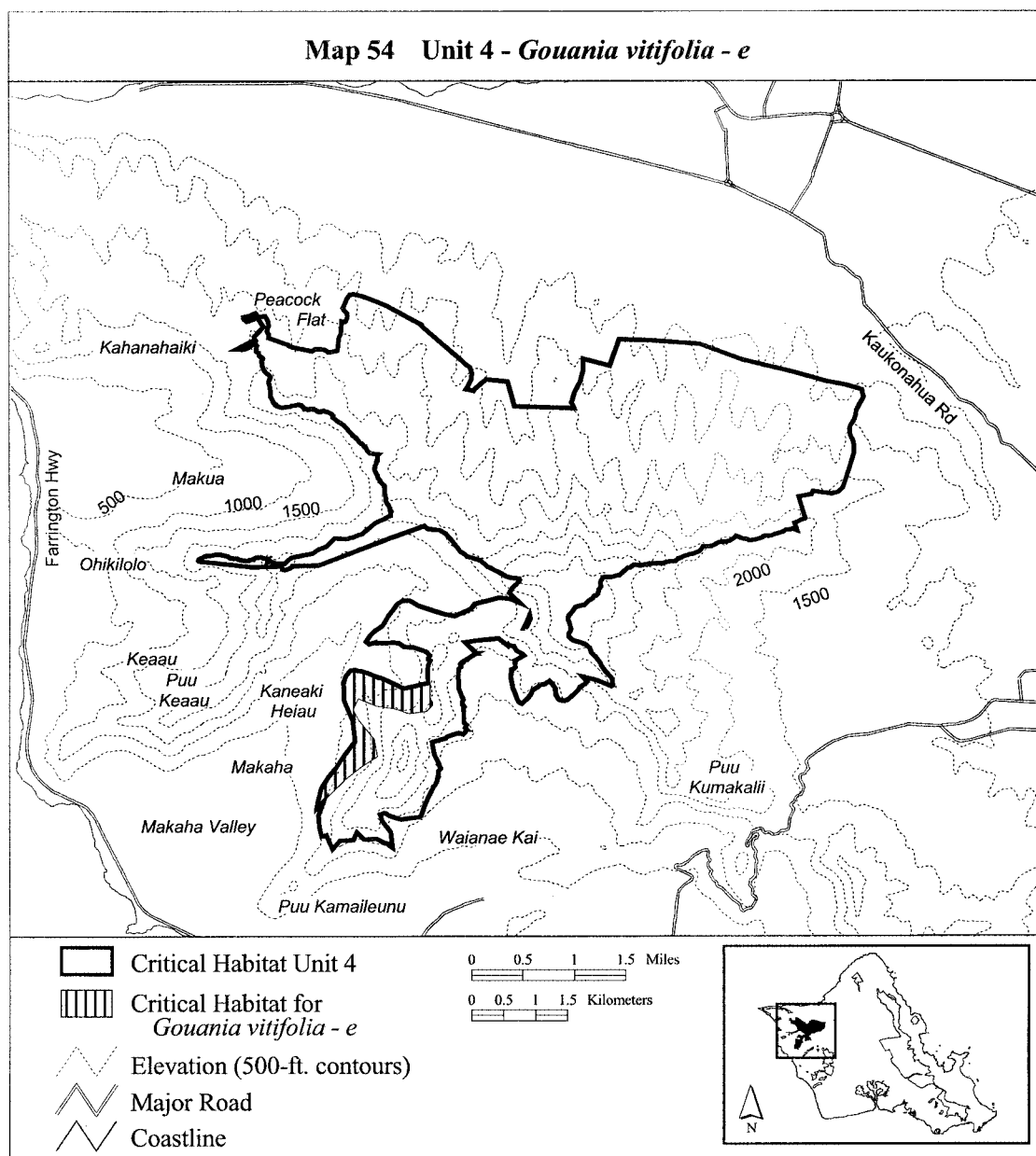
(54) Oahu 4—*Gouania vitifolia*—e (102 ha; 252 ac)

(i) Unit consists of the following 41 boundary points: Start at 585510, 2377208; 585756, 2377090; 586178, 2377178; 586178, 2377052; 586178, 2376914; 586190, 2376916; 586204, 2376890; 586213, 2376815; 586127,

2376725; 585844, 2376688; 585624, 2376763; 585329, 2376813; 585104, 2376927; 584958, 2376744; 585052, 2376581; 585285, 2376292; 585341, 2376015; 585102, 2375858; 584857, 2375669; 584562, 2375374; 584380, 2375182; 584380, 2375189; 584453, 2375499; 584578, 2375705; 584681, 2375822; 584794, 2376001; 584985,

2376248; 584956, 2376578; 584816, 2376896; 584814, 2377043; 584802, 2377164; 584836, 2377263; 584875, 2377327; 584926, 2377374; 584991, 2377379; 585042, 2377361; 585081, 2377361; 585167, 2377340; 585257, 2377301; 585382, 2377258; 585393, 2377255; return to starting point.

(ii) **Note:** Map 54 follows:



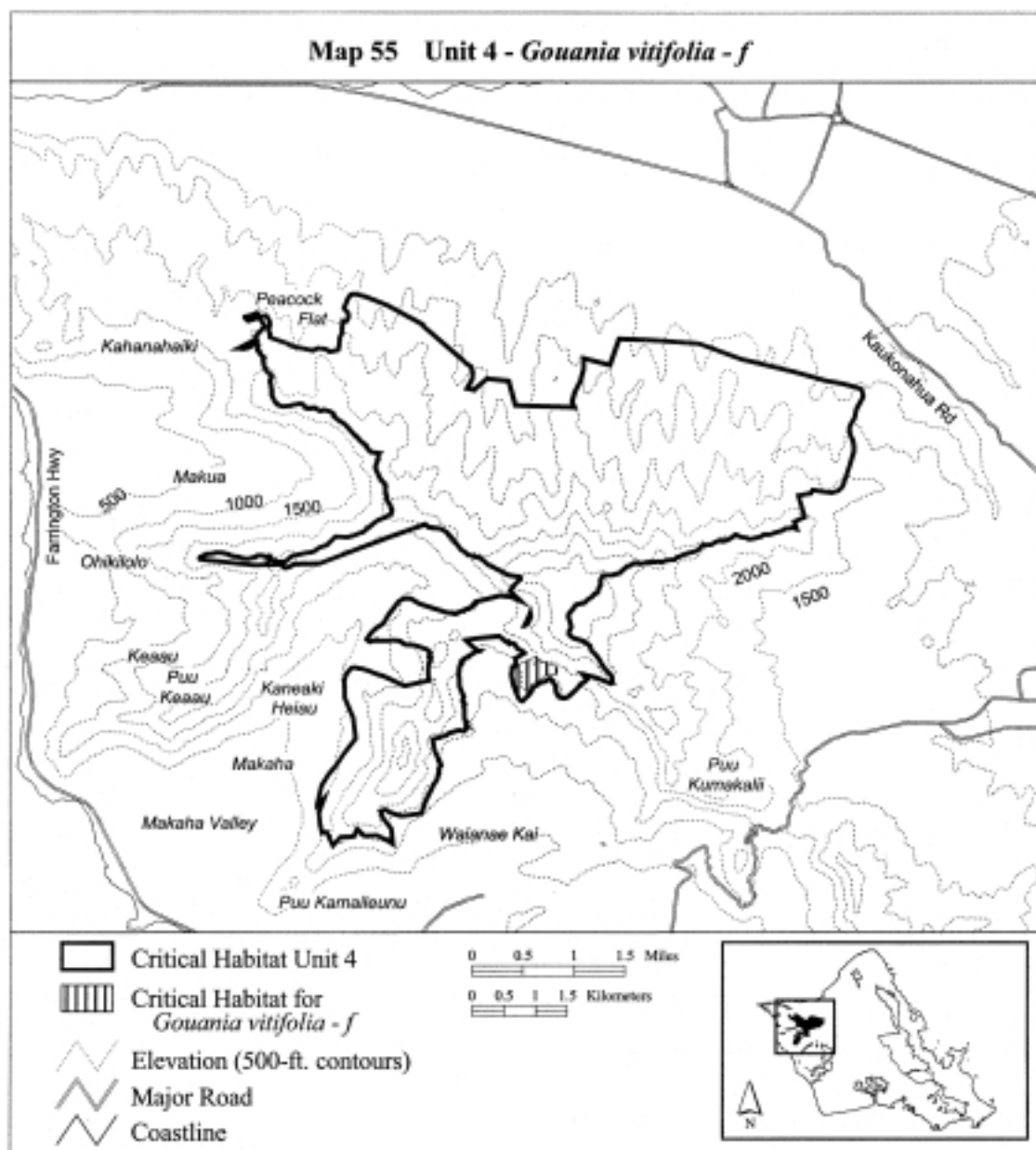
(55) Oahu 4—*Gouania vitifolia*—f (27 ha; 67 ac)

(i) Unit consists of the following 25 boundary points: Start at 587841, 2377556; 587873, 2377508; 587963, 2377465; 588066, 2377439; 588131,

2377413; 588170, 2377374; 588170, 2377336; 588157, 2377271; 588058, 2377275; 587963, 2377245; 587903, 2377168; 587873, 2377121; 587791, 2377060; 587757, 2377000; 587701, 2376931; 587675, 2376897; 587619,

2376850; 587580, 2376862; 587554, 2376906; 587503, 2377026; 587477, 2377090; 587455, 2377189; 587443, 2377271; 587460, 2377366; 587455, 2377389; return to starting point.

(ii) **Note:** Map 55 follows:



(56) Oahu 4—*Hedyotis degeneri*—a (917 ha; 2,265 ac)

(i) Unit consists of the following 334 boundary points: Start at 590035,

2379115; 589518, 2379058; 588672, 2379188; 588616, 2379195; 588356, 2379231; 588192, 2379252; 587212, 2379139; 587072, 2379208; 587008, 2379219; 586848, 2379307; 586668, 2379411; 586497, 2379514; 586155, 2379713; 586096, 2379735; 585983, 2379807; 585725, 2379807; 585661, 2379871; 585619, 2379878; 585550, 2379846; 585558, 2379891; 585558, 2379892; 585557, 2379892; 585548, 2379922; 585550, 2379928; 585550, 2379929; 585549, 2379929; 585549, 2379930; 585548, 2379930; 585547, 2379930; 585546, 2379929; 585545,

2379931; 585539, 2379943; 585531, 2379963; 585523, 2379982; 585522, 2379982; 585511, 2380001; 585498, 2380021; 585488, 2380040; 585483, 2380053; 585478, 2380071; 585475, 2380089; 585476, 2380103; 585474, 2380125; 585474, 2380128; 585472, 2380137; 585468, 2380149; 585465, 2380160; 585461, 2380173; 585457, 2380185; 585456, 2380203; 585456, 2380223; 585459, 2380252; 585459, 2380269; 585456, 2380281; 585451, 2380295; 585443, 2380310; 585430, 2380325; 585430, 2380326; 585408, 2380344; 585393, 2380361; 585375, 2380388; 585364, 2380407; 585353, 2380428; 585342, 2380452; 585330, 2380478; 585326, 2380488; 585324, 2380511; 585336, 2380611; 585384,

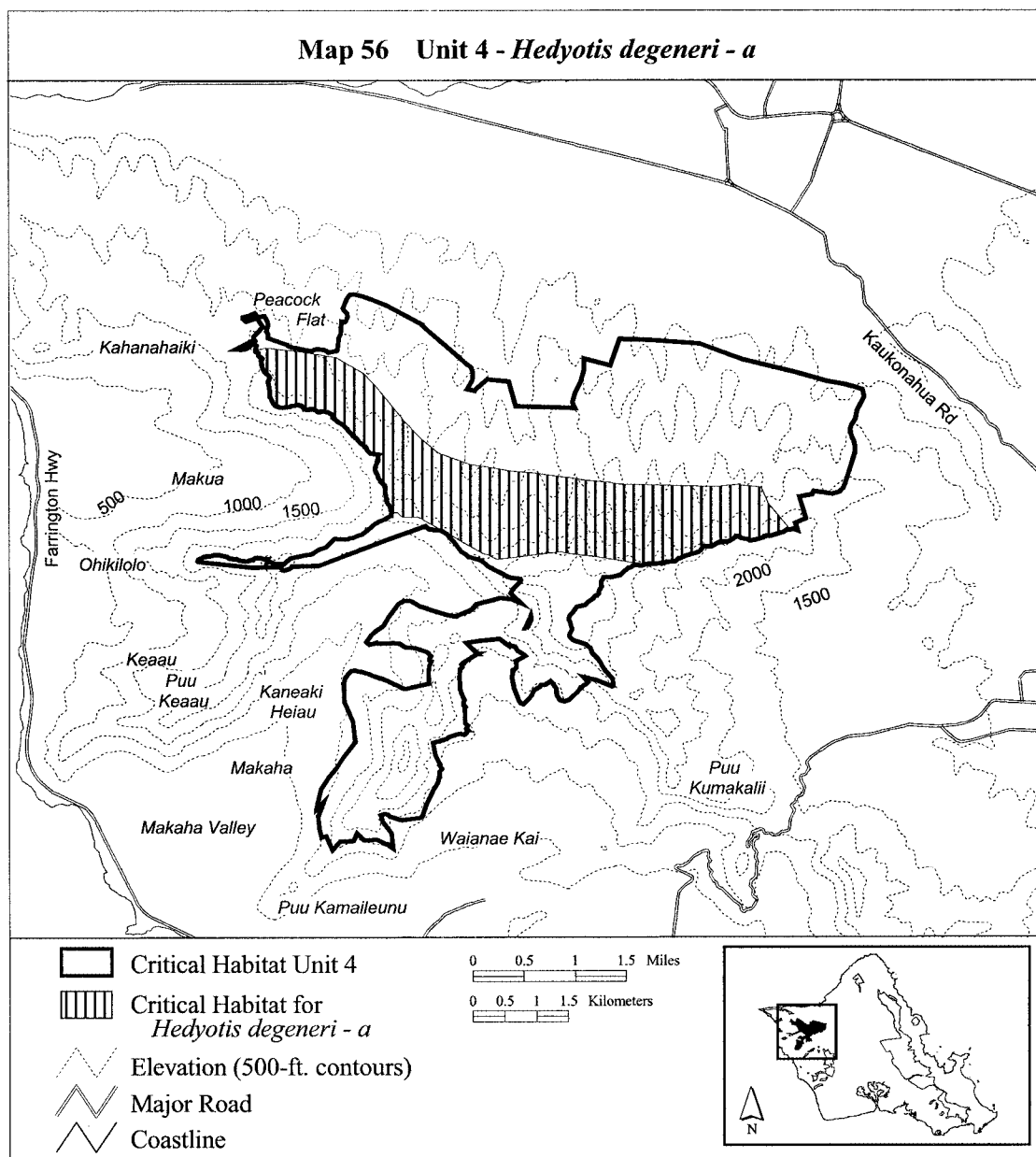
2380711; 585358, 2380763; 585345, 2380771; 585345, 2380779; 585348, 2380789; 585348, 2380790; 585344, 2380798; 585344, 2380799; 585338, 2380802; 585329, 2380804; 585328, 2380804; 585308, 2380806; 585281, 2380810; 585257, 2380825; 585168, 2380904; 585156, 2380911; 585140, 2380929; 585134, 2380934; 585119, 2380952; 585119, 2380953; 585107, 2380962; 585106, 2380963; 585095, 2380967; 585046, 2381011; 585039, 2381021; 585027, 2381040; 585011, 2381059; 584993, 2381074; 584973, 2381090; 584954, 2381104; 584939, 2381117; 584923, 2381137; 584905, 2381157; 584891, 2381175; 584867, 2381205; 584852, 2381221; 584844, 2381230; 584843, 2381230; 584813,

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2379227; 590285, 2379219; 590191,
2379191; 590084, 2379149; 590076,
2379145; 590067, 2379142; 590066,
2379141; 590039, 2379117; return to
starting point.

(ii) **Note:** Map 56 follows:



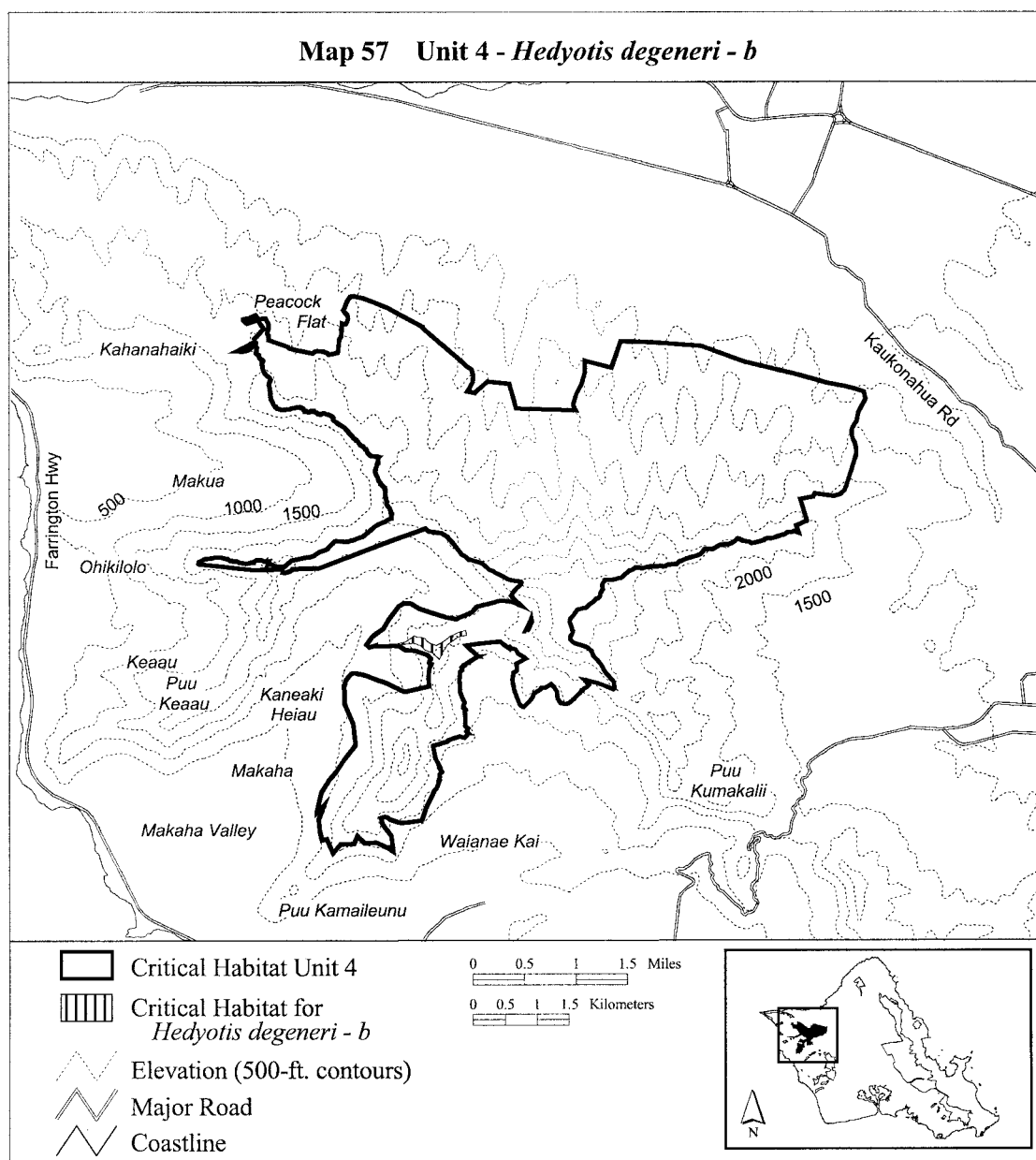
(57) Oahu 4—*Hedyotis degeneri*—b (12 ha; 29 ac)

(i) Unit consists of the following 31 boundary points: Start at 586352, 2377675; 586332, 2377658; 586305, 2377602; 586273, 2377640; 586200, 2377699; 586086, 2377748; 586007,

2377816; 585902, 2377857; 585796, 2377842; 585700, 2377836; 585650, 2377839; 585653, 2377857; 585720, 2377868; 585787, 2377883; 585875, 2377947; 585919, 2377971; 585963, 2377944; 586027, 2377944; 586083, 2377927; 586098, 2377900; 586162,

2377851; 586264, 2377816; 586370, 2377886; 586469, 2377962; 586630, 2378038; 586717, 2378053; 586729, 2377984; 586680, 2377973; 586585, 2377946; 586434, 2377833; 586354, 2377700; return to starting point.

(ii) **Note:** Map 57 follows:



(58) Oahu 4—*Hedyotis parvula*—a (387 ha; 958 ac)

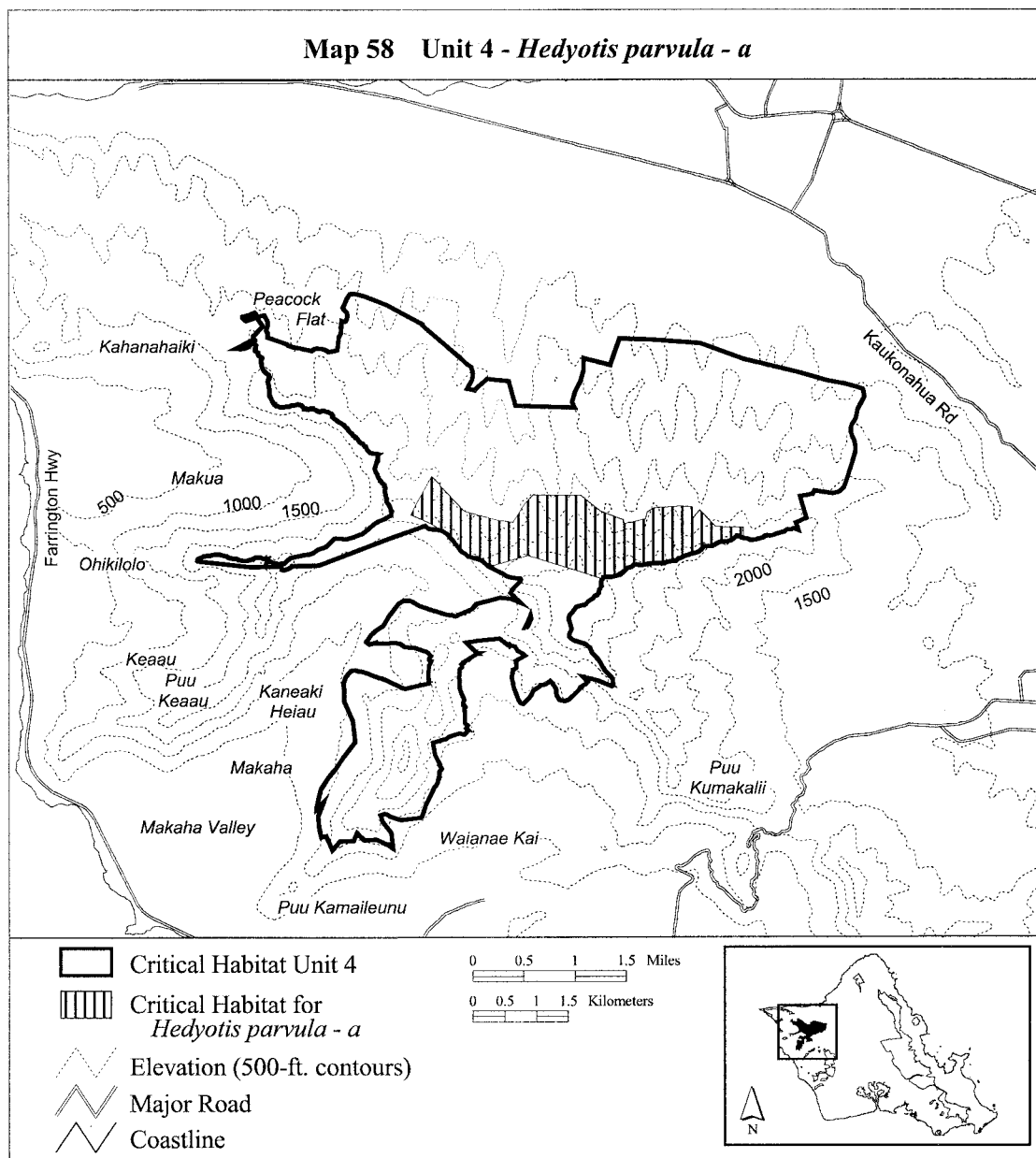
(i) Unit consists of the following 111

boundary points: Start at 589524, 2379043; 589477, 2379034; 589462, 2379034; 589441, 2379042; 589424, 2379047; 589391, 2379048; 589370, 2379041; 589369, 2379041; 589348, 2379025; 589324, 2379009; 589303, 2379003; 589286, 2379001; 589285, 2379001; 589276, 2378998; 589275, 2378998; 589271, 2378994; 589223, 2378985; 589021, 2378858; 589009, 2378857; 588910, 2378852; 588910, 2378851; 588899, 2378848; 588898, 2378848; 588887, 2378841; 588887, 2378840; 588872, 2378818; 588702, 2378884; 587699, 2379193; 587159, 2379038; 587048, 2379065; 587045,

2379095; 586904, 2379179; 586764, 2379173; 586676, 2379263; 586542, 2379397; 586421, 2379532; 586176, 2379699; 585874, 2379837; 585860, 2379838; 585956, 2380034; 586191, 2380443; 586309, 2380325; 586324, 2380341; 586311, 2380311; 586706, 2379887; 587036, 2379801; 587201, 2379758; 587471, 2379718; 587658, 2380020; 587784, 2380156; 587949, 2380153; 588167, 2380149; 588534, 2380143; 588706, 2380004; 588703, 2379964; 588722, 2379990; 588846, 2379891; 589200, 2379754; 589203, 2379694; 589300, 2379716; 589311, 2379711; 589328, 2379722; 589550, 2379771; 589567, 2379874; 589674, 2379941; 590079, 2379973; 590273, 2379963; 590283, 2379771; 590394,

2379904; 590646, 2379643; 591073, 2379636; 591075, 2379464; 591069, 2379465; 591039, 2379476; 590996, 2379497; 590996, 2379498; 590995, 2379498; 590982, 2379496; 590981, 2379496; 590981, 2379495; 590970, 2379488; 590969, 2379488; 590943, 2379463; 590908, 2379443; 590896, 2379436; 590874, 2379427; 590832, 2379413; 590808, 2379409; 590790, 2379408; 590721, 2379404; 590699, 2379398; 590669, 2379385; 590668, 2379384; 590630, 2379354; 590593, 2379338; 590572, 2379336; 590525, 2379340; 590514, 2379339; 590479, 2379340; 590478, 2379340; 590462, 2379334; 590444, 2379312; 590415, 2379277; 590373, 2379247; 590347, 2379233; 590321, 2379227; 590285,

2379219; 590191, 2379191; 590099,

2379155; 589590, 2379056; 589557,
2379052; return to starting point.(ii) **Note:** Map 58 follows:

(59) Oahu 4—*Hesperomannia arborescens*—a (125 ha; 308 ac)

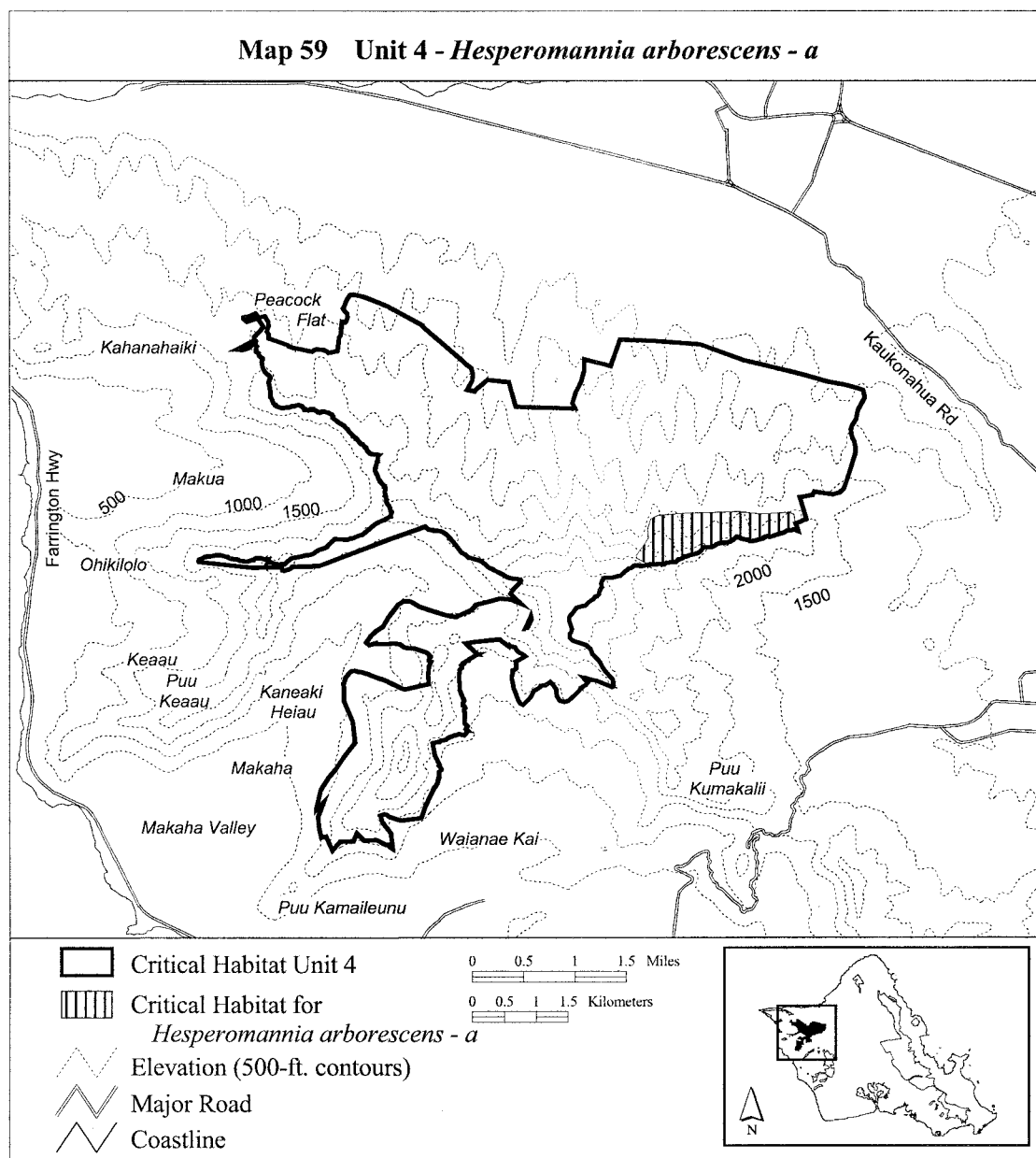
(i) Unit consists of the following 82 boundary points: Start at 591935, 2379592; 591870, 2379614; 591821, 2379599; 591791, 2379602; 591790, 2379602; 591766, 2379598; 591765, 2379598; 591740, 2379584; 591709, 2379566; 591635, 2379543; 591613, 2379538; 591582, 2379527; 591581, 2379526; 591567, 2379517; 591504, 2379497; 591500, 2379496; 591496, 2379496; 591461, 2379506; 591460, 2379506; 591443, 2379503; 591431, 2379499; 591420, 2379498; 591419,

2379498; 591404, 2379488; 591404, 2379487; 591395, 2379475; 591235, 2379445; 591091, 2379479; 591026, 2379482; 590996, 2379497; 590996, 2379498; 590995, 2379498; 590982, 2379496; 590981, 2379496; 590981, 2379495; 590970, 2379488; 590969, 2379488; 590943, 2379463; 590908, 2379443; 590883, 2379429; 590832, 2379413; 590808, 2379409; 590790, 2379408; 590721, 2379404; 590699, 2379398; 590698, 2379398; 590669, 2379385; 590668, 2379384; 590641, 2379362; 590534, 2379339; 590525, 2379340; 590514, 2379339; 590479,

2379340; 590478, 2379340; 590462, 2379334; 590444, 2379312; 590415, 2379277; 590396, 2379264; 590308, 2379227; 590232, 2379203; 590191, 2379191; 590187, 2379189; 590056, 2379149; 589821, 2379079; 589613, 2379066; 589594, 2379063; 589406, 2379168; 589408, 2379201; 589491, 2379323; 589582, 2379471; 589578, 2379631; 589630, 2379784; 589747, 2379845; 589991, 2379862; 590282, 2379879; 590739, 2379888; 591022, 2379897; 591330, 2379866; 591565, 2379871; 591800, 2379892; 591878,

2379858; 591896, 2379718; return to starting point.

(ii) **Note:** Map 59 follows:



(60) Oahu 4—*Hesperomannia arbuscula*—a (596 ha; 1,472 ac)

(i) Unit consists of the following 289 boundary points: Start at 583882, 2381544; 583799, 2381556; 583764, 2381564; 583747, 2381571; 583730, 2381588; 583709, 2381612; 583707, 2381614; 583694, 2381639; 583685, 2381655; 583672, 2381685; 583659, 2381711; 583652, 2381731; 583651, 2381742; 583651, 2381757; 583651, 2381773; 583651, 2381789; 583651, 2381805; 583651, 2381806; 583649, 2381820; 583644, 2381847; 583642, 2381874; 583639, 2381896; 583638,

2381897; 583634, 2381907; 583631, 2381919; 583629, 2381934; 583630, 2381951; 583633, 2381969; 583638, 2381979; 583645, 2381993; 583645, 2381994; 583649, 2382013; 583649, 2382018; 583648, 2382029; 583647, 2382030; 583641, 2382045; 583640, 2382045; 583626, 2382059; 583610, 2382073; 583590, 2382091; 583570, 2382107; 583561, 2382120; 583552, 2382135; 583546, 2382153; 583536, 2382180; 583529, 2382214; 583523, 2382238; 583523, 2382239; 583518, 2382254; 583517, 2382264; 583517, 2382276; 583518, 2382287; 583521, 2382299; 583528, 2382305; 583535,

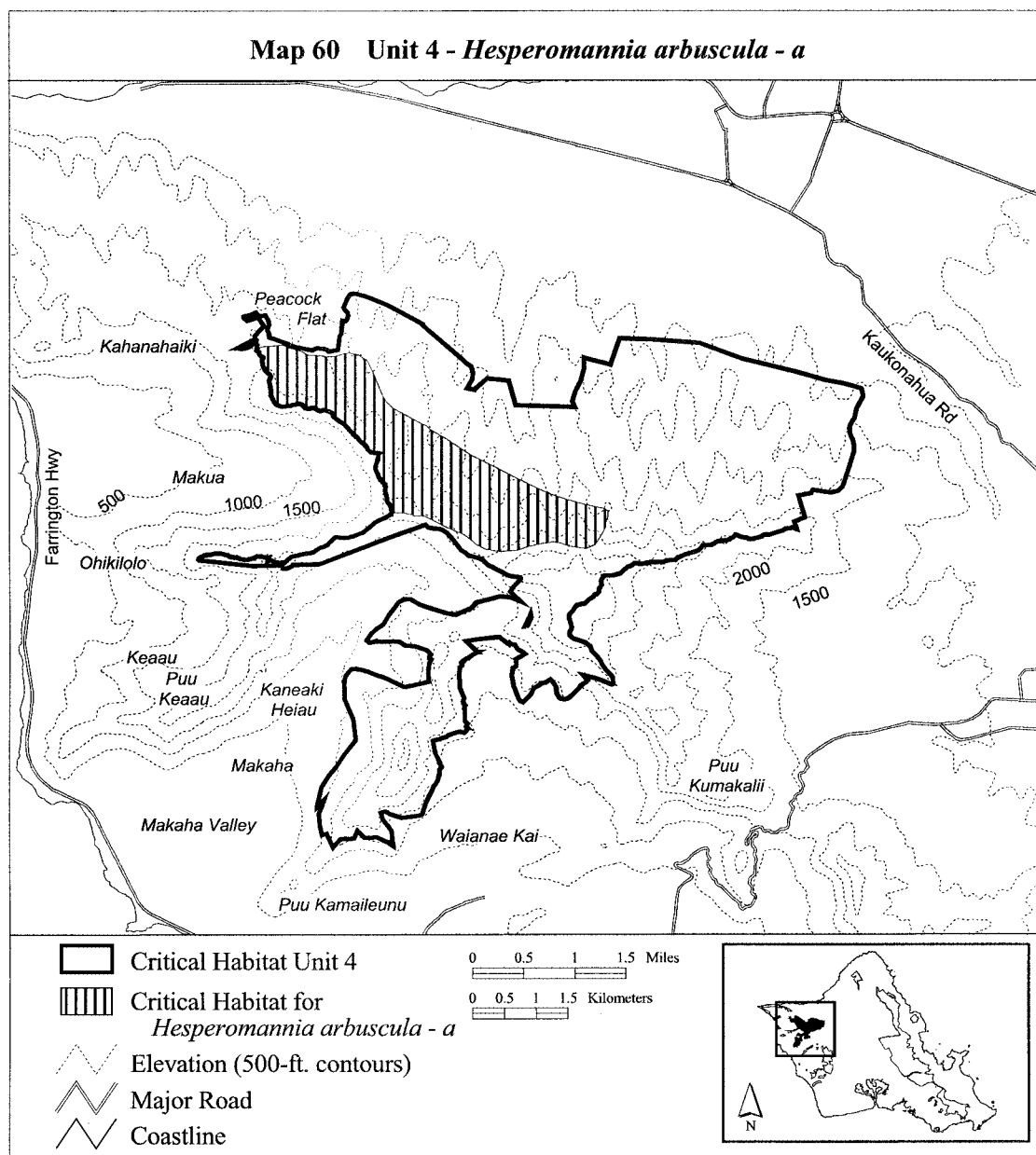
2382312; 583535, 2382313; 583535, 2382319; 583531, 2382326; 583523, 2382334; 583522, 2382334; 583511, 2382337; 583498, 2382345; 583497, 2382345; 583486, 2382351; 583477, 2382362; 583474, 2382370; 583475, 2382383; 583475, 2382397; 583474, 2382417; 583474, 2382405; 583469, 2382411; 583468, 2382411; 583457, 2382416; 583443, 2382421; 583435, 2382424; 583430, 2382430; 583429, 2382440; 583430, 2382455; 583530, 2382499; 583719, 2382510; 583836, 2382521; 583970, 2382474; 584145, 2382415; 584247, 2382364; 584328, 2382361; 584536, 2382332; 584605,

2382332; 584700, 2382353; 584802,
2382379; 584893, 2382397; 585046,
2382364; 585105, 2382317; 585166,
2382284; 585261, 2382091; 585407,
2381723; 585483, 2381614; 585582,
2381519; 585800, 2381399; 586026,
2381275; 586114, 2381231; 586157,
2381184; 586363, 2381060; 586369,
2381064; 586802, 2380776; 587167,
2380586; 587495, 2380415; 587717,
2380306; 587957, 2380186; 588030,
2380175; 588030, 2380165; 588198,
2380098; 588318, 2380062; 588573,
2379993; 588781, 2379945; 588886,
2379923; 588955, 2379880; 588955,
2379792; 588918, 2379690; 588918,
2379614; 588853, 2379479; 588758,
2379348; 588612, 2379286; 588361,
2379318; 588193, 2379370; 588087,
2379391; 588007, 2379374; 588007,
2379373; 588003, 2379372; 587989,
2379370; 587989, 2379371; 587902,
2379359; 587690, 2379311; 587556,
2379264; 587271, 2379235; 587035,
2379271; 586892, 2379348; 586783,
2379435; 586688, 2379512; 586550,
2379559; 586437, 2379614; 586280,
2379697; 586098, 2379788; 585985,
2379810; 585898, 2379803; 585876,
2379829; 585716, 2379850; 585588,
2379850; 585557, 2379890; 585558,
2379891; 585558, 2379892; 585557,
2379892; 585548, 2379922; 585550,
2379928; 585550, 2379929; 585549,
2379929; 585549, 2379930; 585548,

2379930; 585547, 2379930; 585546,
2379929; 585545, 2379931; 585539,
2379943; 585531, 2379963; 585523,
2379982; 585522, 2379982; 585511,
2380001; 585509, 2380004; 585504,
2380029; 585480, 2380063; 585478,
2380071; 585475, 2380089; 585476,
2380103; 585474, 2380125; 585474,
2380128; 585472, 2380137; 585468,
2380149; 585465, 2380160; 585461,
2380173; 585457, 2380185; 585456,
2380203; 585456, 2380223; 585459,
2380252; 585459, 2380269; 585456,
2380281; 585451, 2380295; 585443,
2380310; 585430, 2380325; 585430,
2380326; 585408, 2380344; 585400,
2380353; 585402, 2380382; 585445,
2380413; 585391, 2380375; 585350,
2380434; 585342, 2380452; 585330,
2380478; 585322, 2380497; 585318,
2380512; 585308, 2380533; 585299,
2380553; 585297, 2380570; 585300,
2380580; 585303, 2380592; 585309,
2380613; 585312, 2380624; 585355,
2380732; 585356, 2380787; 585348,
2380789; 585348, 2380790; 585344,
2380798; 585344, 2380799; 585338,
2380802; 585329, 2380804; 585328,
2380804; 585308, 2380806; 585279,
2380811; 585252, 2380816; 585222,
2380825; 585208, 2380833; 585194,
2380847; 585183, 2380863; 585167,
2380888; 585157, 2380904; 585138,
2380929; 585119, 2380952; 585119,
2380953; 585107, 2380962; 585106,

2380963; 585034, 2381030; 585027,
2381040; 585011, 2381059; 584993,
2381074; 584993, 2381075; 584973,
2381090; 584955, 2381103; 584937,
2381120; 584923, 2381137; 584905,
2381157; 584891, 2381175; 584867,
2381205; 584852, 2381221; 584844,
2381230; 584843, 2381230; 584813,
2381261; 584796, 2381273; 584778,
2381284; 584774, 2381287; 584751,
2381303; 584728, 2381318; 584715,
2381325; 584706, 2381333; 584641,
2381428; 584624, 2381434; 584618,
2381442; 584617, 2381442; 584601,
2381452; 584581, 2381462; 584562,
2381467; 584539, 2381475; 584519,
2381483; 584494, 2381489; 584478,
2381486; 584461, 2381479; 584415,
2381486; 584386, 2381492; 584383,
2381494; 584357, 2381507; 584350,
2381511; 584325, 2381523; 584324,
2381523; 584310, 2381528; 584309,
2381528; 584291, 2381527; 584290,
2381527; 584281, 2381521; 584275,
2381516; 584273, 2381515; 584269,
2381515; 584174, 2381559; 584160,
2381560; 584150, 2381572; 584130,
2381584; 584129, 2381584; 584104,
2381586; 584065, 2381583; 584021,
2381575; 583992, 2381567; 583957,
2381557; 583934, 2381555; 583897,
2381549; return to starting point.

(ii) **Note:** Map 60 follows:



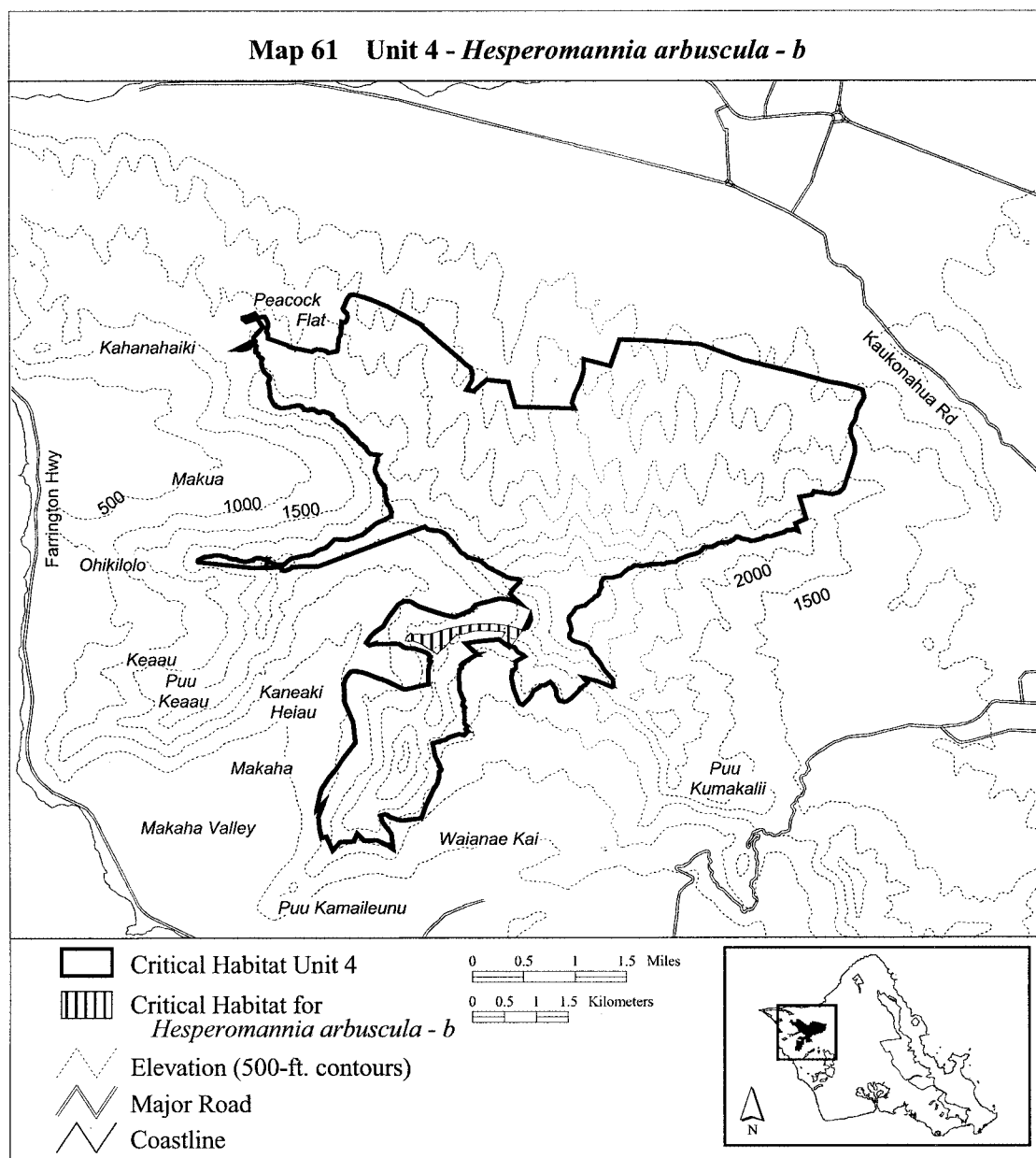
(61) Oahu 4—*Hesperomannia arbuscula*—b (31 ha; 78 ac)

(i) Unit consists of the following 35 boundary points: Start at 585893, 2377968; 586006, 2377974; 586069, 2377958; 586208, 2377978; 586416, 2378047; 586624, 2378090; 586810,

2378123; 586965, 2378130; 587150, 2378130; 587336, 2378110; 587498, 2378077; 587620, 2378030; 587622, 2378022; 587460, 2377788; 587277, 2377877; 587356, 2378000; 587078, 2378018; 586882, 2378021; 586704, 2377975; 586578, 2377945; 586471, 2377850; 586396, 2377759; 586327,

2377703; 586274, 2377650; 586237, 2377680; 586168, 2377720; 586098, 2377766; 586046, 2377796; 585966, 2377839; 585910, 2377855; 585847, 2377852; 585788, 2377855; 585778, 2377865; 585801, 2377911; 585864, 2377981; return to starting point.

(ii) **Note:** Map 61 follows:



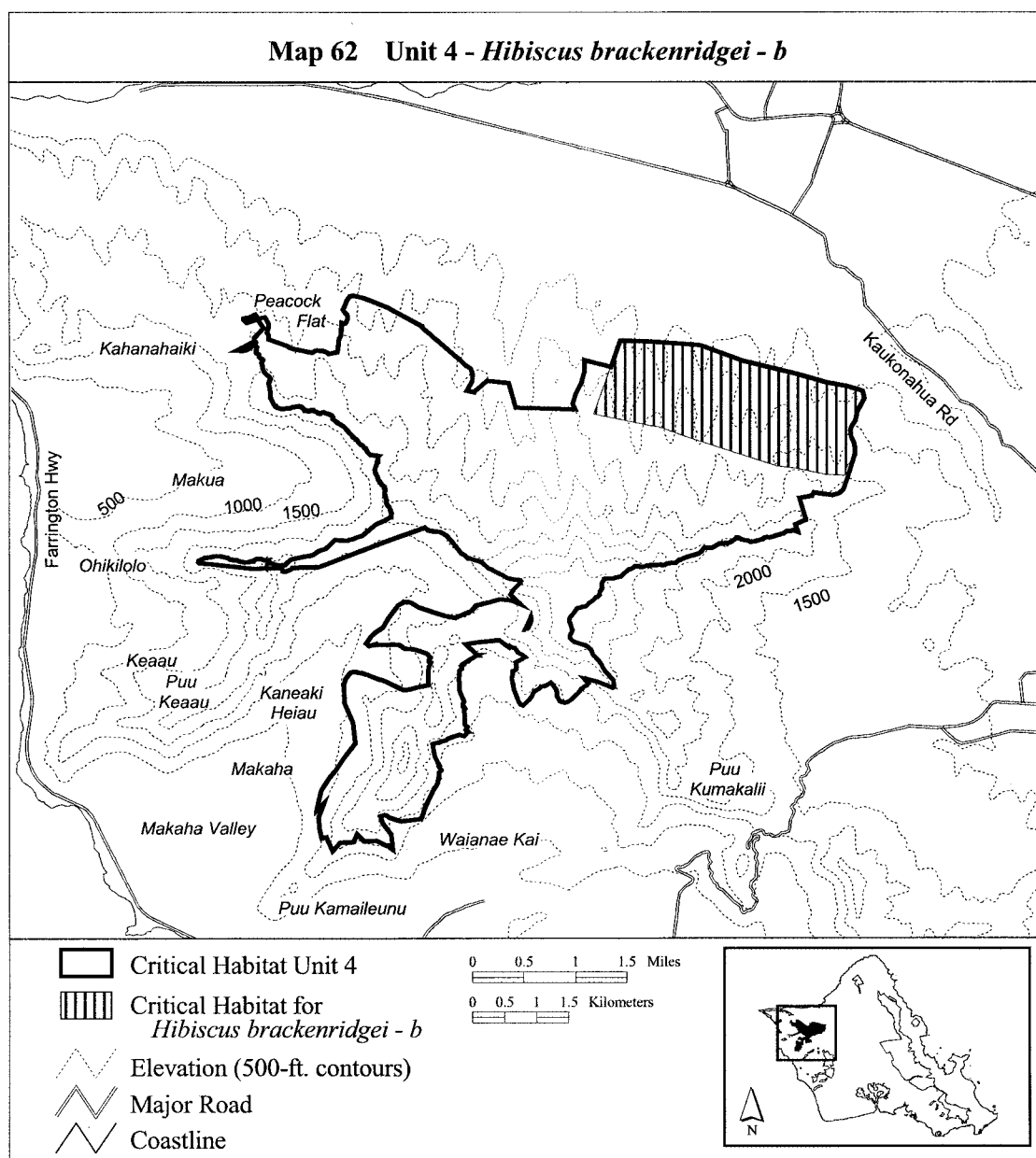
(62) Oahu 4—*Hibiscus brackenridgei*—b
(560 ha; 1,385 ac)

(i) Unit consists of the following 35 boundary points: Start at 590390, 2382551; 591054, 2382306; 591908, 2382094; 592162, 2382021; 592395, 2381959; 592679, 2381908; 592850,

2381861; 592959, 2381825; 592985, 2381706; 592917, 2381592; 592871, 2381504; 592845, 2381364; 592788, 2381266; 592762, 2381188; 592757, 2381116; 592819, 2381017; 592840, 2380924; 592840, 2380826; 592793, 2380717; 592731, 2380650; 592695, 2380562; 592705, 2380520; 592679,

2380479; 592596, 2380489; 592389, 2380495; 592219, 2380531; 591908, 2380598; 591618, 2380639; 591380, 2380707; 590226, 2381090; 589766, 2381250; 589585, 2381276; 588725, 2381459; 589141, 2382625; 589622, 2382606; return to starting point.

(ii) **Note:** Map 62 follows:



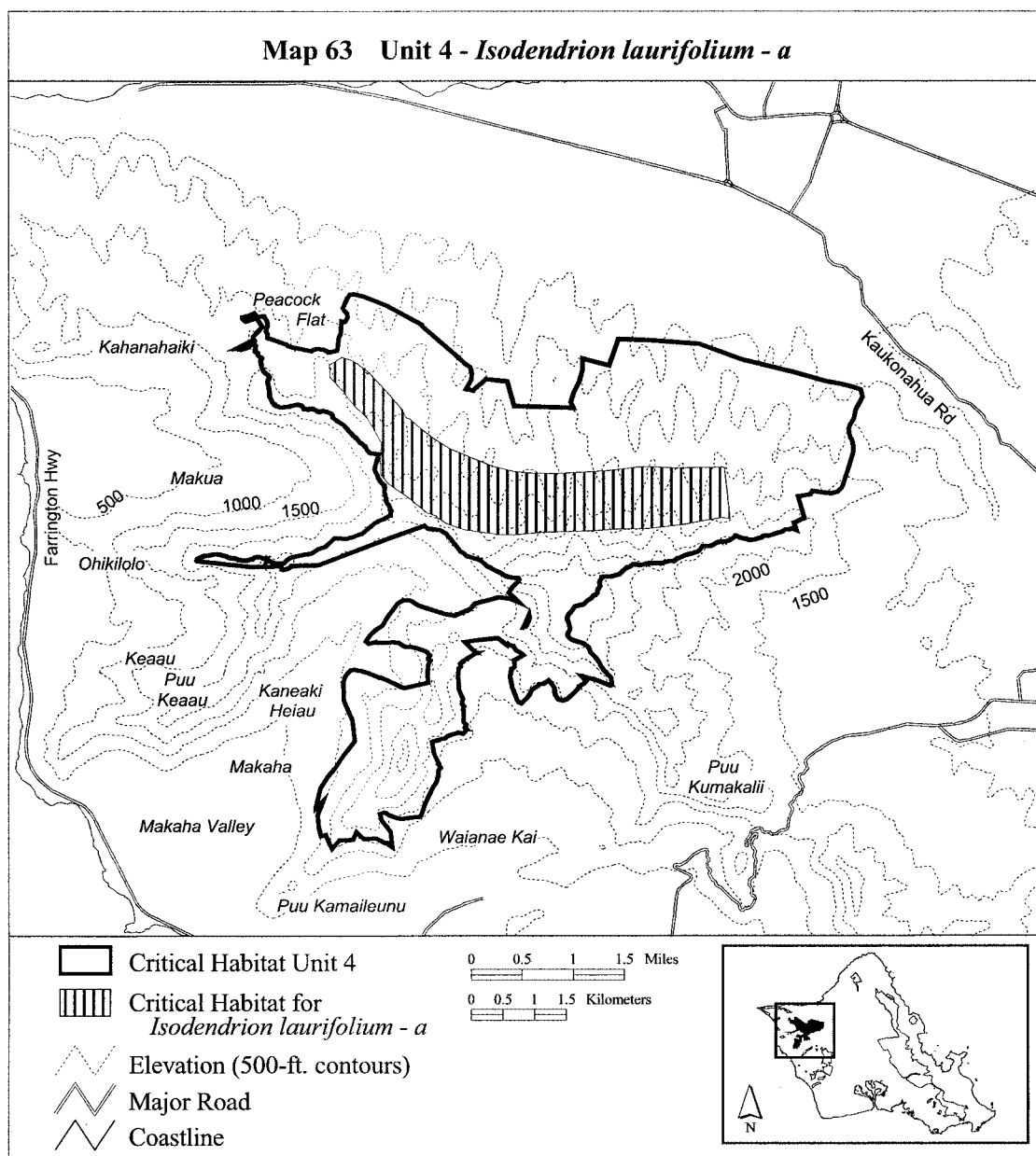
(63) Oahu 4—*Isodendron laurifolium*—a (617 ha; 1,524 ac)

(i) Unit consists of the following 54 boundary points: Start at 586829, 2380741; 587186, 2380602; 587492, 2380524; 587782, 2380496; 588189, 2380491; 588963, 2380535; 589515, 2380602; 590027, 2380585; 590807, 2380591; 590891, 2379772; 590779, 2379788; 590445, 2379738; 590172, 2379677; 589854, 2379644; 589620,

2379616; 589408, 2379605; 589163, 2379610; 588728, 2379577; 588300, 2379566; 587959, 2379554; 587541, 2379515; 587268, 2379521; 586934, 2379566; 586716, 2379599; 586449, 2379694; 586276, 2379794; 586280, 2379814; 586137, 2379866; 585947, 2380006; 585830, 2380112; 585708, 2380201; 585546, 2380307; 585396, 2380474; 585385, 2380708; 585402, 2380981; 585302, 2381154; 585179,

2381382; 584973, 2381583; 584795, 2381811; 584594, 2382029; 584589, 2382213; 584789, 2382330; 584962, 2382280; 585073, 2382201; 585179, 2382129; 585307, 2381990; 585469, 2381817; 585625, 2381639; 585731, 2381505; 585798, 2381382; 585848, 2381366; 585965, 2381260; 586249, 2381037; 586489, 2380892; return to starting point.

(ii) **Note:** Map 63 follows:



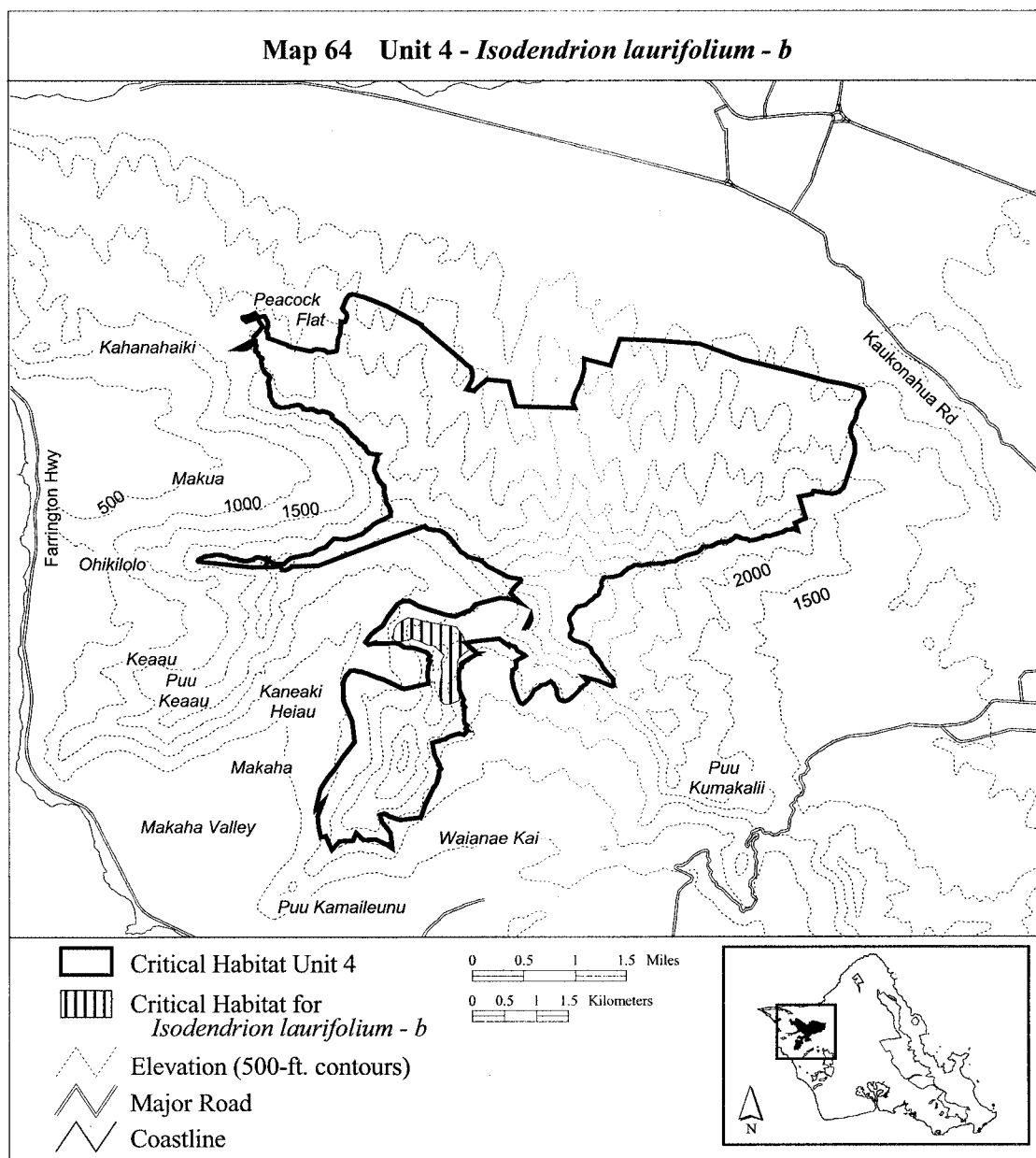
(64) Oahu 4—*Isodendron laurifolium*—
b (62 ha; 154 ac)

(i) Unit consists of the following 43
boundary points: Start at 586591,
2378074; 586586, 2378057; 586673,
2377968; 586668, 2377967; 586669,
2377967; 586771, 2377694; 586772,
2377693; 586771, 2377693; 586772,
2377690; 586750, 2377686; 586684,

2377637; 586618, 2377556; 586598,
2377498; 586591, 2377359; 586626,
2377192; 586622, 2377072; 586637,
2376972; 586637, 2376914; 586571,
2376879; 586479, 2376848; 586401,
2376848; 586331, 2376898; 586316,
2377018; 586328, 2377169; 586355,
2377339; 586339, 2377529; 586399,
2377621; 586326, 2377693; 586326,

2377694; 586235, 2377769; 586138,
2377784; 586014, 2377846; 585875,
2377885; 585782, 2377854; 585662,
2377827; 585573, 2377904; 585597,
2377935; 585612, 2378036; 585658,
2378121; 585743, 2378171; 585836,
2378217; 585948, 2378198; 586088,
2378152; return to starting point.

(ii) **Note:** Map 64 follows:



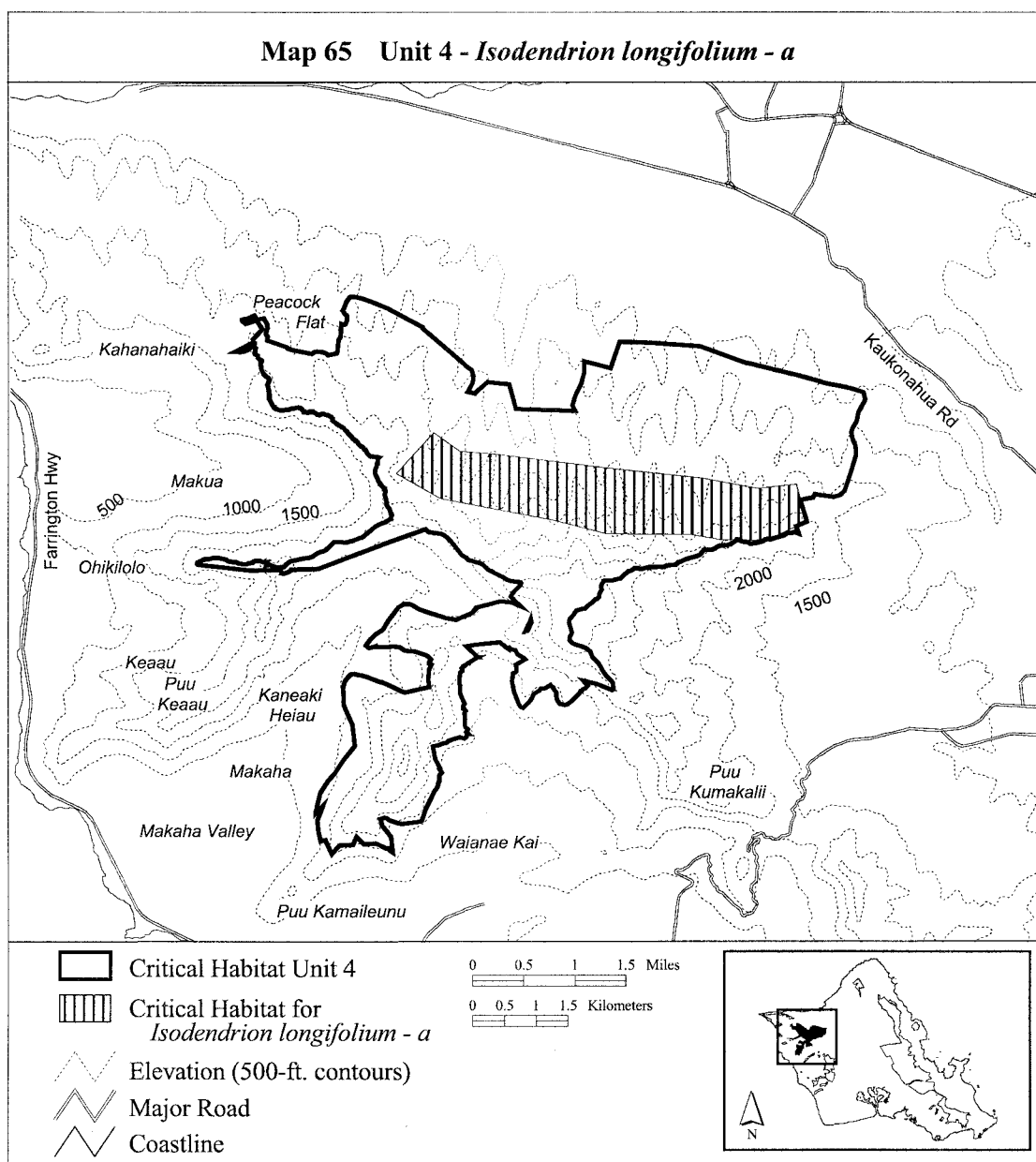
(65) Oahu 4—*Isodendron longifolium*—a (552 ha; 1,363 ac)

(i) Unit consists of the following 18 boundary points: Start at 585636, 2380541; 586214, 2381188; 586627,

2380899; 587191, 2380857; 589008, 2380623; 590425, 2380472; 591292, 2380307; 591898, 2380376; 592063, 2379784; 591609, 2379563; 591251, 2379481; 590987, 2379504; 590755,

2379495; 590246, 2379577; 588938, 2379591; 588086, 2379811; 586764, 2380059; 586323, 2380142; return to starting point.

(ii) **Note:** Map 65 follows:



(66) Oahu 4—*Labordia cyrtandrae*—a
(161 ha; 397 ac)

(i) Area consists of the following 114 boundary points: Start at 588702,

2378502; 588659, 2378471; 588616,
2378430; 588583, 2378413; 588562,
2378406; 588530, 2378399; 588483,
2378388; 588466, 2378385; 588465,
2378385; 588458, 2378380; 588394,
2378294; 588360, 2378255; 588348,
2378235; 588348, 2378234; 588343,
2378210; 588343, 2378187; 588343,
2378186; 588348, 2378161; 588348,
2378160; 588372, 2378097; 588383,
2378041; 588383, 2378026; 588379,
2378003; 588362, 2377972; 588350,
2377942; 588350, 2377941; 588352,
2377924; 588352, 2377923; 588360,
2377904; 588361, 2377903; 588368,

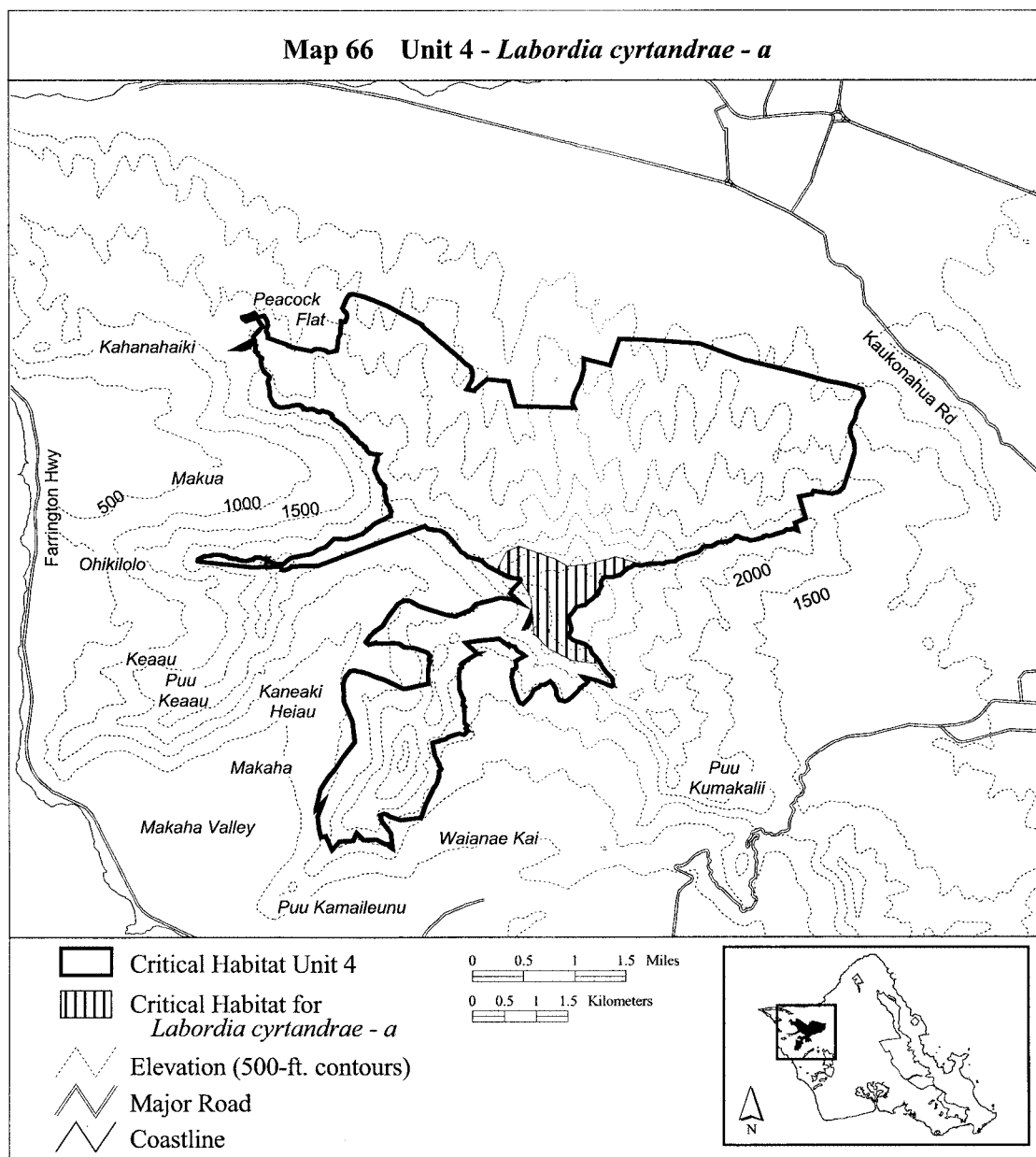
2377893; 588406, 2377863; 588407,
2377863; 588443, 2377848; 588444,
2377848; 588503, 2377826; 588587,
2377797; 588594, 2377793; 588594,
2377792; 588605, 2377788; 588624,
2377778; 588662, 2377749; 588673,
2377733; 588684, 2377709; 588691,
2377689; 588691, 2377688; 588708,
2377657; 588735, 2377626; 588736,
2377625; 588762, 2377601; 588787,
2377570; 588816, 2377534; 588841,
2377494; 588810, 2377480; 588752,
2377488; 588394, 2377535; 588024,
2377726; 587797, 2377965; 587750,
2378526; 587571, 2378836; 587213,
2378967; 5887368, 2379265; 587559,
2379349; 588119, 2379146; 588322,
2379027; 588621, 2379051; 589098,
2379170; 589451, 2379064; 589446,

2379060; 589427, 2379046; 589424,
2379047; 589391, 2379048; 589370,
2379041; 589369, 2379041; 589348,
2379025; 589324, 2379009; 589303,
2379003; 589286, 2379001; 589285,
2379001; 589276, 2378998; 589275,
2378998; 589245, 2378974; 589217,
2378943; 589164, 2378898; 589149,
2378886; 589123, 2378879; 589060,
2378862; 589009, 2378857; 588910,
2378852; 588910, 2378851; 588899,
2378848; 588898, 2378848; 588887,
2378841; 588887, 2378840; 588862,
2378802; 588851, 2378772; 588851,
2378763; 588851, 2378746; 588855,
2378710; 588838, 2378677; 588825,
2378656; 588815, 2378615; 588815,
2378614; 588814, 2378597; 588767,
2378640; 588765, 2378640; 588695,

2378577; 588695, 2378576; 588694,
2378576; 588675, 2378552; 588667,
2378540; 588667, 2378538; 588686,

2378515; 588686, 2378514; return to
starting point.

(ii) **Note:** Map 66 follows:



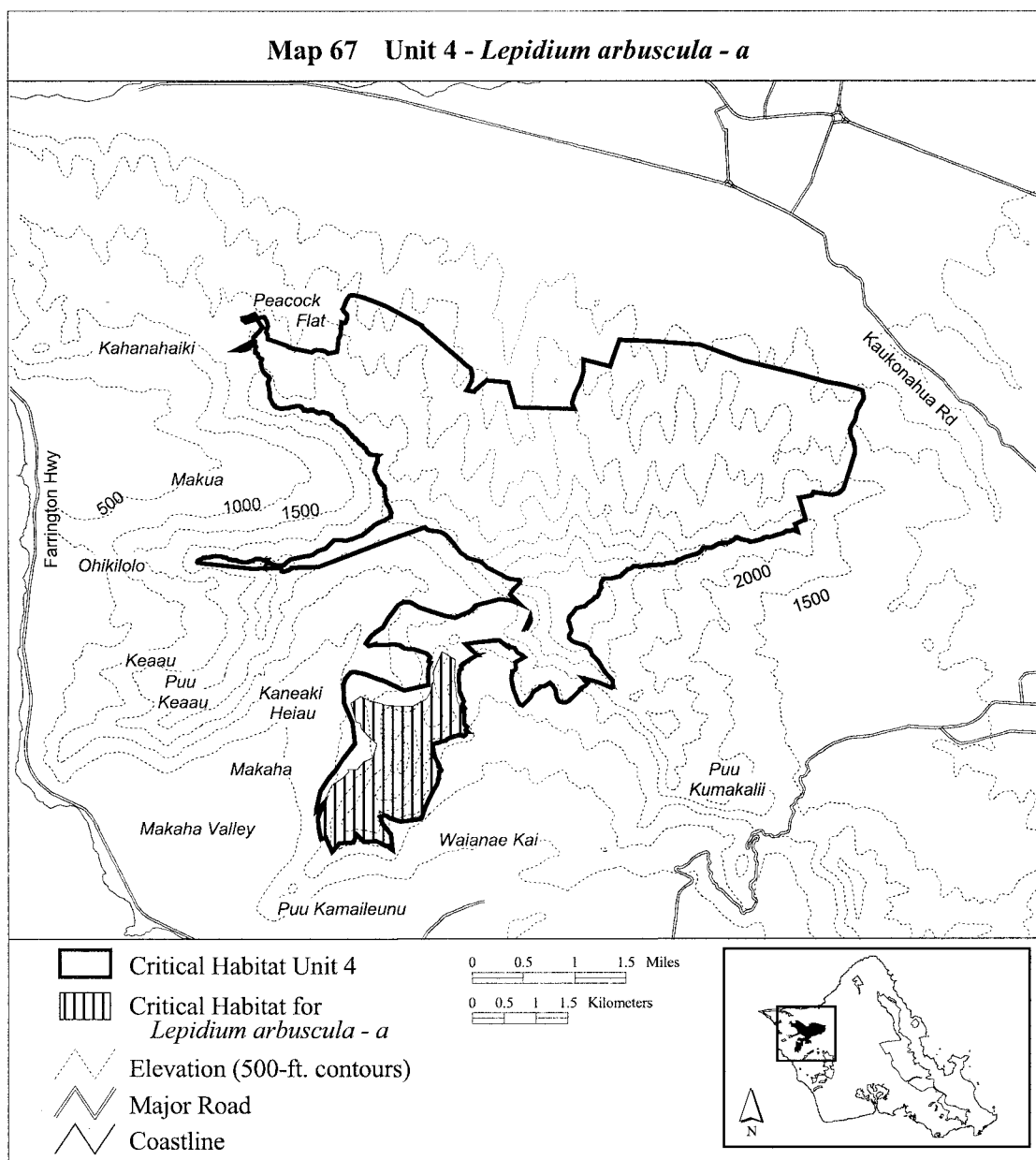
(67) Oahu 4—*Lepidium arbuscula*—a
(329 ha; 813 ac)

(i) Unit consists of the following 59
boundary points: Start at 586225,
2377240; 586216, 2377374; 586354,
2377705; 586562, 2377571; 586551,
2377255; 586596, 2376916; 586697,
2376755; 586711, 2376435; 586714,
2376433; 586693, 2376424; 586634,
2376388; 586634, 2376389; 586454,
2376338; 586201, 2376249; 586302,

2375690; 586018, 2375108; 585683,
2375026; 585530, 2375075; 585368,
2375194; 585411, 2374997; 585551,
2374818; 585578, 2374579; 585526,
2374607; 585510, 2374636; 585509,
2374637; 585467, 2374638; 585325,
2374713; 585128, 2374699; 585020,
2374810; 584964, 2374691; 584752,
2374684; 584633, 2374546; 584531,
2374770; 584459, 2374749; 584427,
2374883; 584408, 2375073; 584493,
2375310; 584635, 2375594; 584777,

2375689; 584901, 2375803; 584881,
2375836; 585037, 2375840; 585035,
2375843; 585138, 2375964; 585193,
2375992; 585198, 2375992; 585198,
2375994; 585270, 2376030; 585337,
2376239; 585100, 2376476; 585072,
2376573; 585003, 2376595; 584927,
2376885; 585083, 2376990; 585195,
2376934; 585508, 2376845; 585899,
2376841; 586115, 2376952; 586157,
2377037; return to starting point.

(ii) **Note:** Map 67 follows:



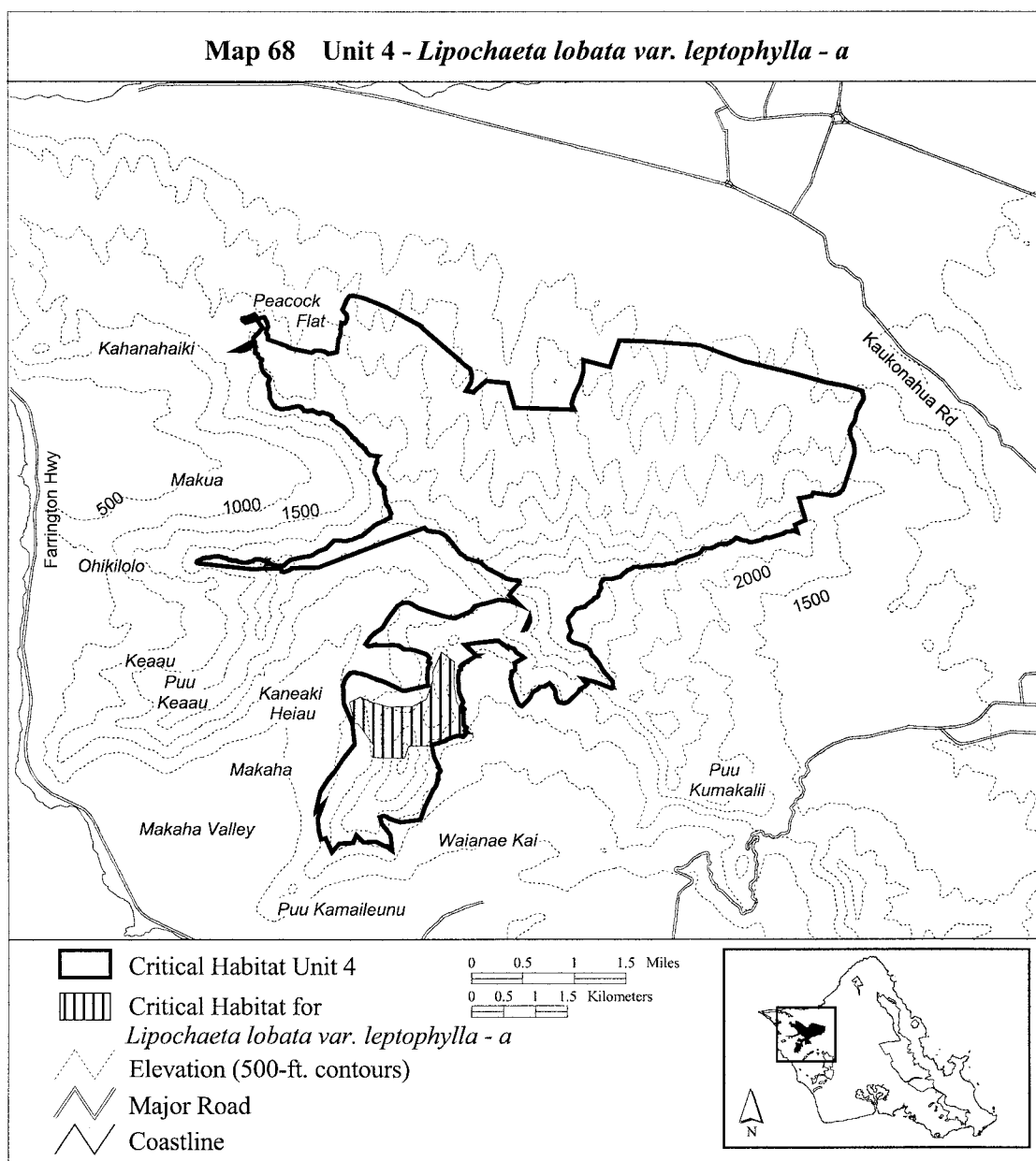
(68) Oahu 4—*Lipochaeta lobata* var. *leptophylla*—a (139 ha; 344 ac)

(i) Unit consists of the following 23 boundary points: Start at 586225, 2377399; 586356, 2377699; 586563,

2377545; 586548, 2377345; 586548, 2377199; 586594, 2376915; 586702, 2376738; 586702, 2376422; 586187, 2376230; 585840, 2376222; 585779, 2376030; 585271, 2376038; 585289, 2376232; 585094, 2376499; 585056,

2376568; 584986, 2376584; 584909, 2376907; 585079, 2376992; 585240, 2376922; 585525, 2376838; 585910, 2376845; 586117, 2376953; 586225, 2377253; return to starting point.

(ii) **Note:** Map 68 follows:



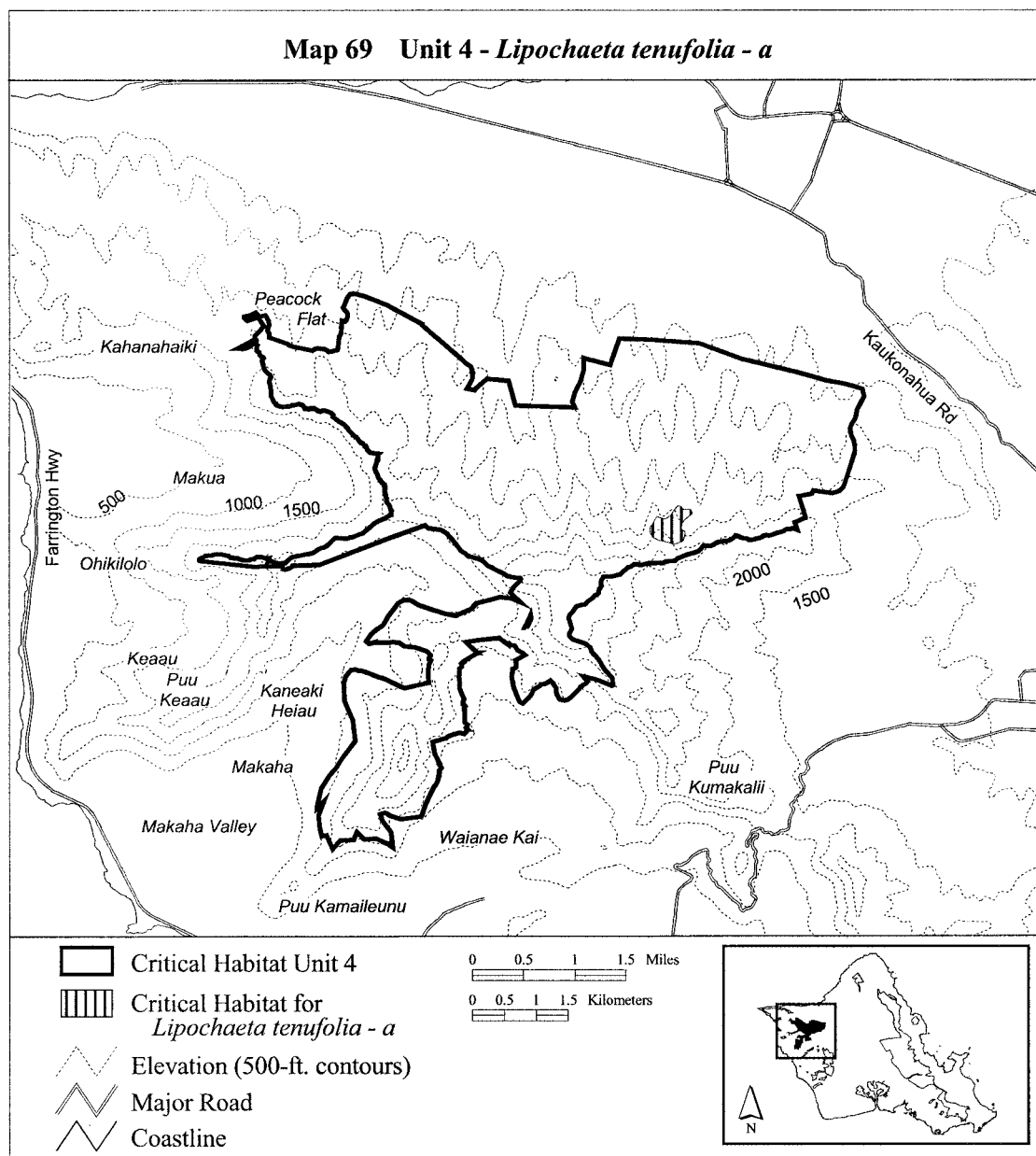
(69) Oahu 4—*Lipochaeta tenuifolia*—a
(23 ha; 57 ac)

(i) Unit consists of the following 32 boundary points: Start at 590120, 2379962; 590149, 2379920; 590199, 2379920; 590266, 2379920; 590282, 2379874; 590282, 2379849; 590241,

2379812; 590179, 2379750; 590133, 2379692; 590125, 2379629; 590125, 2379596; 590174, 2379559; 590179, 2379513; 590145, 2379422; 590120, 2379401; 589996, 2379359; 589929, 2379388; 589850, 2379413; 589755, 2379426; 589713, 2379451; 589684, 2379463; 589643, 2379521; 589622,

2379584; 589630, 2379633; 589676, 2379700; 589705, 2379750; 589738, 2379795; 589825, 2379775; 589879, 2379762; 589958, 2379829; 590004, 2379899; 590071, 2379974; return to starting point.

(ii) **Note:** Map 69 follows:



(70) Oahu 4—*Lipochaeta tenuifolia*—b
(67 ha; 166 ac)

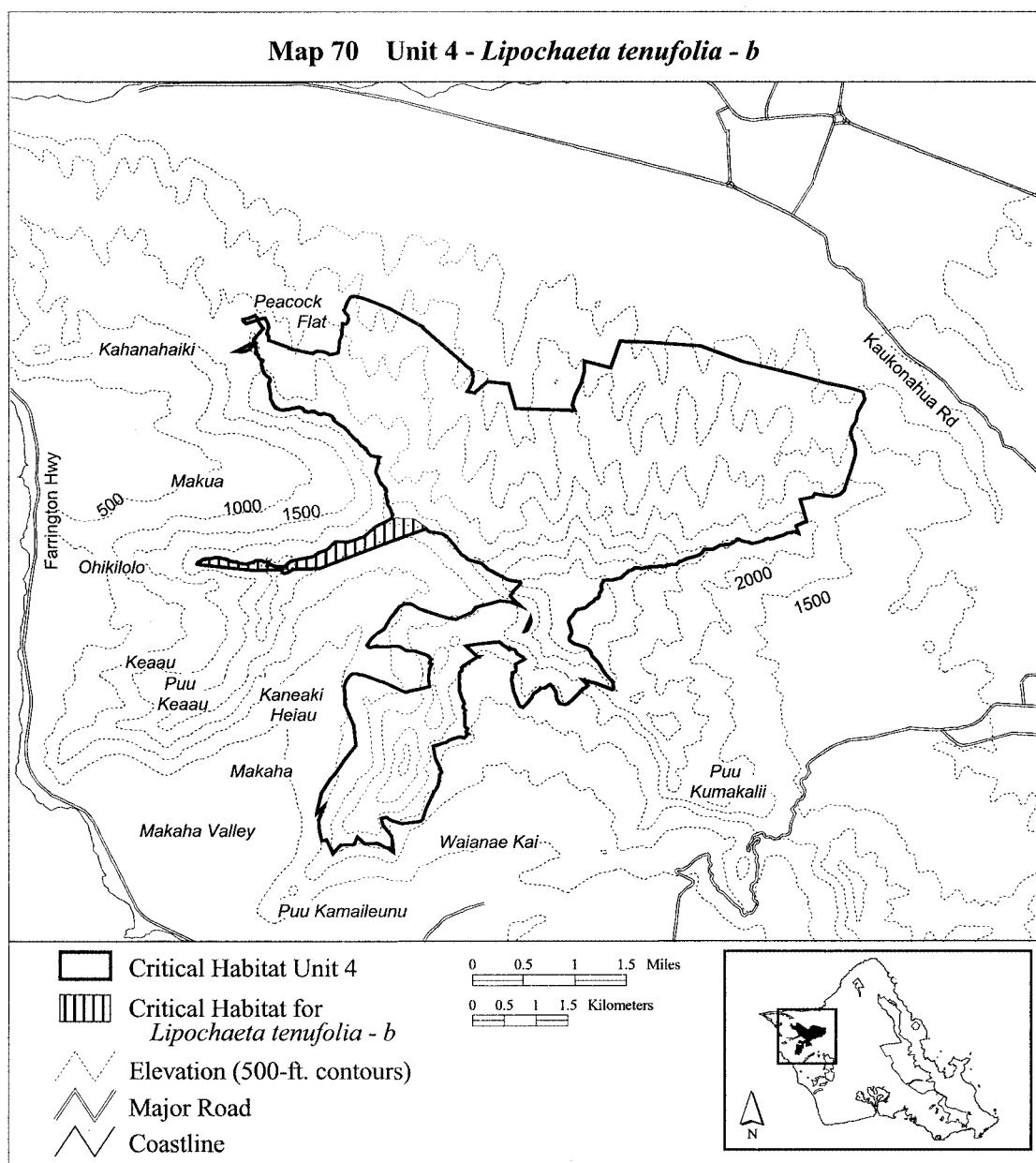
(i) Unit consists of the following 109 boundary points: Start at 585469, 2379778; 585483, 2379787; 585584, 2379839; 585909, 2379825; 586116, 2379671; 585534, 2379466; 584413, 2379036; 583371, 2379010; 582537, 2379101; 582523, 2379101; 582515, 2379109; 582526, 2379139; 582546, 2379144; 582547, 2379144; 582564, 2379150; 582564, 2379151; 582581, 2379157; 582597, 2379168; 582617, 2379177; 582636, 2379181; 582645, 2379183; 582656, 2379186; 582691, 2379191; 582710, 2379193; 582711, 2379193; 582744, 2379201; 582784, 2379205; 582809, 2379208; 582836, 2379208; 582861, 2379206; 582900,

2379202; 582936, 2379193; 582962, 2379185; 582982, 2379177; 583001, 2379166; 583017, 2379157; 583018, 2379156; 583040, 2379150; 583041, 2379150; 583062, 2379147; 583082, 2379147; 583108, 2379146; 583127, 2379141; 583141, 2379136; 583154, 2379131; 583179, 2379122; 583180, 2379122; 583211, 2379117; 583238, 2379112; 583261, 2379110; 583287, 2379111; 583322, 2379118; 583349, 2379124; 583371, 2379128; 583383, 2379131; 583383, 2379132; 583400, 2379142; 583418, 2379154; 583435, 2379162; 583448, 2379164; 583469, 2379167; 583485, 2379166; 583506, 2379162; 583534, 2379155; 583557, 2379148; 583558, 2379148; 583595, 2379145; 583614, 2379141; 583615,

2379141; 583629, 2379145; 583616, 2379115; 583606, 2379089; 583606, 2379088; 583606, 2379087; 583607, 2379087; 583608, 2379087; 583666, 2379100; 583695, 2379080; 583725, 2379070; 583726, 2379070; 583796, 2379060; 583876, 2379060; 583877, 2379060; 583877, 2379061; 583947, 2379131; 583977, 2379150; 584086, 2379180; 584226, 2379210; 584256, 2379210; 584326, 2379230; 584327, 2379230; 584417, 2379290; 584526, 2379330; 584527, 2379330; 584557, 2379350; 584657, 2379450; 584667, 2379460; 584836, 2379450; 584866, 2379450; 584867, 2379450; 584906, 2379470; 584936, 2379470; 584937, 2379470; 585107, 2379540; 585217, 2379630; 585297, 2379700; 585357,

2379740; 585456, 2379770; 585457,
2379770; return to starting point.

(ii) **Note:** Map 70 follows:



(71) Oahu 4—*Lipochaeta tenuifolia*—c
(118 ha; 293 ac)

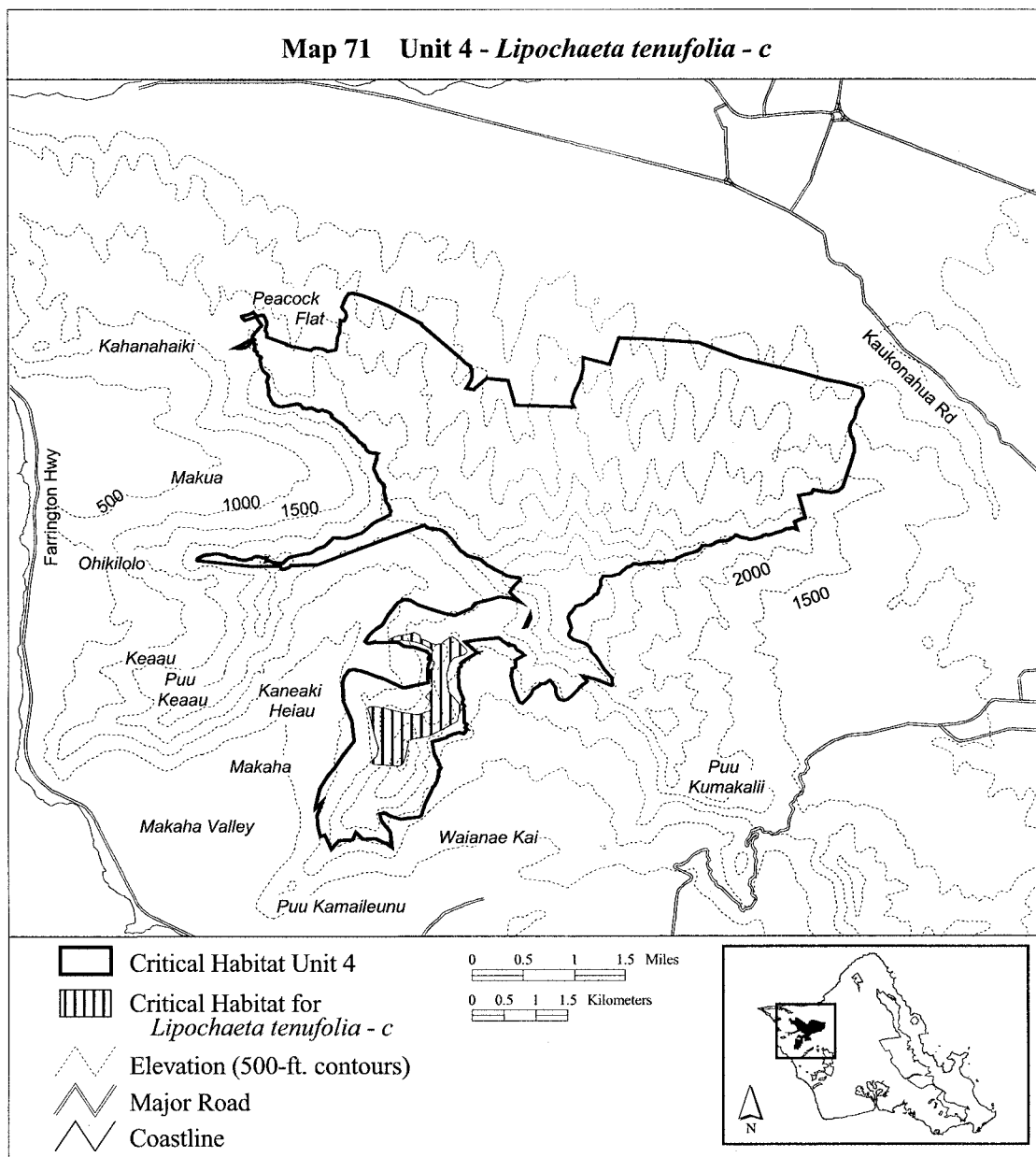
(i) Unit consists of the following 91 boundary points: Start at 585520, 2377857; 585626, 2377904; 585688, 2377923; 585760, 2377926; 585878, 2377957; 585925, 2377973; 586009, 2377932; 586030, 2377867; 586114, 2377836; 586202, 2377789; 586279, 2377773; 586351, 2377792; 586410, 2377839; 586460, 2377873; 586522, 2377898; 586575, 2377867; 586644, 2377801; 586737, 2377721; 586762, 2377661; 586737, 2377624; 586665, 2377602; 586553, 2377565; 586476,

2377468; 586435, 2377310; 586441, 2377163; 586469, 2377017; 586544, 2376942; 586641, 2376824; 586647, 2376715; 586616, 2376637; 586603, 2376569; 586376, 2376435; 586155, 2376332; 585946, 2376292; 585844, 2376264; 585816, 2376133; 585785, 2375981; 585788, 2375981; 585782, 2375967; 585781, 2375962; 585753, 2375890; 585710, 2375865; 585579, 2375868; 585448, 2375875; 585321, 2375881; 585274, 2375890; 585259, 2375909; 585262, 2375946; 585290, 2375968; 585343, 2376012; 585364, 2376096; 585364, 2376155; 585376,

2376121; 585336, 2376248; 585274, 2376485; 585237, 2376665; 585206, 2376756; 585218, 2376793; 585287, 2376799; 585448, 2376777; 585710, 2376712; 585981, 2376665; 586058, 2376690; 586171, 2376724; 586183, 2376768; 586177, 2376843; 586161, 2376896; 586105, 2376945; 586127, 2376973; 586167, 2377020; 586208, 2377064; 586205, 2377148; 586177, 2377241; 586143, 2377266; 586130, 2377310; 586139, 2377350; 586211, 2377406; 586239, 2377447; 586230, 2377509; 586205, 2377518; 586143, 2377543; 586143, 2377559; 586164,

2377593; 586205, 2377640; 586205,
2377689; 586161, 2377730; 586099,
2377767; 585974, 2377811; 585862,

2377829; 585747, 2377842; 585539,
2377833; return to starting point.
(ii) **Note:** Map 71 follows:



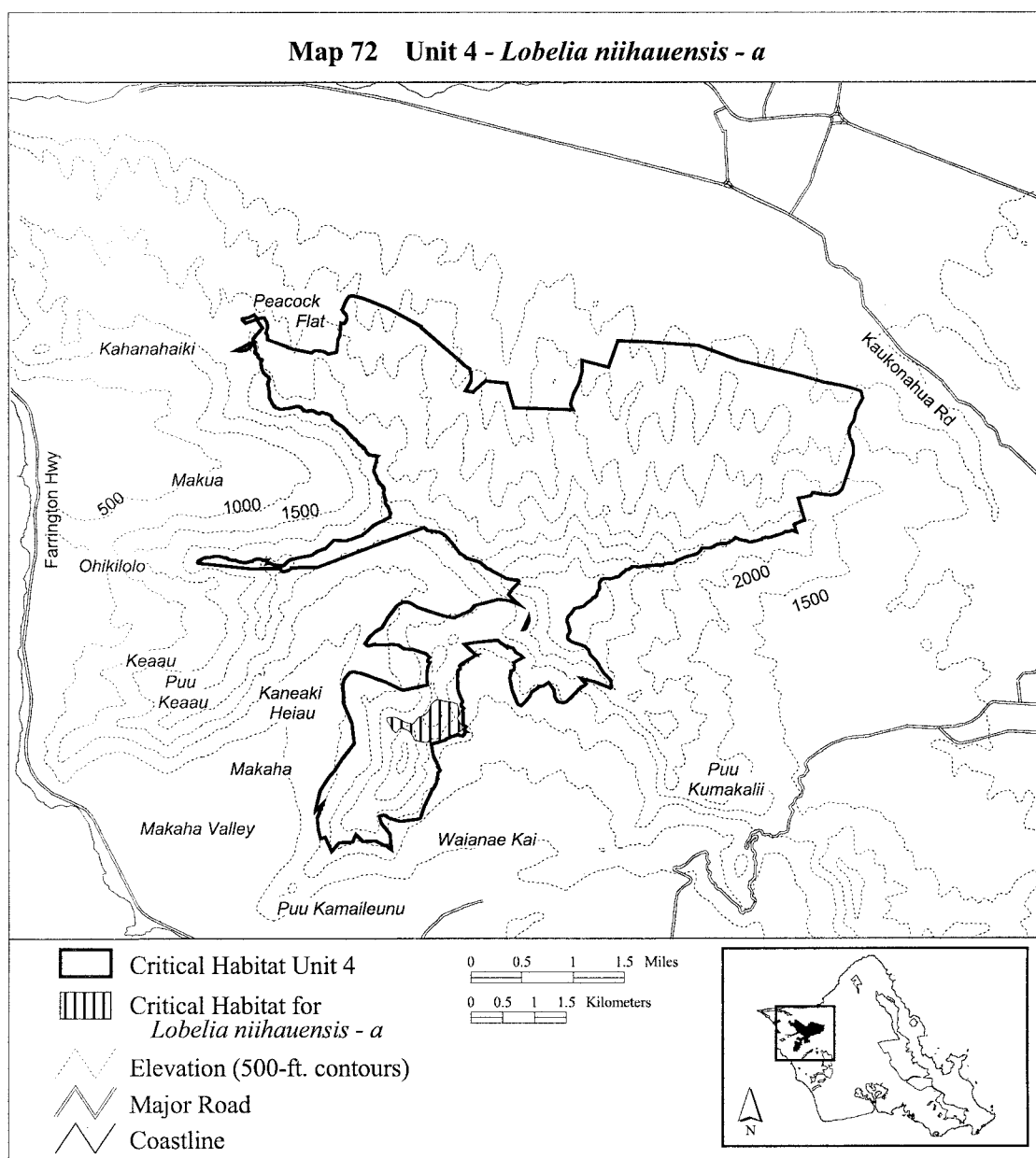
(72) Oahu 4—*Lobelia niihauensis*—a (44 ha; 108 ac)

(i) Unit consists of the following 40 boundary points: Start at 585508, 2376654; 585626, 2376661; 585701, 2376636; 585802, 2376586; 585905, 2376557; 585934, 2376575; 586016, 2376675; 586091, 2376696; 586156,

2376757; 586174, 2376804; 586199, 2376865; 586267, 2376926; 586295, 2376943; 586353, 2376936; 586399, 2376922; 586510, 2376911; 586618, 2376875; 586657, 2376714; 586618, 2376646; 586678, 2376550; 586696, 2376475; 586653, 2376432; 586542, 2376385; 586453, 2376339; 586328, 2376278; 586220, 2376267; 586045,

2376278; 585934, 2376313; 585912, 2376367; 585873, 2376432; 585823, 2376467; 585748, 2376492; 585701, 2376475; 585683, 2376449; 585655, 2376407; 585637, 2376424; 585587, 2376464; 585565, 2376528; 585522, 2376586; 585501, 2376621; return to starting point.

(ii) **Note:** Map 72 follows:



(73) Oahu 4—*Mariscus pennatiformis*—a (166 ha; 410 ac)

(i) Unit consists of the following 182

boundary points: Start at 583501, 2382343; 583539, 2382348; 583749, 2382330; 583883, 2382277; 584242, 2382158; 584464, 2382083; 584692, 2382012; 584946, 2381862; 585122, 2381716; 585294, 2381563; 585526, 2381335; 585687, 2381185; 585796, 2381069; 585949, 2380950; 585968, 2380878; 585960, 2380800; 585915, 2380703; 585855, 2380673; 585822, 2380590; 585781, 2380471; 585705, 2380366; 585604, 2380355; 585529, 2380347; 585405, 2380347; 585393, 2380361; 585375, 2380388; 585364, 2380407; 585353, 2380428; 585342, 2380452; 585330, 2380478; 585322,

2380497; 585318, 2380512; 585308, 2380533; 585299, 2380553; 585297, 2380570; 585300, 2380580; 585303, 2380592; 585309, 2380613; 585315, 2380636; 585327, 2380677; 585338, 2380712; 585339, 2380712; 585344, 2380738; 585346, 2380754; 585345, 2380767; 585345, 2380779; 585348, 2380789; 585348, 2380790; 585344, 2380798; 585344, 2380799; 585338, 2380802; 585329, 2380804; 585328, 2380804; 585308, 2380806; 585279, 2380811; 585245, 2380818; 585228, 2380821; 585208, 2380833; 585194, 2380847; 585183, 2380863; 585183, 2380864; 585167, 2380888; 585157, 2380904; 585138, 2380929; 585119, 2380952; 585119, 2380953; 585107, 2380962; 585106, 2380963; 585094,

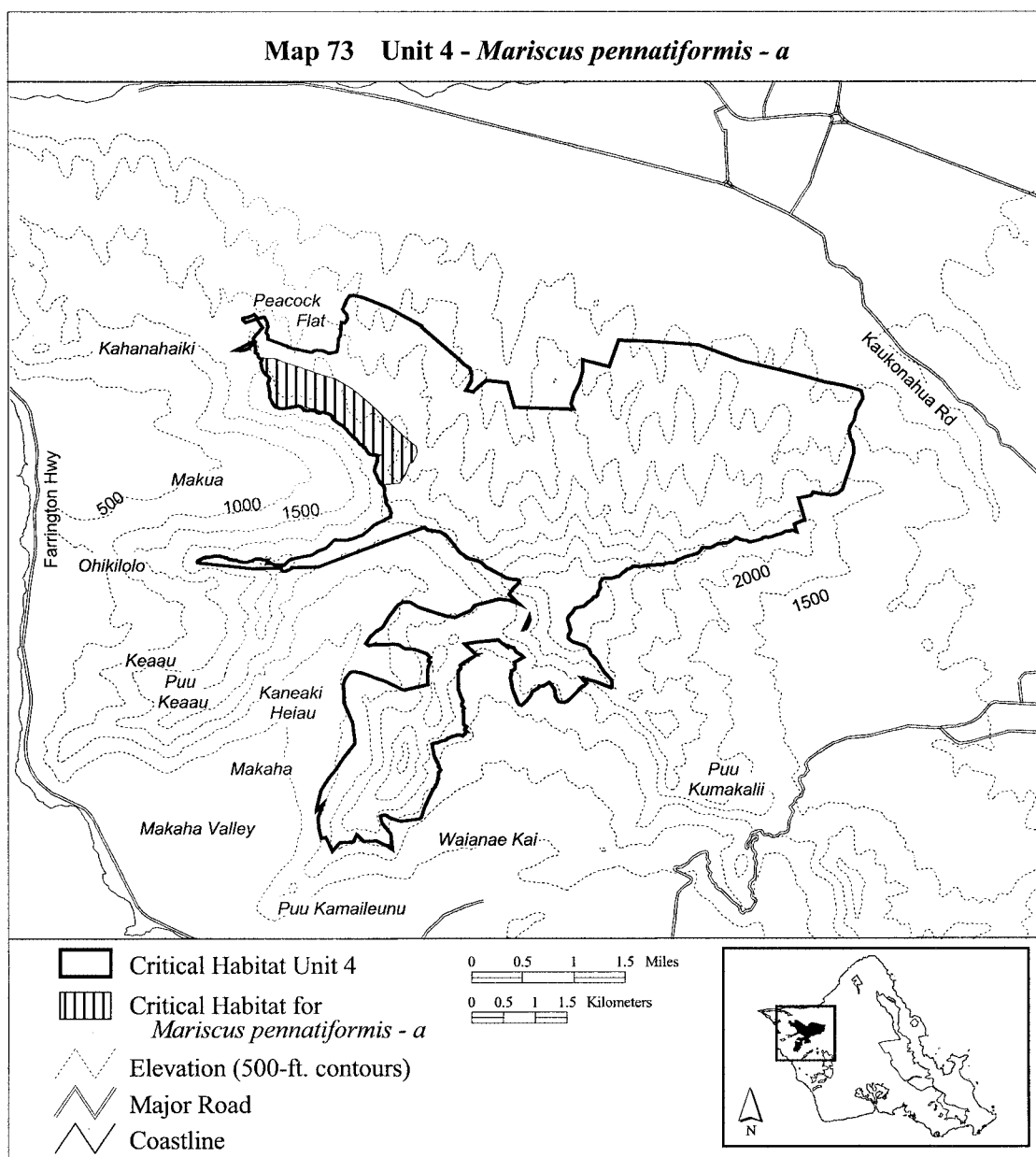
2380968; 585078, 2380975; 585067, 2380980; 585061, 2380987; 585053, 2381000; 585039, 2381021; 585027, 2381040; 585011, 2381059; 584993, 2381074; 584993, 2381075; 584973, 2381090; 584954, 2381104; 584939, 2381117; 584923, 2381137; 584905, 2381157; 584891, 2381175; 584867, 2381205; 584852, 2381221; 584844, 2381230; 584843, 2381230; 584813, 2381261; 584796, 2381273; 584778, 2381284; 584774, 2381287; 584751, 2381303; 584728, 2381318; 584708, 2381329; 584690, 2381345; 584690, 2381346; 584676, 2381356; 584656, 2381369; 584654, 2381370; 584643, 2381382; 584639, 2381394; 584636, 2381408; 584633, 2381420; 584628, 2381430; 584618, 2381442; 584617,

2381442; 584601, 2381452; 584581,
2381462; 584562, 2381467; 584539,
2381475; 584519, 2381483; 584494,
2381489; 584485, 2381487; 584388,
2381533; 584179, 2381574; 584145,
2381575; 584130, 2381584; 584129,
2381584; 584104, 2381586; 584065,
2381583; 584038, 2381578; 584037,
2381578; 583831, 2381548; 583790,
2381574; 583729, 2381589; 583709,
2381612; 583707, 2381614; 583694,
2381639; 583685, 2381655; 583672,
2381685; 583659, 2381711; 583652,
2381731; 583651, 2381742; 583651,

2381757; 583651, 2381773; 583651,
2381789; 583651, 2381805; 583651,
2381806; 583649, 2381820; 583644,
2381847; 583642, 2381874; 583639,
2381896; 583638, 2381897; 583634,
2381907; 583631, 2381919; 583629,
2381934; 583630, 2381951; 583633,
2381969; 583638, 2381979; 583645,
2381993; 583645, 2381994; 583649,
2382013; 583649, 2382018; 583648,
2382029; 583647, 2382030; 583641,
2382045; 583640, 2382175; 583626,
2382059; 583610, 2382073; 583590,
2382091; 583570, 2382107; 583561,

2382120; 583552, 2382135; 583546,
2382153; 583536, 2382180; 583529,
2382214; 583523, 2382238; 583523,
2382239; 583518, 2382254; 583517,
2382264; 583517, 2382276; 583518,
2382287; 583521, 2382299; 583528,
2382305; 583535, 2382312; 583535,
2382313; 583535, 2382319; 583531,
2382326; 583523, 2382334; 583522,
2382334; 583511, 2382337; return to
starting point.

(ii) **Note:** Map 73 follows:



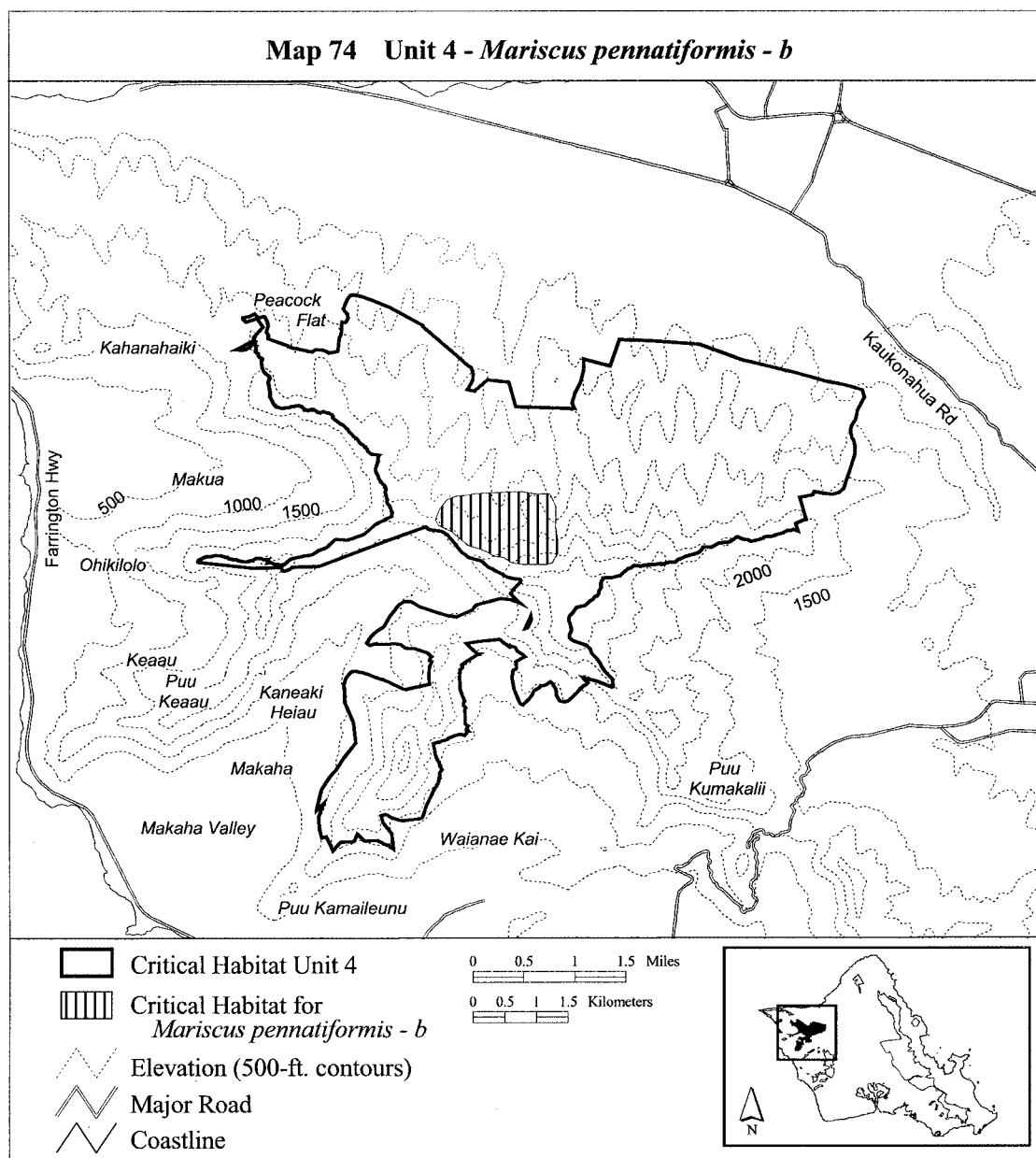
(74) Oahu 4—*Mariscus pennatiformis*—
b (170 ha; 421 ac)

(i) Unit consists of the following 35
boundary points: Start at 588047,
2380182; 588144, 2379979; 588144,
2379793; 588131, 2379665; 588157,
2379510; 588165, 2379390; 588165,

2379280; 588165, 2379231; 588134,
2379169; 588090, 2379090; 587997,
2379063; 587874, 2379063; 587732,
2379068; 587617, 2379059; 587436,
2379094; 587325, 2379169; 587179,
2379192; 587029, 2379276; 586874,
2379329; 586799, 2379342; 586764,
2379364; 586653, 2379452; 586503,

2379581; 586286, 2379678; 586242,
2379771; 586308, 2379948; 586428,
2380089; 586557, 2380147; 586721,
2380160; 586889, 2380186; 587127,
2380200; 587295, 2380208; 587508,
2380222; 587614, 2380222; 587817,
2380178; return to starting point.

(ii) **Note:** Map 74 follows:



(75) Oahu 4—*Melicope pallida*—a (854
ha; 2,111 ac)

(i) Unit consists of the following 60
boundary points: Start at 589777,
2380936; 589797, 2380951; 589984,
2380951; 590370, 2380907; 590625,
2380855; 590896, 2380791; 591007,
2380799; 591152, 2380764; 591657,
2380042; 591778, 2379883; 591708,

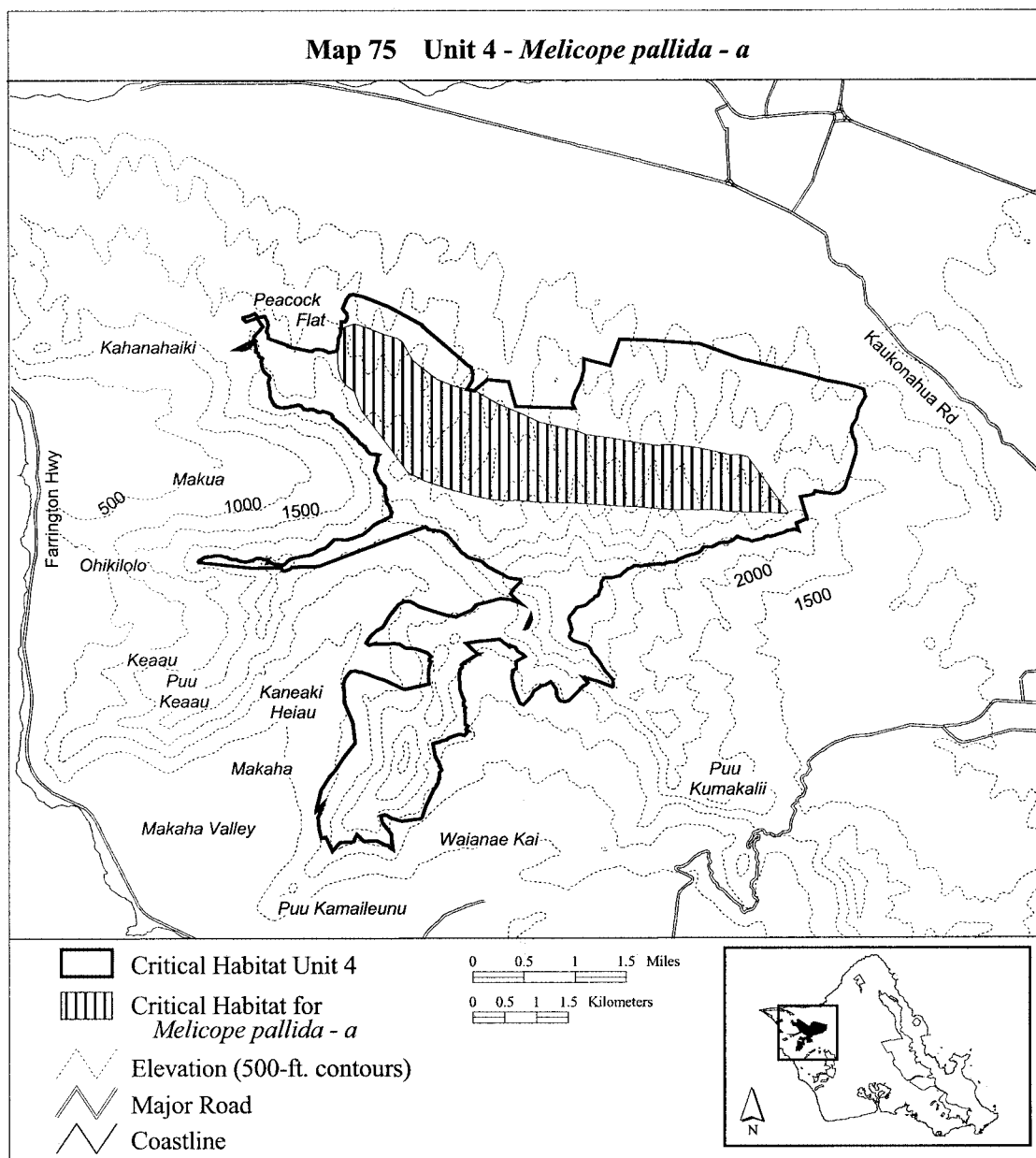
2379867; 591489, 2379879; 590896,
2379887; 590645, 2379923; 590318,
2379927; 589996, 2379927; 589850,
2379946; 589851, 2379932; 589475,
2379972; 589084, 2379988; 588459,
2380033; 587823, 2380058; 587497,
2380083; 587377, 2380073; 587131,
2380093; 586901, 2380138; 586520,
2380233; 586079, 2380388; 585871,

2380488; 585869, 2380479; 585809,
2380534; 585548, 2380889; 585238,
2381315; 585107, 2381481; 585052,
2381586; 584977, 2381806; 584872,
2381891; 584777, 2381997; 584726,
2382157; 584716, 2382428; 584736,
2382653; 584812, 2382818; 584992,
2382873; 585177, 2382808; 585443,
2382708; 585653, 2382648; 585734,

2382583; 585794, 2382473; 585889,
2382302; 586009, 2382202; 586281,
2381985; 586535, 2381886; 586896,

2381796; 587227, 2381611; 587617,
2381441; 587888, 2381320; 588459,
2381180; 588619, 2381120; 589010,

2381065; 589376, 2381000; return to
starting point.
(ii) **Note:** Map 75 follows:



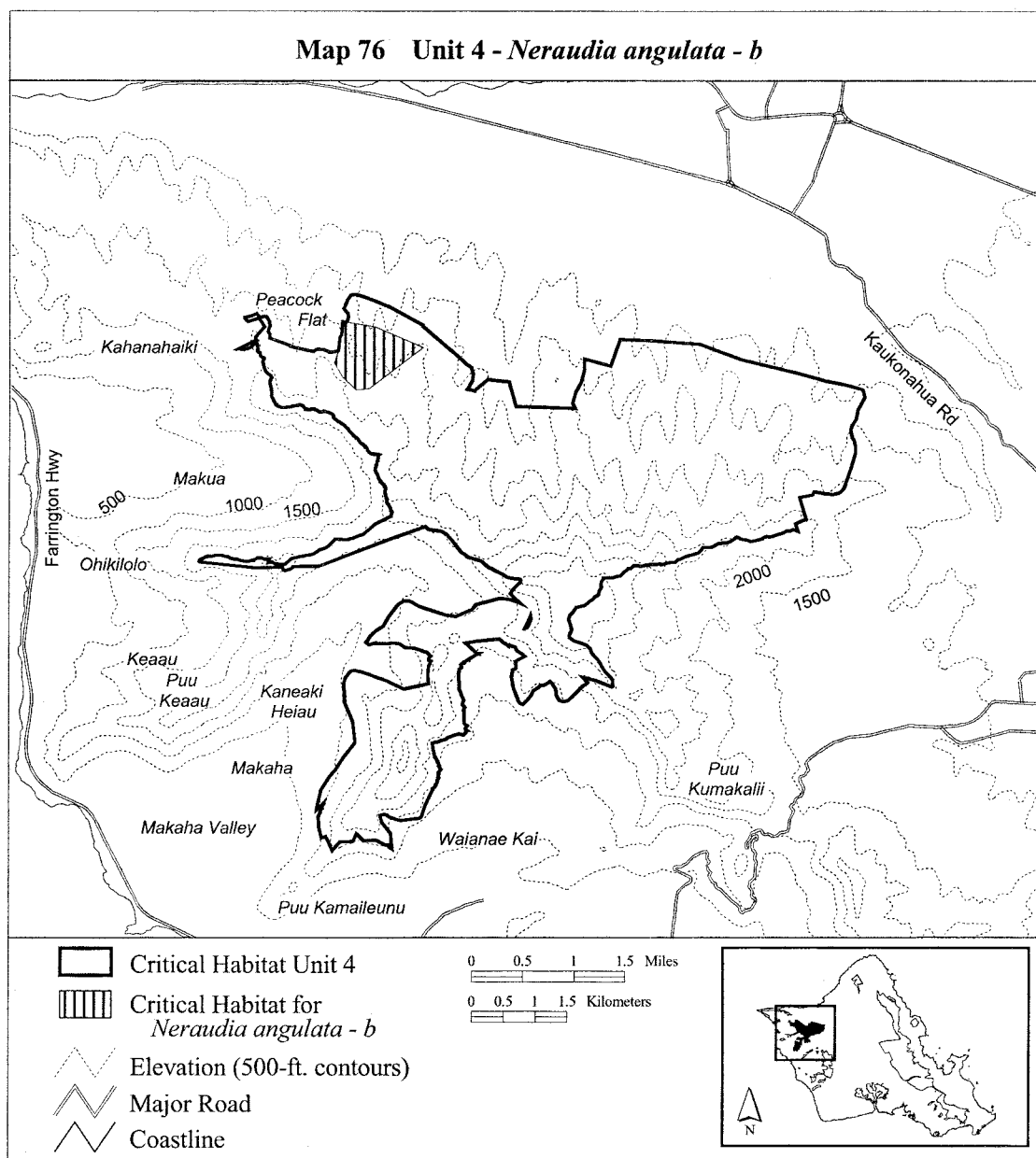
(76) Oahu 4—*Neraudia angulata*—b (90 ha; 222 ac)

(i) Unit consists of the following 8 boundary points: Start at 584778,

2382903; 585296, 2382829; 586055,
2382495; 585203, 2381848; 585000,
2381829; 584778, 2382033; 584648,

2382255; 584740, 2382533; return to
starting point.

(ii) **Note:** Map 76 follows:



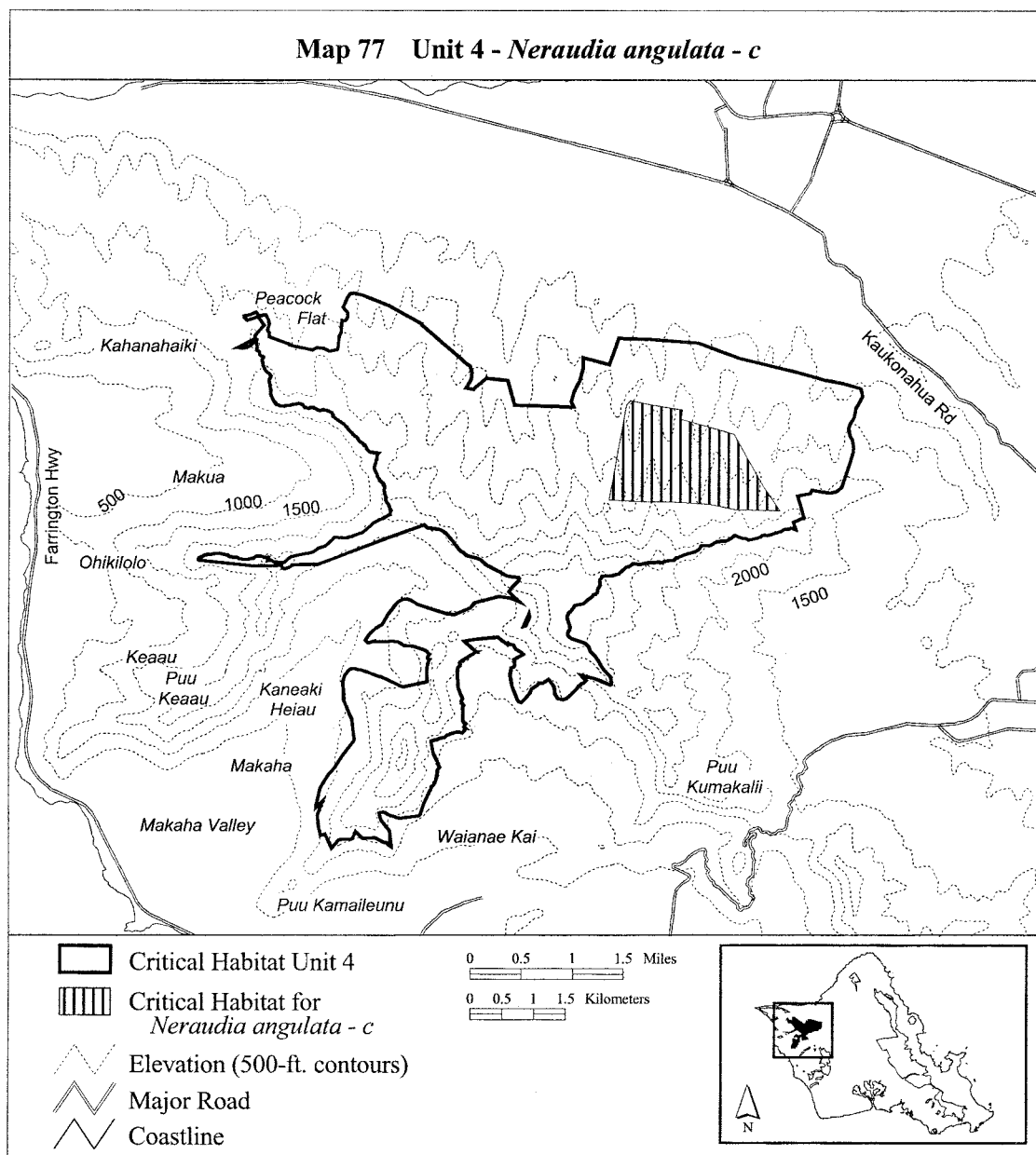
(77) Oahu 4—*Neraudia angulata*—c
(298 ha; 736 ac)

(i) Unit consists of the following 14
boundary points: Start at 590133,

2381342; 590967, 2381106; 591416,
2380304; 591694, 2379888; 590985,
2379908; 590605, 2379986; 590337,
2380011; 589953, 2380039; 589541,
2380039; 588997, 2380062; 589266,

2381566; 589328, 2381633; 589651,
2381572; 590151, 2381490; return to
starting point.

(ii) **Note:** Map 77 follows:



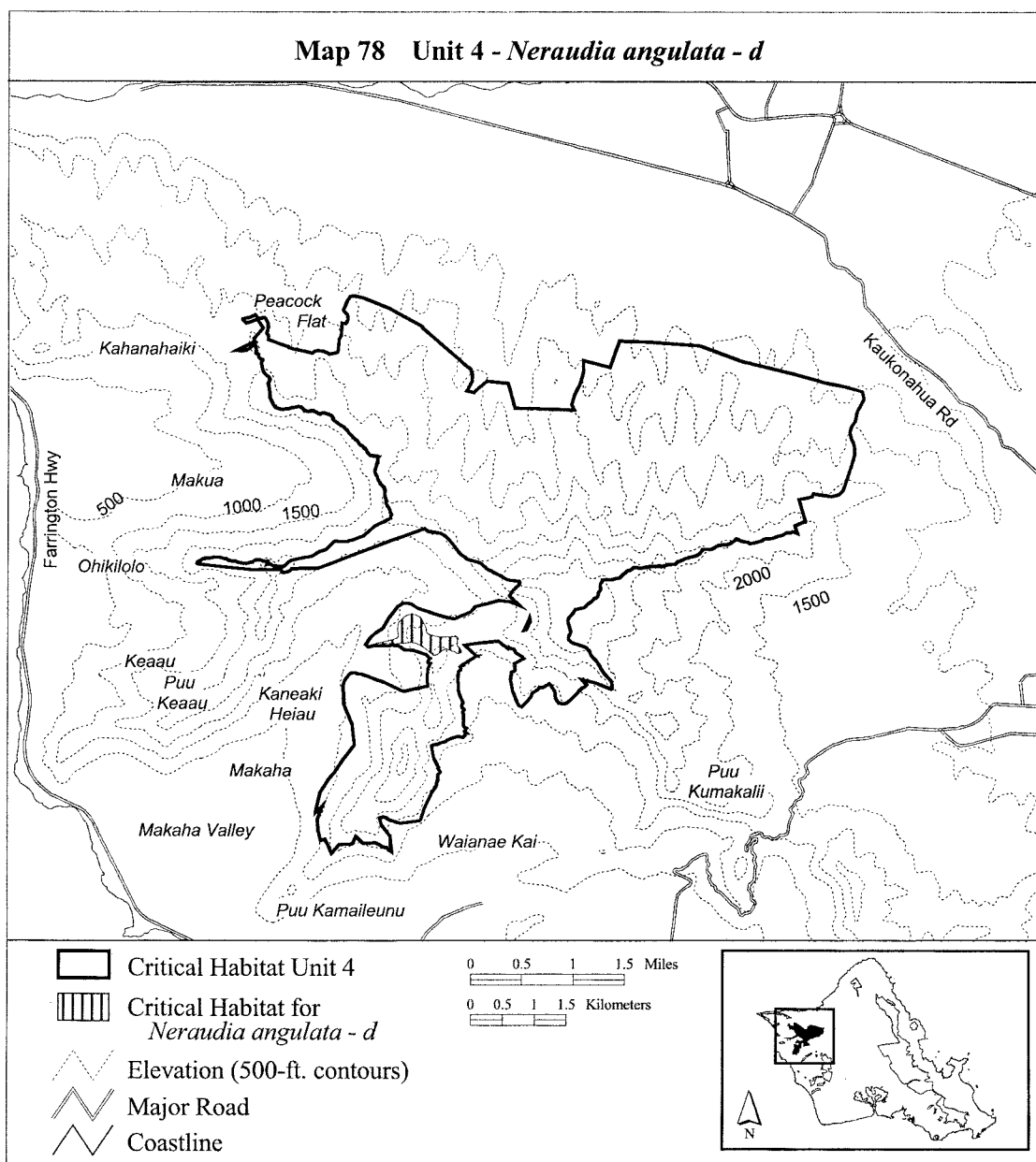
(78) Oahu 4—*Neraudia angulata*—d (33 ha; 81 ac)

(i) Unit consists of the following 54 boundary points: Start at 586062, 2378210; 586099, 2378126; 586119, 2378071; 586119, 2378029; 586159, 2377987; 586297, 2377953; 586383, 2377948; 586497, 2377955; 586574, 2377955; 586606, 2377950; 586606, 2377911; 586603, 2377854; 586603, 2377812; 586628, 2377790; 586653,

2377760; 586668, 2377728; 586660, 2377693; 586618, 2377681; 586569, 2377711; 586502, 2377740; 586421, 2377765; 586381, 2377738; 586339, 2377711; 586299, 2377676; 586255, 2377659; 586215, 2377676; 586159, 2377721; 586104, 2377760; 586067, 2377792; 586170, 2377800; 585986, 2377834; 585941, 2377856; 585865, 2377866; 585795, 2377859; 585736, 2377844; 585627, 2377849; 585504,

2377854; 585368, 2377827; 585321, 2377834; 585333, 2377856; 585373, 2377859; 585511, 2377889; 585623, 2377921; 585672, 2377938; 585677, 2377982; 585667, 2378019; 585657, 2378104; 585657, 2378103; 585682, 2378170; 585724, 2378225; 585793, 2378279; 585889, 2378321; 585954, 2378299; 586030, 2378259; return to starting point.

(ii) **Note:** Map 78 follows:



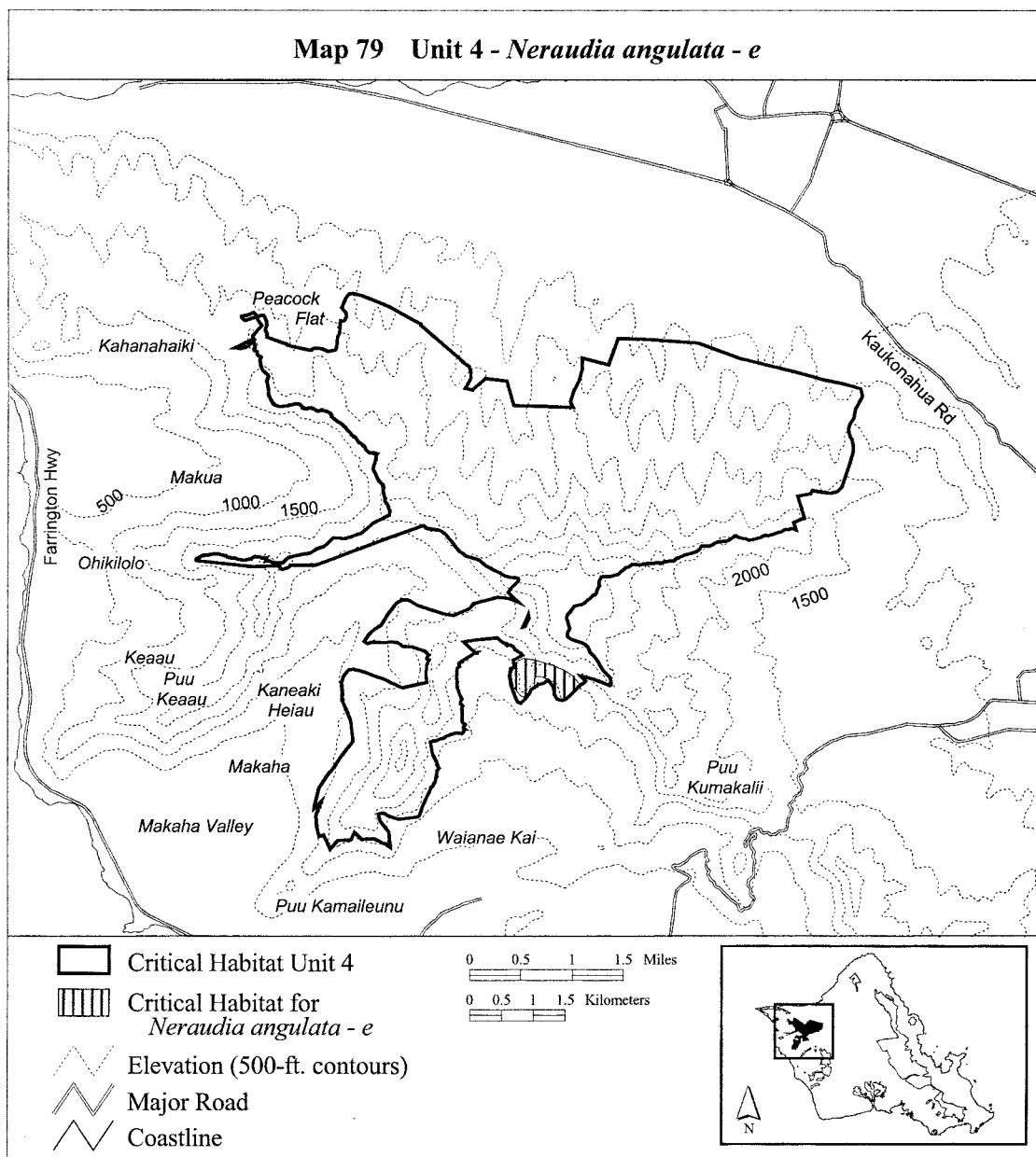
(79) Oahu 4—*Neraudia angulata*—e (40 ha; 98 ac)

(i) Unit consists of the following 36 boundary points: Start at 587733, 2377543; 587811, 2377534; 587910, 2377510; 587991, 2377480; 588125, 2377444; 588215, 2377414; 588302, 2377369; 588425, 2377291; 588473,

2377235; 588539, 2377142; 588500, 2377073; 588041, 2376971; 588335, 2376914; 588275, 2376893; 588194, 2376911; 588152, 2376980; 588137, 2377091; 588080, 2377181; 587991, 2377253; 587925, 2377271; 587847, 2377265; 587841, 2377196; 587832, 2377127; 587781, 2377104; 587727,

2376971; 587670, 2376950; 587625, 2376968; 587574, 2377022; 587508, 2377103; 587475, 2377262; 587475, 2377315; 587493, 2377375; 587520, 2377441; 587547, 2377480; 587592, 2377525; 587673, 2377552; return to starting point.

(ii) **Note:** Map 79 follows:



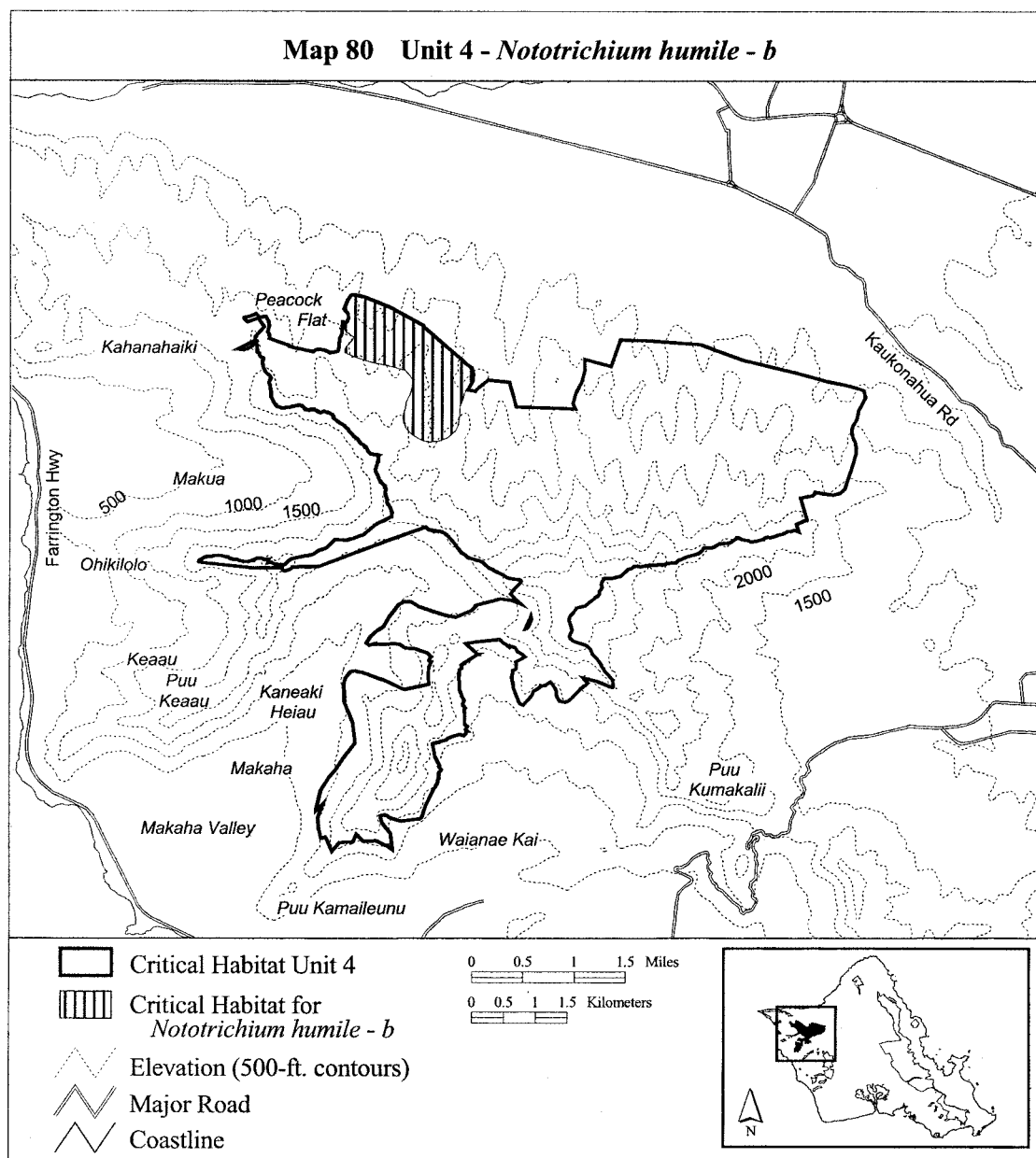
(80) Oahu 4—*Nototrichium humile*—b
(230 ha; 568 ac)

(i) Unit consists of the following 60 boundary points: Start at 586045, 2382855; 586039, 2382820; 586045, 2382834; 586658, 2382294; 586720, 2382235; 586802, 2382184; 586833, 2382084; 586826, 2381980; 586761, 2381863; 586692, 2381770; 586672, 2381688; 586627, 2381574; 586613, 2381419; 586606, 2381330; 586589, 2381251; 586558, 2381192; 586437,

2381085; 586307, 2381023; 586159, 2381010; 586052, 2381030; 585973, 2381058; 585859, 2381137; 585773, 2381237; 585732, 2381333; 585721, 2381406; 585759, 2381536; 585783, 2381629; 585835, 2381746; 585866, 2381870; 585866, 2381994; 585842, 2382049; 585769, 2382137; 585756, 2382142; 585518, 2382211; 585257, 2382266; 584961, 2382349; 584809, 2382424; 584809, 2382462; 584830, 2382504; 584899, 2382583; 584933,

2382617; 584950, 2382652; 584950, 2382672; 584919, 2382693; 584875, 2382721; 584830, 2382741; 584809, 2382793; 584809, 2382844; 584840, 2382910; 584871, 2382975; 584864, 2383037; 584823, 2383068; 584802, 2383113; 584813, 2383154; 584857, 2383264; 584906, 2383326; 584974, 2383330; 585119, 2383295; 585257, 2383244; 585508, 2383141; return to starting point.

(ii) **Note:** Map 80 follows:



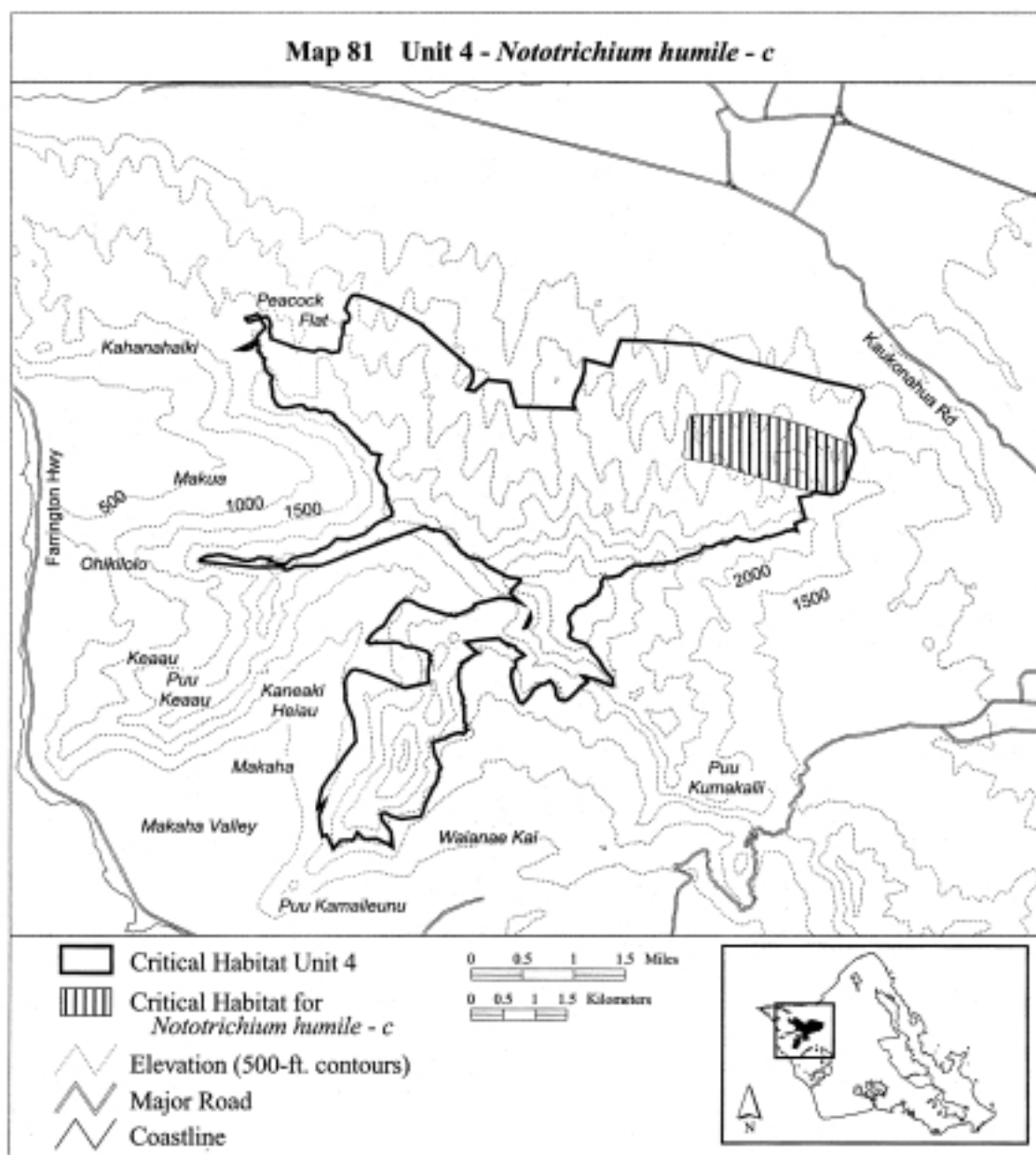
(81) Oahu 4—*Nototrichium humile*—c
(237 ha; 586 ac)

(i) Unit consists of the following 29 boundary points: Start at 590280, 2381435; 591017, 2381472; 591362, 2381456; 591601, 2381407; 591990,

2381289; 592541, 2381079; 592785, 2380977; 592829, 2380868; 592829, 2380803; 592776, 2380617; 592683, 2380333; 592655, 2380260; 592582, 2380195; 592485, 2380175; 592351, 2380187; 592087, 2380232; 591844, 2380300; 591471, 2380398; 591102,

2380519; 590693, 2380657; 590555, 2380677; 590227, 2380722; 590138, 2380750; 590134, 2380815; 590166, 2380937; 590154, 2381139; 590190, 2381221; 590207, 2381322; 590235, 2381423; return to starting point.

(ii) **Note:** Map 81 follows:



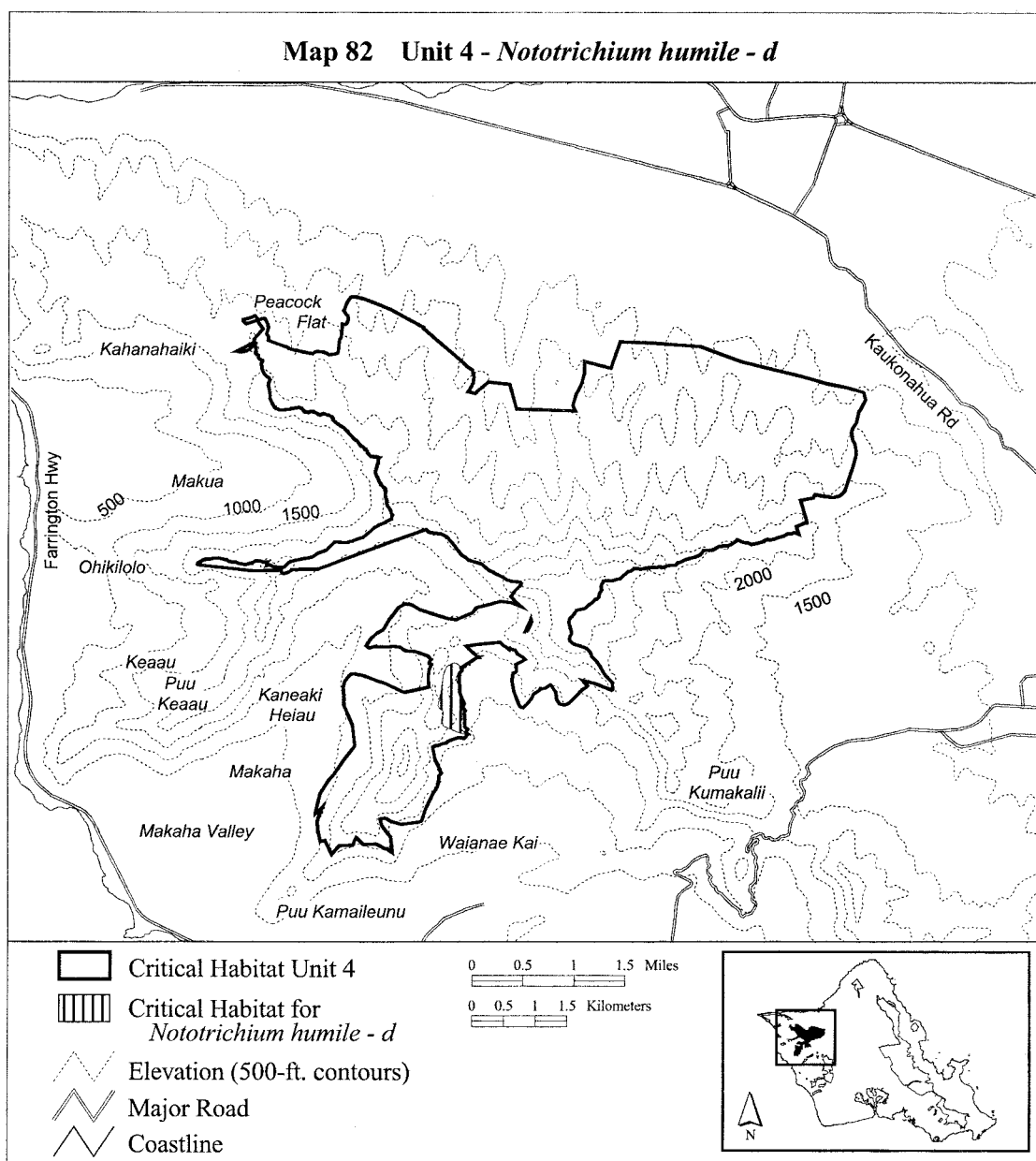
(82) Oahu 4—*Nototrichium humile*—d
(30 ha; 75 ac)

(i) Unit consists of the following 62 boundary points: Start at 586425, 2377484; 586427, 2377501; 586520, 2377552; 586563, 2377551; 586598, 2377533; 586651, 2377487; 586658, 2377456; 586656, 2377428; 586593, 2377382; 586567, 2377321; 586581, 2377258; 586602, 2377207; 586616, 2377142; 586623, 2377093; 586669, 2376975; 586688, 2376938; 586693,

2376910; 586688, 2376891; 586679, 2376875; 586674, 2376860; 586676, 2376835; 586700, 2376824; 586712, 2376800; 586700, 2376763; 586690, 2376753; 586677, 2376744; 586679, 2376696; 586667, 2376665; 586653, 2376651; 586646, 2376614; 586653, 2376575; 586653, 2376544; 586653, 2376511; 586663, 2376498; 586688, 2376481; 586712, 2376454; 586712, 2376442; 586686, 2376439; 586635, 2376453; 586563, 2376482; 586477, 2376518; 586379, 2376561; 586367,

2376581; 586353, 2376609; 586339, 2376626; 586342, 2376658; 586358, 2376709; 586372, 2376744; 586367, 2376795; 586355, 2376812; 586327, 2376826; 586309, 2376845; 586295, 2376863; 586288, 2376886; 586292, 2376905; 586295, 2376940; 586316, 2377031; 586337, 2377100; 586337, 2377159; 586348, 2377258; 586374, 2377389; 586404, 2377456; return to starting point.

(ii) **Note:** Map 82 follows:



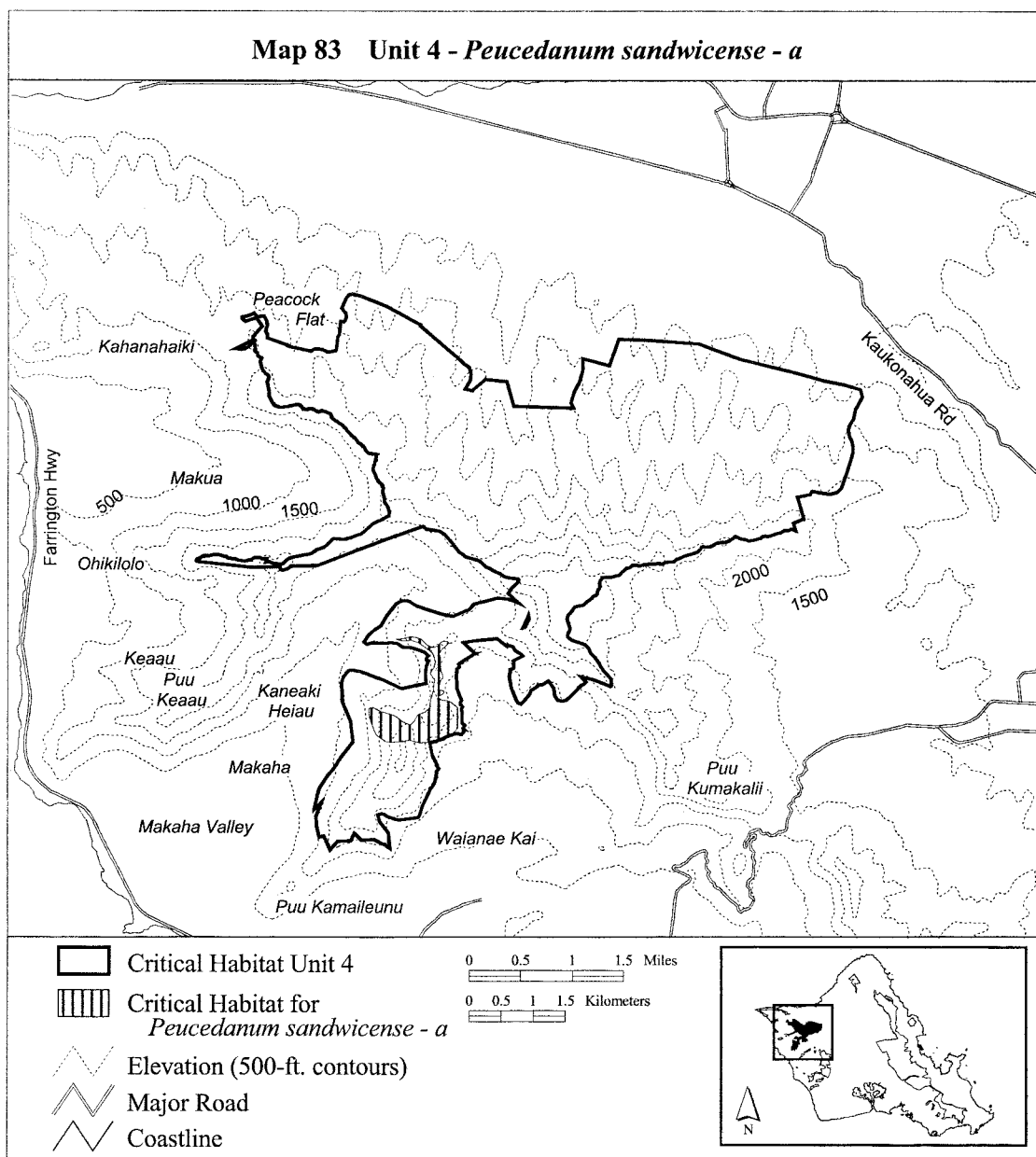
(83) Oahu 4—*Peucedanum sandwicense*—a (75 ha; 186 ac)

(i) Unit consists of the following 100 boundary points: Start at 585425, 2376724; 585534, 2376705; 585646, 2376668; 585722, 2376612; 585771, 2376573; 585821, 2376550; 585890, 2376523; 585926, 2376540; 585969, 2376596; 585999, 2376645; 586035, 2376695; 586137, 2376718; 586200, 2376784; 586206, 2376860; 586216, 2376932; 586253, 2377015; 586256, 2377127; 586266, 2377186; 586274, 2377236; 586243, 2377278; 586203, 2377338; 586236, 2377367; 586266, 2377427; 586286, 2377509; 586266, 2377582; 586239, 2377654; 586140, 2377737; 586012, 2377816; 585910,

2377852; 585831, 2377846; 585758, 2377842; 585712, 2377852; 585682, 2377872; 585831, 2377888; 585887, 2377905; 585926, 2377911; 586012, 2377888; 586071, 2377869; 586121, 2377806; 586157, 2377780; 586223, 2377747; 586279, 2377743; 586335, 2377773; 586371, 2377816; 586421, 2377846; 586477, 2377836; 586487, 2377819; 586474, 2377789; 586454, 2377760; 586431, 2377743; 586398, 2377727; 586378, 2377681; 586342, 2377641; 586365, 2377559; 586365, 2377529; 586371, 2377417; 586378, 2377358; 586404, 2377302; 586404, 2377265; 586404, 2377259; 586399, 2377257; 586368, 2377212; 586348, 2377163; 586345, 2377074; 586414, 2377054; 586431, 2377038; 586424,

2377021; 586388, 2376992; 586342, 2376972; 586335, 2376942; 586394, 2376912; 586464, 2376903; 586520, 2376883; 586602, 2376820; 586645, 2376790; 586645, 2376734; 586642, 2376639; 586642, 2376556; 586642, 2376474; 586609, 2376418; 586546, 2376375; 586450, 2376355; 586352, 2376299; 586312, 2376266; 586193, 2376246; 586045, 2376240; 585893, 2376273; 585847, 2376273; 585778, 2376260; 585590, 2376243; 585511, 2376256; 585425, 2376306; 585362, 2376368; 585326, 2376434; 585280, 2376550; 585250, 2376629; 585240, 2376698; 585240, 2376764; 585273, 2376790; 585313, 2376790; return to starting point.

(ii) **Note:** Map 83 follows:



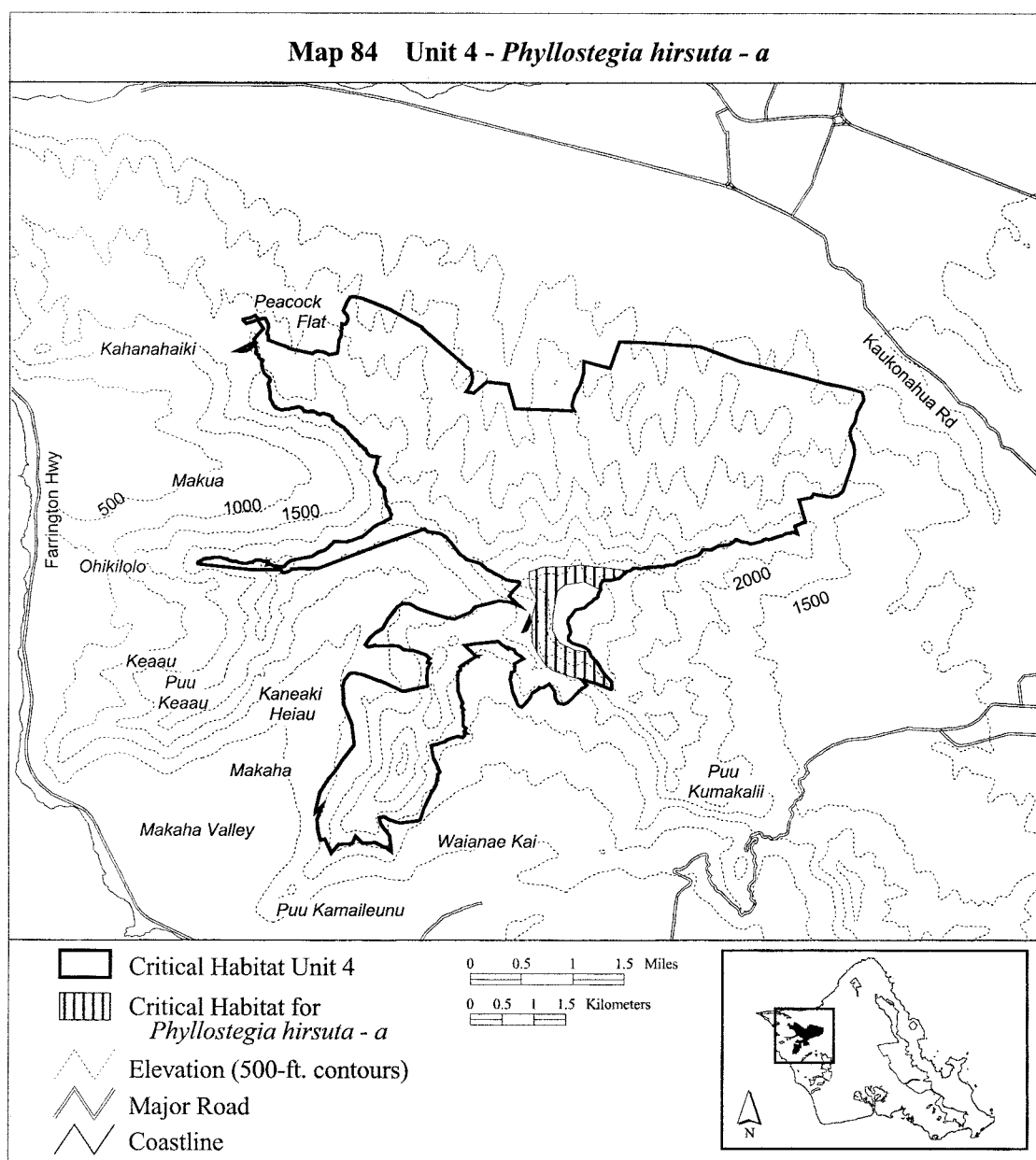
(84) Oahu 4—*Phyllostegia hirsuta*—a
(114 ha; 282 ac)

(i) Unit consists of the following 75 boundary points: Start at 588849, 2378699; 588837, 2378713; 588731, 2378766; 588729, 2378762; 588606, 2378831; 588478, 2378811; 588296, 2378786; 588179, 2378678; 588110, 2378315; 588105, 2378060; 588218, 2377868; 588463, 2377750; 588677, 2377723; 588684, 2377709; 588691, 2377689; 588691, 2377688; 588708, 2377657; 588735, 2377626; 588736, 2377625; 588762, 2377601; 588787, 2377570; 588816, 2377534; 588848,

2377484; 588857, 2377459; 588858, 2377458; 588877, 2377428; 588894, 2377402; 588911, 2377378; 588912, 2377378; 589020, 2377256; 589028, 2377236; 589171, 2377144; 589039, 2377141; 589026, 2377130; 588768, 2377229; 588439, 2377308; 588125, 2377421; 587997, 2377514; 587864, 2377696; 587791, 2377873; 587791, 2378138; 587791, 2378285; 587845, 2378487; 587845, 2378561; 587741, 2378747; 587732, 2378978; 587958, 2379062; 588360, 2379076; 588542, 2379091; 588860, 2379052; 588866,

2379066; 589269, 2379008; 589288, 2379001; 589286, 2379001; 589285, 2379001; 589276, 2378998; 589275, 2378998; 589245, 2378974; 589217, 2378943; 589164, 2378898; 589149, 2378886; 589123, 2378879; 589060, 2378862; 589009, 2378857; 588910, 2378852; 588910, 2378851; 588899, 2378848; 588898, 2378848; 588887, 2378841; 588887, 2378840; 588862, 2378802; 588851, 2378772; 588851, 2378763; 588851, 2378746; 588855, 2378710; return to starting point.

(ii) **Note:** Map 84 follows:



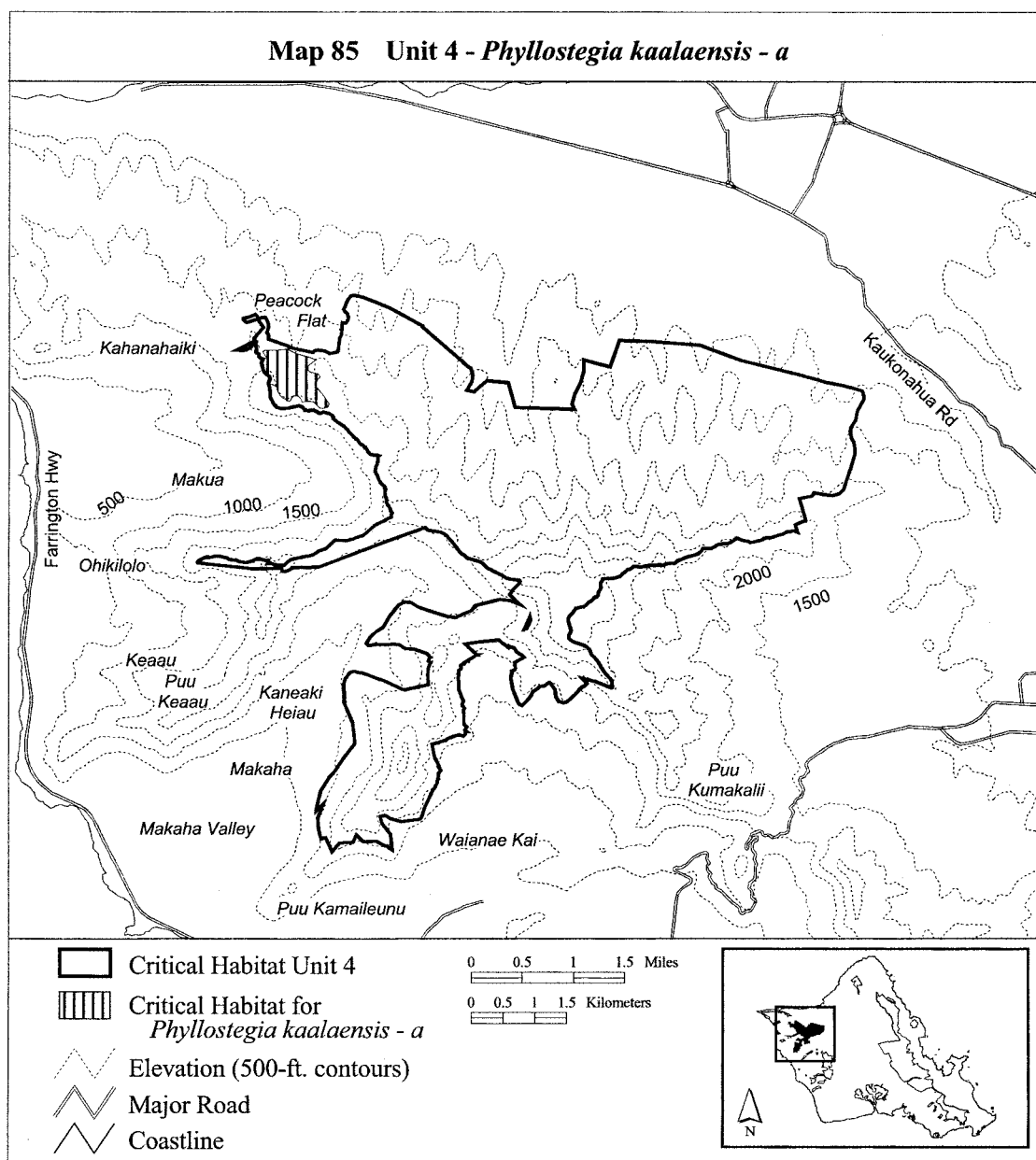
(85) Oahu 4—*Phyllostegia kaalaensis*—a (57 ha; 141 ac)

(i) Unit consists of the following 79 boundary points: Start at 583531, 2382445; 583582, 2382469; 583735, 2382475; 583912, 2382492; 584051, 2382414; 584180, 2382380; 584235, 2382373; 584358, 2382316; 584293, 2382251; 584242, 2382203; 584245, 2382149; 584289, 2382118; 584378, 2382101; 584415, 2382077; 584436, 2382170; 584388, 2381986; 584371, 2381928; 584381, 2381877; 584439, 2381805; 584510, 2381724; 584572, 2381629; 584561, 2381574; 584504,

2381554; 584436, 2381550; 584371, 2381612; 584327, 2381649; 584276, 2381666; 584225, 2381663; 584153, 2381642; 584129, 2381707; 584085, 2381741; 584024, 2381741; 583993, 2381720; 583976, 2381676; 583959, 2381663; 583925, 2381663; 583895, 2381690; 583864, 2381703; 583827, 2381731; 583800, 2381765; 583772, 2381816; 583762, 2381884; 583687, 2381921; 583629, 2381945; 583630, 2381951; 583633, 2381969; 583638, 2381979; 583645, 2381993; 583645, 2381994; 583649, 2382013; 583649, 2382018; 583648, 2382029; 583647,

2382030; 583641, 2382045; 583640, 2382045; 583626, 2382059; 583625, 2382059; 583610, 2382073; 583590, 2382091; 583570, 2382107; 583561, 2382120; 583552, 2382135; 583546, 2382153; 583536, 2382180; 583529, 2382214; 583523, 2382238; 583523, 2382239; 583518, 2382254; 583517, 2382264; 583517, 2382276; 583518, 2382287; 583521, 2382299; 583528, 2382305; 583535, 2382312; 583535, 2382313; 583535, 2382317; 583544, 2382316; 583592, 2382339; 583582, 2382377; return to starting point.

(ii) **Note:** Map 85 follows:



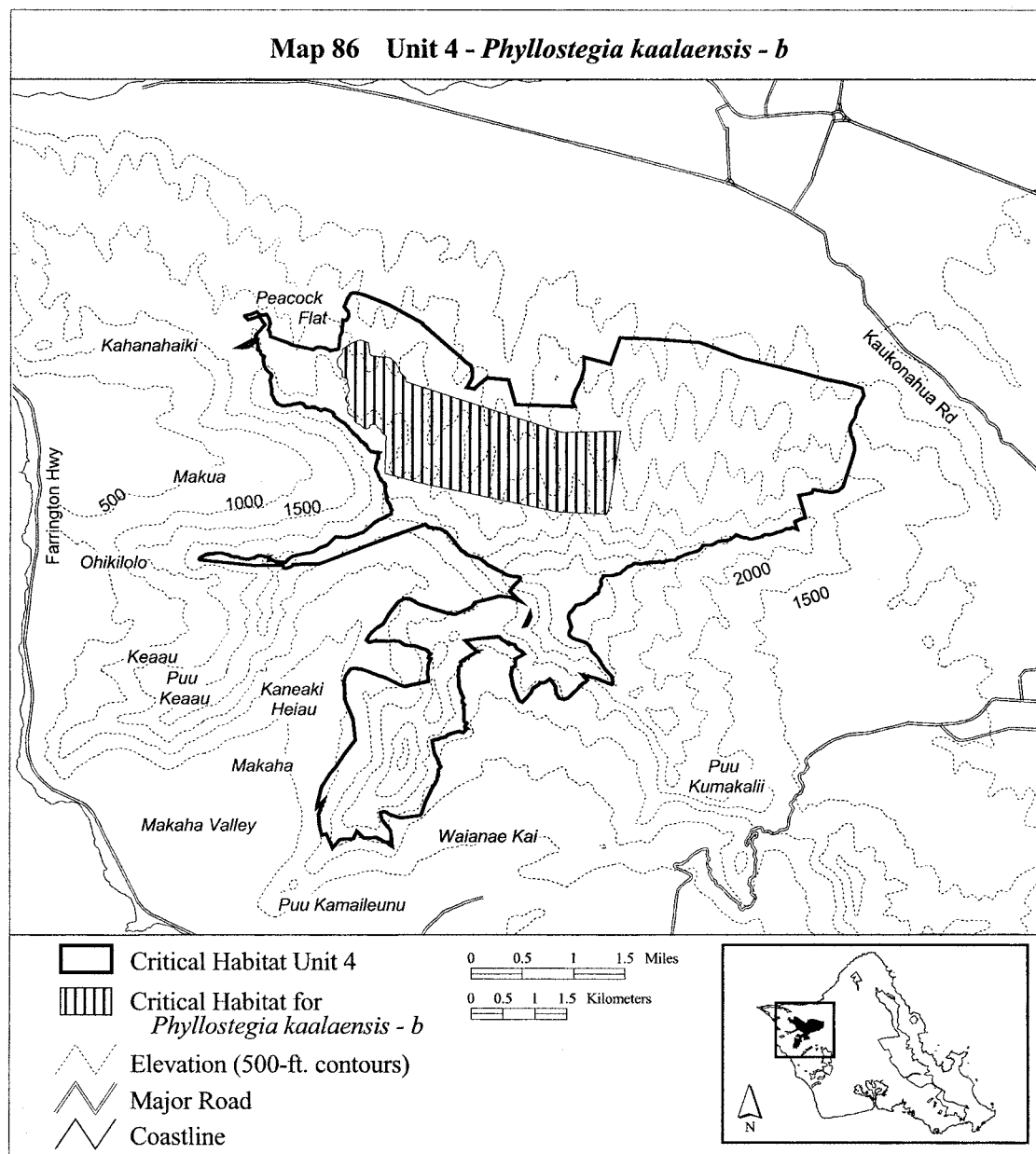
(86) Oahu 4—*Phyllostegia kaalaensis*—
b (589 ha; 1,455 ac)

(i) Unit consists of the following 58 boundary points: Start at 585195, 2382431; 585205, 2382373; 585239, 2382339; 585396, 2382316; 585467, 2382316; 585538, 2382299; 585613, 2382234; 585657, 2382142; 585688, 2382081; 585766, 2381992; 585778, 2381927; 588229, 2381124; 589161, 2381146; 588965, 2379889; 588943,

2379824; 588164, 2379867; 585976, 2380322; 585455, 2380474; 585471, 2381065; 585447, 2381088; 585402, 2381112; 585385, 2381142; 585375, 2381176; 585331, 2381200; 585304, 2381244; 585260, 2381251; 585222, 2381248; 585202, 2381203; 585151, 2381173; 585107, 2381197; 585062, 2381244; 585001, 2381265; 584960, 2381305; 584960, 2381363; 584909, 2381390; 584858, 2381431; 584851, 2381516; 584889, 2381571; 584845,

2381598; 584817, 2381652; 584841, 2381707; 584882, 2381758; 584882, 2381809; 584848, 2381904; 584865, 2381965; 584766, 2382006; 584766, 2382091; 584749, 2382128; 584702, 2382173; 584685, 2382241; 584702, 2382292; 584766, 2382370; 584773, 2382438; 584838, 2382489; 584919, 2382530; 585025, 2382581; 585083, 2382581; 585175, 2382540; return to starting point.

(ii) **Note:** Map 86 follows:

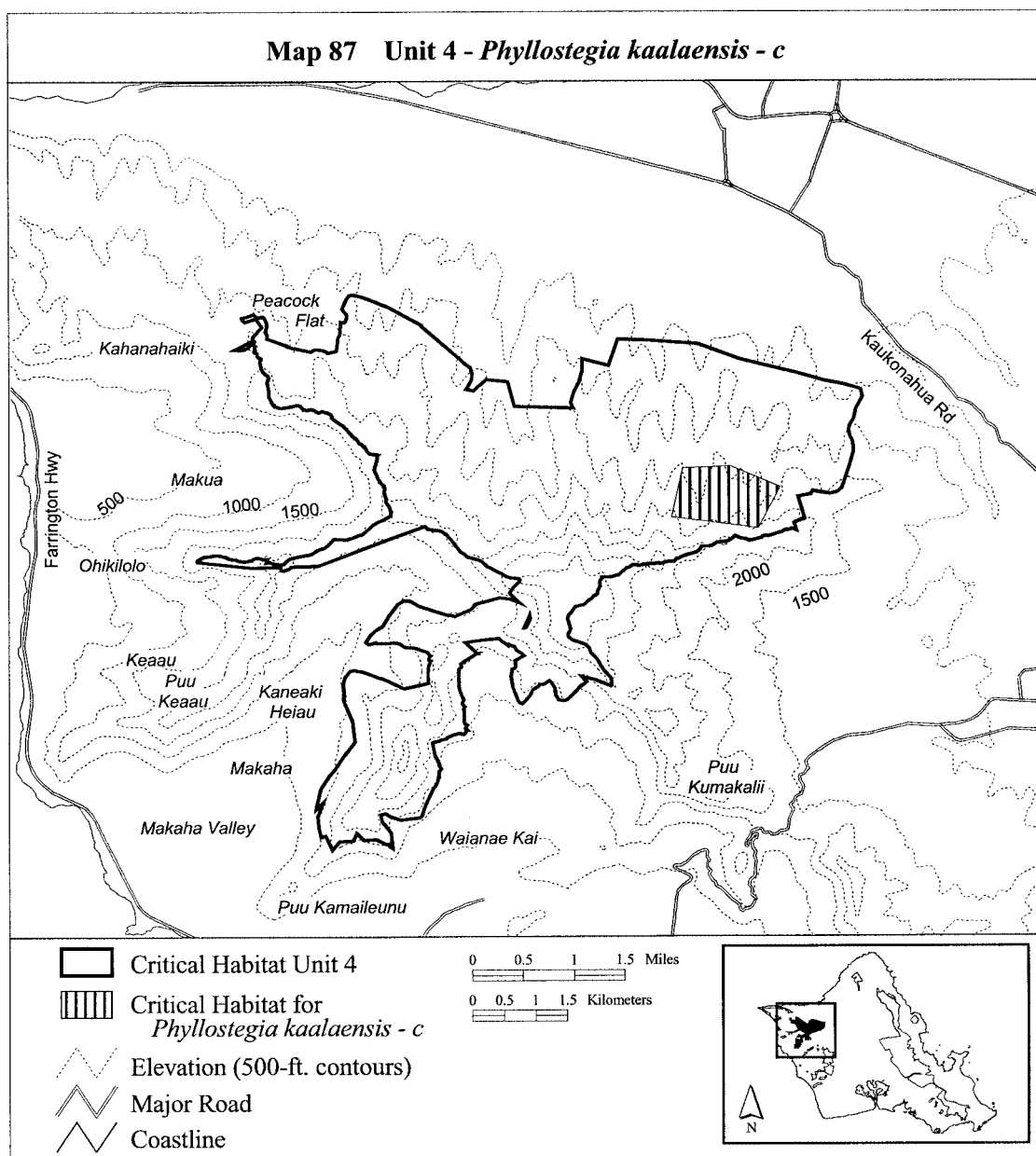


(87) Oahu 4—*Phyllostegia kaalaensis*—c
(123 ha; 317 ac)

(i) Unit consists of the following 6
boundary points: Start at 589983,

2379802; 590157, 2380582; 590915,
2380104; 591695, 2380279; 591348,
2379629; 590157, 2379781; return to
starting point.

(ii) **Note:** Map 87 follows:



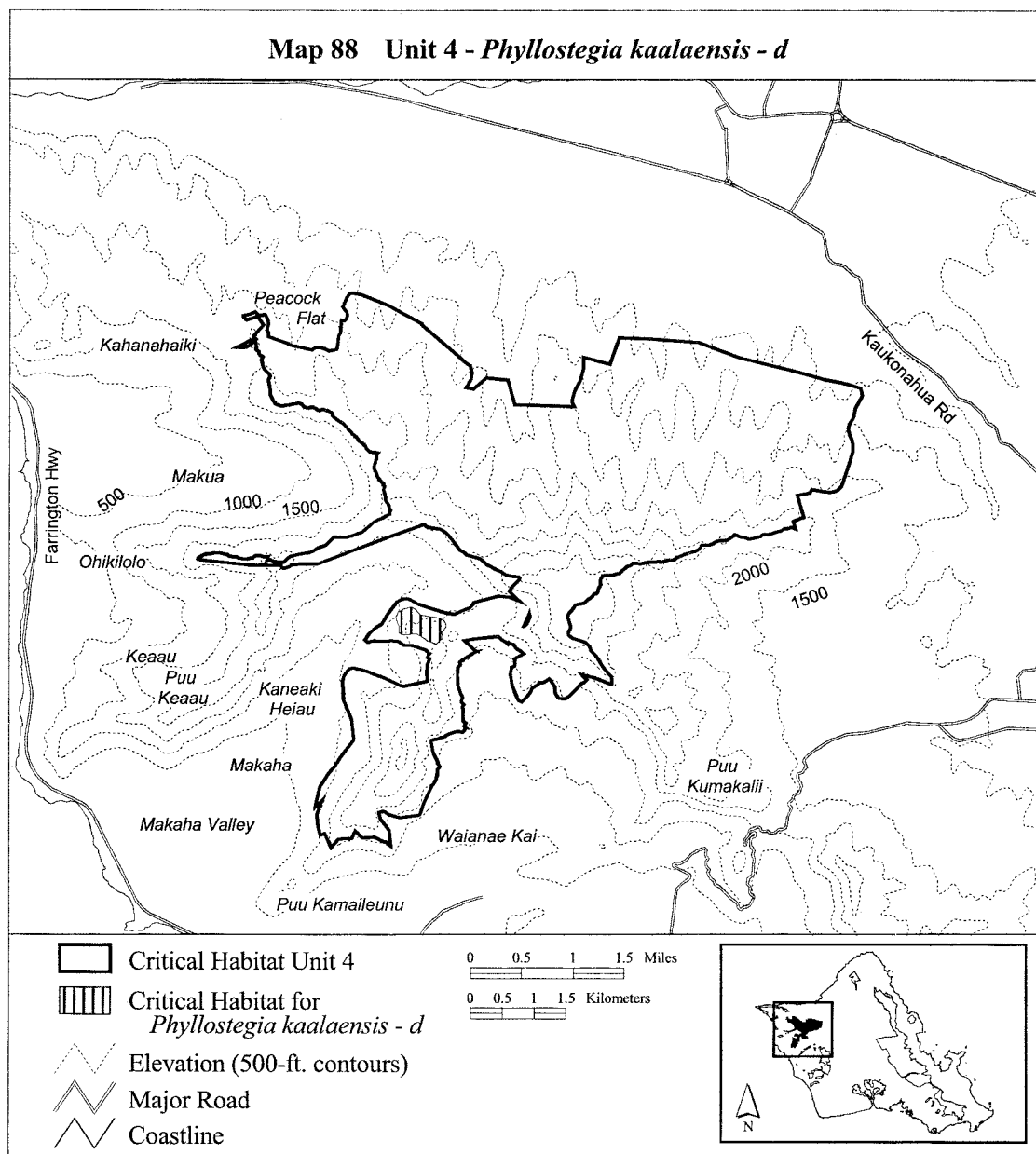
(88) Oahu 4—*Phyllostegia kaalaensis*—
d (28 ha; 69 ac)

(i) Unit consists of the following 24
boundary points: Start at 586029,
2378224; 586338, 2378174; 586402,
2378136; 586433, 2378075; 586437,

2378026; 586410, 2377988; 586372,
2377946; 586391, 2377851; 586364,
2377824; 586292, 2377767; 586151,
2377809; 586105, 2377847; 586037,
2377893; 585972, 2377931; 585843,
2377908; 585744, 2377912; 585698,

2377946; 585694, 2378052; 585668,
2378121; 585652, 2378201; 585691,
2378273; 585789, 2378323; 585896,
2378353; 585961, 2378315; return to
starting point.

(ii) **Note:** Map 88 follows:



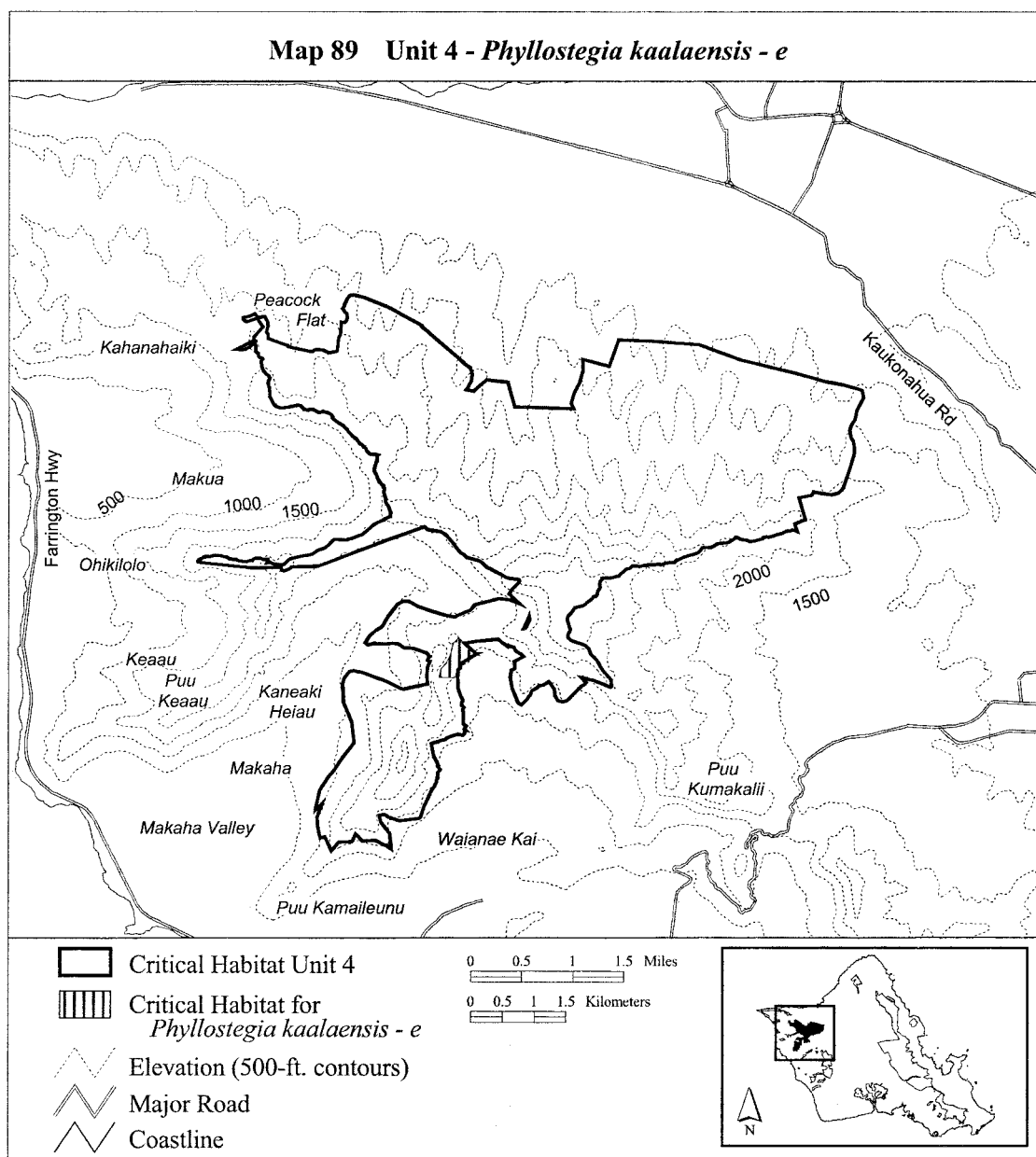
(89) Oahu 4—*Phyllostegia kaalaensis*—
e (16 ha; 39 ac)

(i) Unit consists of the following 20
boundary points: Start at 586900,
2377643; 586901, 2377642; 586889,

2377636; 586880, 2377632; 586685,
2377514; 586685, 2377503; 586677,
2377497; 586668, 2377496; 586612,
2377415; 586592, 2377326; 586593,
2377324; 586590, 2377318; 586579,
2377274; 586326, 2377285; 586348,

2377411; 586438, 2377509; 586507,
2377643; 586540, 2377810; 586637,
2377900; 586905, 2377647; return to
starting point.

(ii) **Note:** Map 89 follows:



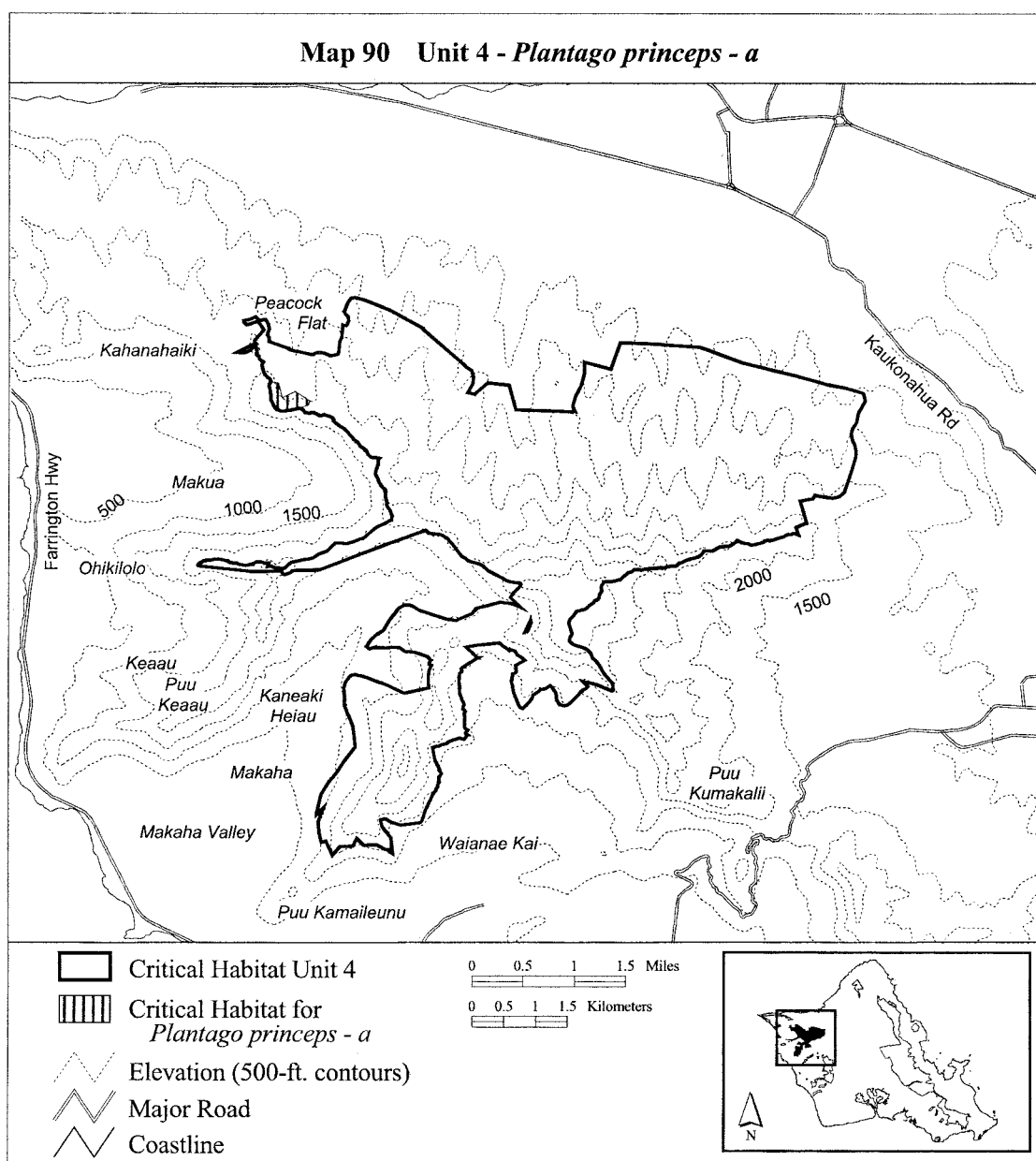
(90) Oahu 4—*Plantago princeps*—a (15 ha; 37 ac)

(i) Unit consists of the following 33 boundary points: Start at 583649, 2382009; 583774, 2381990; 583830, 2381756; 584042, 2381856; 584265, 2381711; 584242, 2381633; 584075,

2381589; 583819, 2381566; 583676, 2381676; 583672, 2381685; 583659, 2381711; 583652, 2381731; 583651, 2381742; 583651, 2381757; 583651, 2381773; 583651, 2381774; 583651, 2381789; 583651, 2381805; 583651, 2381806; 583649, 2381820; 583644, 2381847; 583642, 2381874; 583639,

2381896; 583638, 2381897; 583634, 2381907; 583631, 2381919; 583629, 2381930; 583629, 2381945; 583630, 2381951; 583633, 2381969; 583638, 2381979; 583645, 2381993; 583645, 2381994; return to starting point.

(ii) **Note:** Map 90 follows:



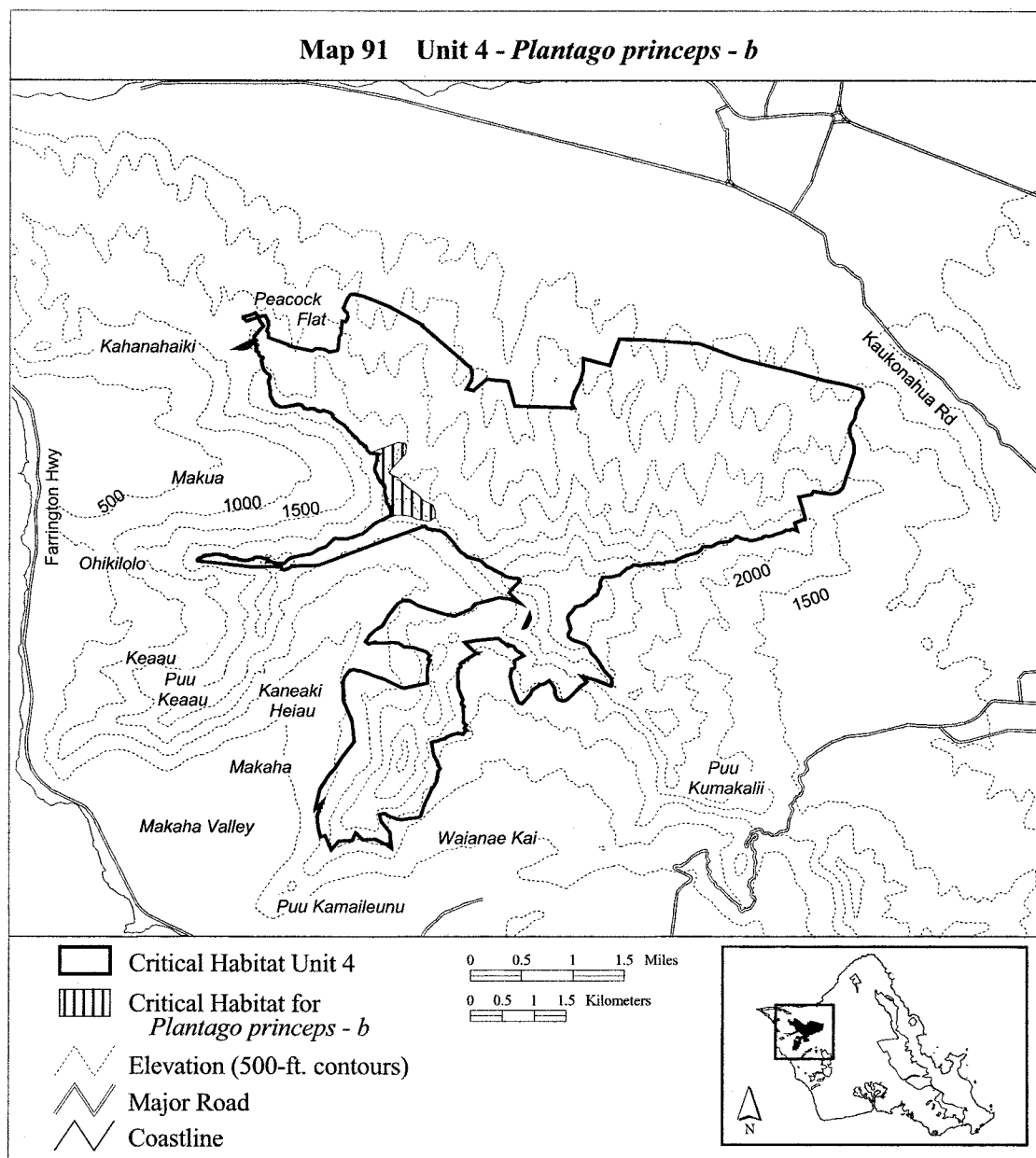
(91) Oahu 4—*Plantago princeps*—b (53 ha; 130 ac)

(i) Unit consists of the following 103 boundary points: Start at 585306, 2380537; 585297, 2380570; 585300, 2380580; 585303, 2380592; 585309, 2380613; 585315, 2380636; 585327, 2380677; 585338, 2380712; 585339, 2380712; 585344, 2380738; 585346, 2380754; 585345, 2380767; 585345, 2380779; 585348, 2380789; 585348, 2380790; 585344, 2380798; 585344, 2380799; 585338, 2380802; 585329, 2380804; 585328, 2380804; 585308, 2380806; 585279, 2380811; 585245, 2380818; 585228, 2380821; 585222, 2380825; 585222, 2380826; 585273, 2380841; 585474, 2380914; 585671, 2380987; 585774, 2380979; 585798,

2380918; 585786, 2380806; 585636, 2380648; 585535, 2380529; 585522, 2380526; 585525, 2380496; 585675, 2380429; 585698, 2380393; 585835, 2380275; 585966, 2380171; 586081, 2380063; 586216, 2379998; 586255, 2379886; 586259, 2379805; 586166, 2379736; 585997, 2379759; 585835, 2379824; 585685, 2379836; 585615, 2379836; 585621, 2379827; 585482, 2379787; 585547, 2379830; 585547, 2379831; 585548, 2379831; 585558, 2379891; 585558, 2379892; 585557, 2379892; 585548, 2379922; 585550, 2379928; 585550, 2379929; 585549, 2379929; 585549, 2379930; 585548, 2379930; 585547, 2379930; 585546, 2379929; 585545, 2379931; 585539, 2379943; 585531, 2379963; 585523,

2379982; 585522, 2379982; 585511, 2380001; 585498, 2380021; 585488, 2380040; 585483, 2380053; 585478, 2380071; 585475, 2380089; 585476, 2380103; 585474, 2380125; 585474, 2380128; 585472, 2380137; 585468, 2380149; 585465, 2380160; 585461, 2380173; 585457, 2380185; 585456, 2380203; 585456, 2380223; 585459, 2380252; 585459, 2380269; 585456, 2380281; 585451, 2380295; 585443, 2380310; 585430, 2380325; 585430, 2380326; 585408, 2380344; 585393, 2380361; 585375, 2380388; 585364, 2380407; 585353, 2380428; 585342, 2380452; 585330, 2380478; 585322, 2381797; 585318, 2380512; 585308, 2380533; return to starting point.

(ii) **Note:** Map 91 follows:



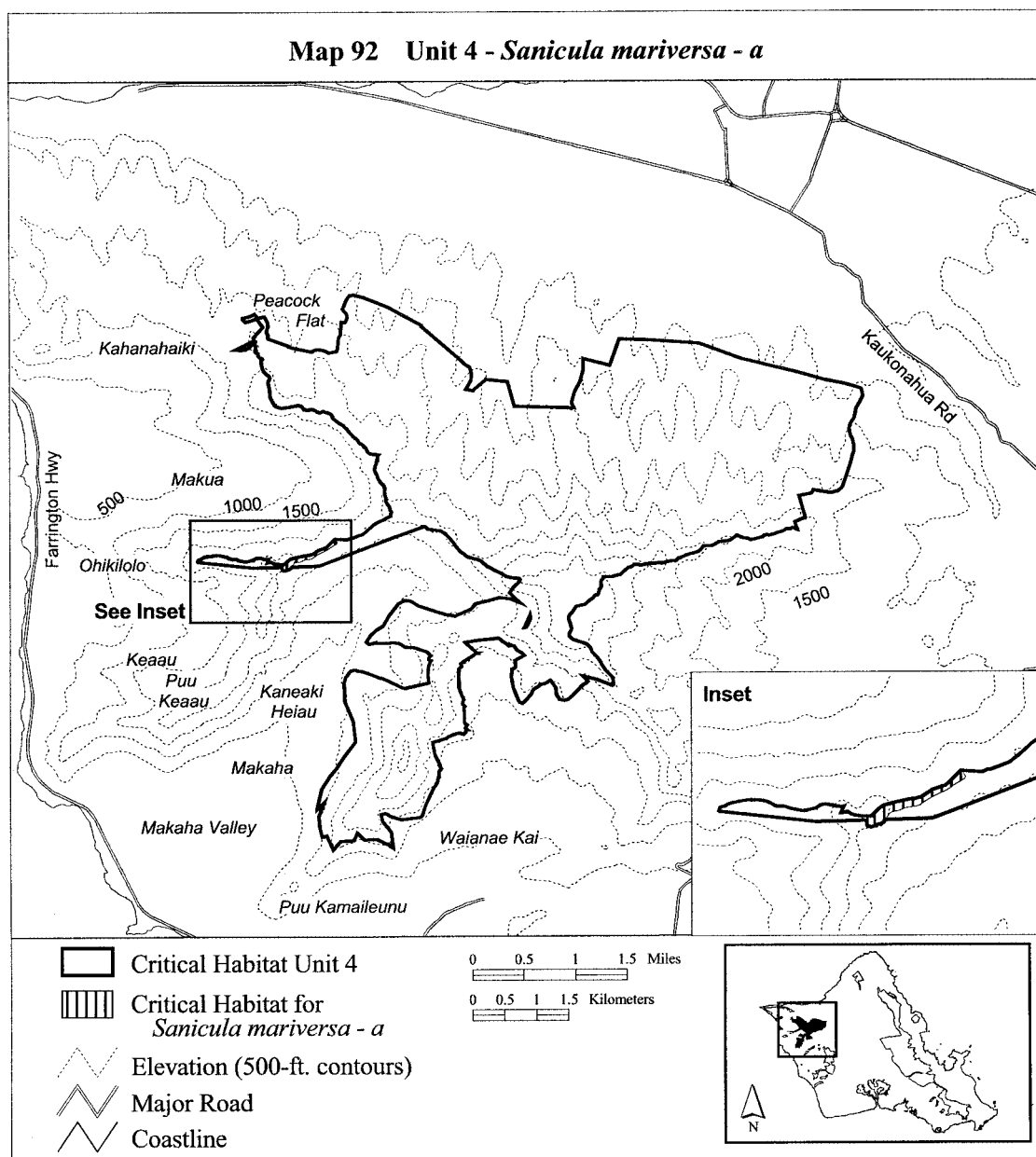
(92) Oahu 4—*Sanicula mariversa*—a (7 ha; 17 ac)

(i) Unit consists of the following 41 boundary points: Start at 584679, 2379459; 584686, 2379451; 584711, 2379404; 584703, 2379389; 584671, 2379369; 584614, 2379339; 584561, 2379299; 584536, 2379282; 584467,

2379252; 584407, 2379220; 584349, 2379185; 584305, 2379157; 584272, 2379145; 584188, 2379132; 584133, 2379110; 584043, 2379088; 584011, 2379043; 583988, 2379005; 583966, 2378990; 583936, 2378985; 583876, 2378960; 583839, 2378973; 583836, 2378998; 583835, 2379022; 583854, 2379060; 583876, 2379060; 583877,

2379060; 583877, 2379061; 583947, 2379131; 583977, 2379150; 584086, 2379180; 584226, 2379210; 584256, 2379210; 584326, 2379230; 584327, 2379230; 584417, 2379290; 584526, 2379330; 584527, 2379330; 584557, 2379350; 584657, 2379450; 584667, 2379460; return to starting point.

(ii) **Note:** Map 92 follows:



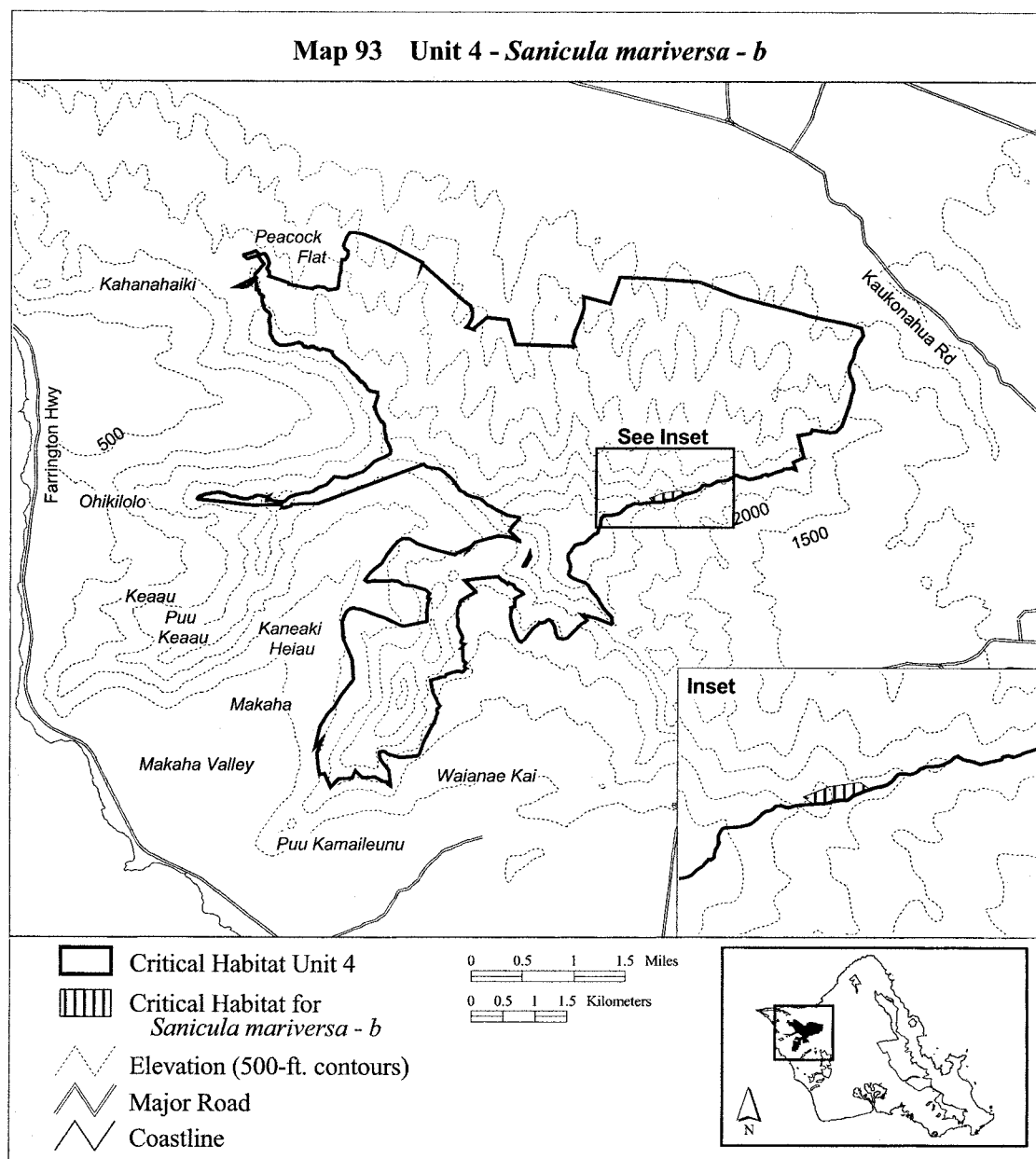
(93) Oahu 4—*Sanicula mariversa*—b (6 ha; 15 ac)

(i) Unit consists of the following 23 boundary points: Start at 589618, 2379132; 589854, 2379223; 590128,

2379259; 590218, 2379199; 590191, 2379191; 590084, 2379149; 590076, 2379145; 590067, 2379142; 590066, 2379141; 590039, 2379117; 590020, 2379104; 590012, 2379101; 589944, 2379099; 589907, 2379095; 589906,

2379095; 589881, 2379089; 589839, 2379075; 589839, 2379074; 589806, 2379068; 589790, 2379069; 589787, 2379069; 589747, 2379069; 589709, 2379066; return to starting point.

(ii) **Note:** Map 93 follows:



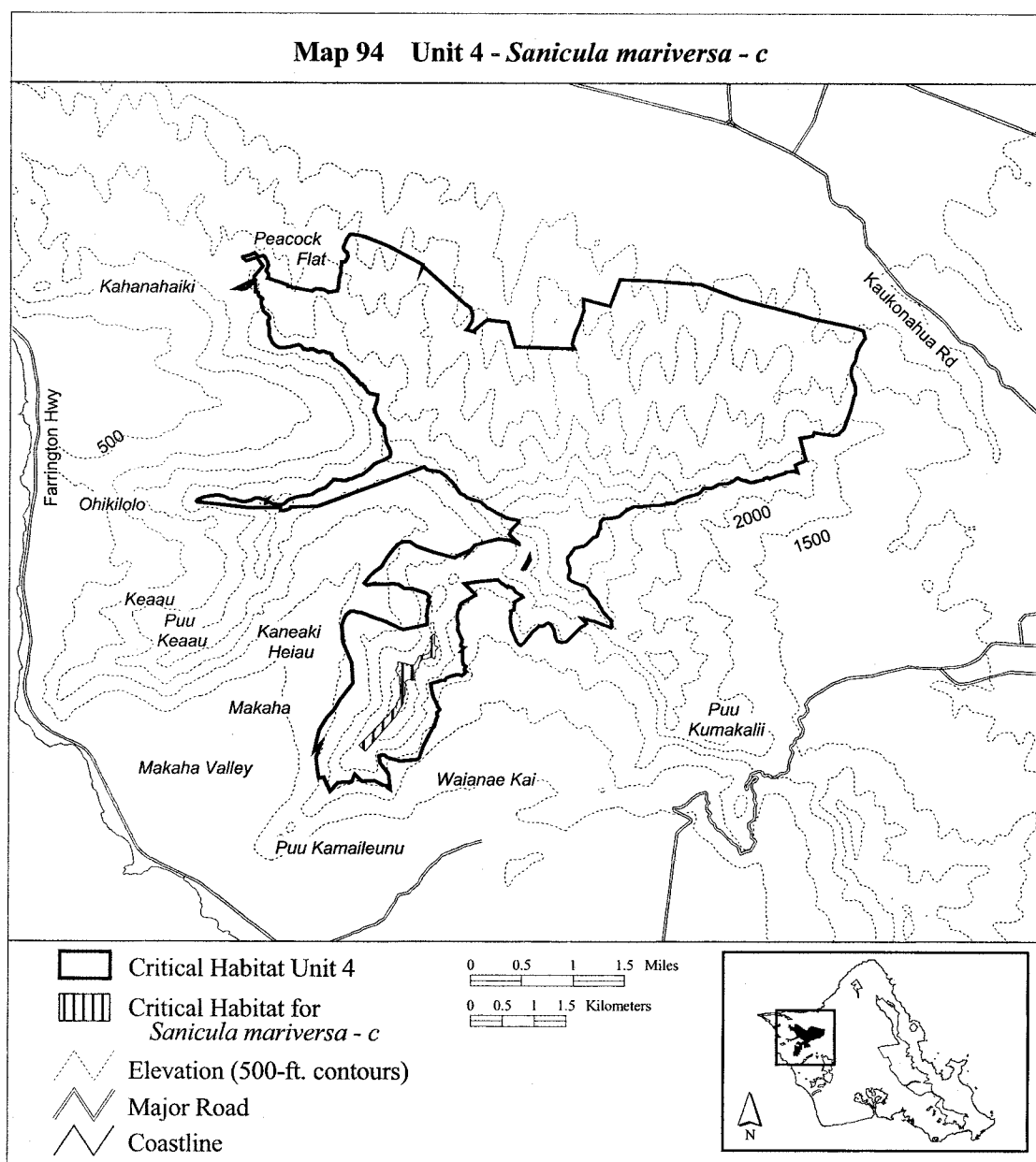
(94) Oahu 4—*Sanicula mariversa*—c (25 ha; 61 ac)

(i) Unit consists of the following 88 boundary points: Start at 586207, 2376926; 586193, 2376956; 586223, 2377006; 586254, 2377017; 586277, 2377004; 586255, 2376972; 586259, 2376901; 586261, 2376860; 586261, 2376842; 586298, 2376818; 586316, 2376808; 586300, 2376783; 586275, 2376759; 586272, 2376738; 586272, 2376692; 586273, 2376654; 586268, 2376631; 586241, 2376652; 586200, 2376659; 586162, 2376649; 586136, 2376633; 586082, 2376633; 586039, 2376593; 586011, 2376533; 586005,

2376472; 585975, 2376466; 585966, 2376447; 585962, 2376420; 585936, 2376400; 585928, 2376382; 585928, 2376361; 585944, 2376343; 585948, 2376325; 585948, 2376300; 585939, 2376293; 585914, 2376293; 585878, 2376298; 585855, 2376298; 585819, 2376282; 585805, 2376250; 585807, 2376209; 585800, 2376163; 585798, 2376102; 585791, 2376045; 585773, 2376004; 585766, 2375966; 585777, 2375927; 585746, 2375871; 585712, 2375825; 585700, 2375789; 585648, 2375707; 585601, 2375655; 585181, 2375180; 585083, 2375264; 585553, 2375761; 585592, 2375809; 585632, 2375845; 585664, 2375896; 585673,

2375941; 585719, 2376014; 585721, 2376068; 585726, 2376111; 585723, 2376172; 585721, 2376216; 585714, 2376259; 585718, 2376332; 585700, 2376370; 585669, 2376415; 585648, 2376438; 585664, 2376484; 585687, 2376509; 585680, 2376558; 585671, 2376575; 585685, 2376579; 585723, 2376577; 585791, 2376558; 585848, 2376541; 585911, 2376525; 585937, 2376531; 585984, 2376591; 586007, 2376665; 586028, 2376683; 586082, 2376686; 586136, 2376699; 586166, 2376711; 586182, 2376751; 586200, 2376777; 586209, 2376817; return to starting point.

(ii) **Note:** Map 94 follows:



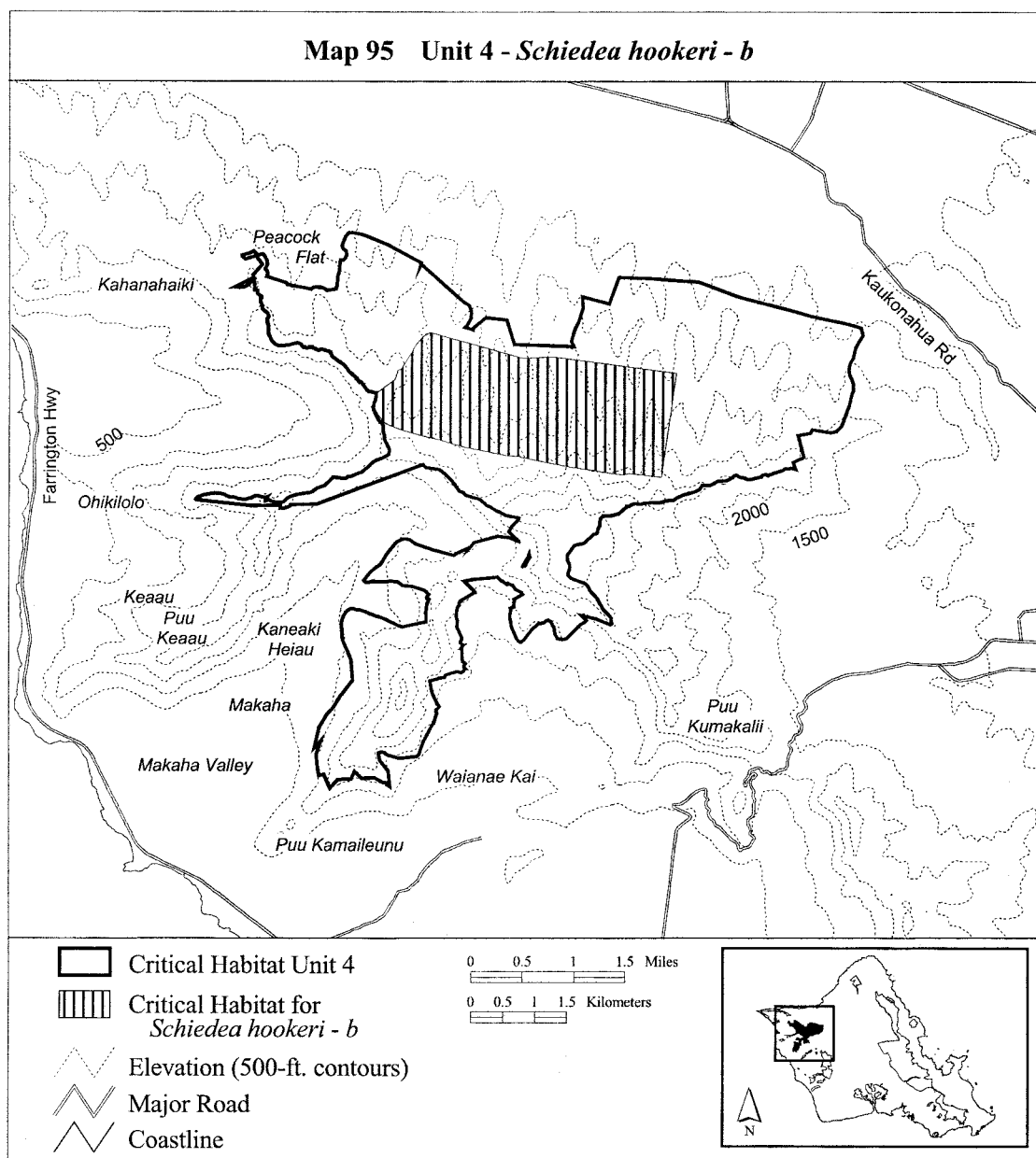
(95) Oahu 4—*Schiedea hookeri*—b (711 ha; 1,756 ac)

(i) Unit consists of the following 37 boundary points: Start at 585348, 2380789; 585645, 2381015; 585688, 2381163; 585739, 2381171; 585894, 2381417; 585985, 2381572; 586082, 2381691; 586191, 2381756; 586314,

2381731; 587656, 2381348; 587656, 2381345; 588119, 2381369; 590050, 2381108; 589819, 2379466; 589452, 2379514; 589308, 2379532; 589228, 2379500; 589029, 2379532; 588401, 2379630; 587999, 2379702; 587612, 2379785; 587612, 2379793; 587384, 2379814; 586747, 2379937; 586309,

2380060; 586081, 2380114; 585767, 2380205; 585499, 2380313; 585383, 2380444; 585318, 2380559; 585331, 2380689; 585338, 2380712; 585339, 2380712; 585344, 2380738; 585346, 2380754; 585345, 2380767; 585345, 2380779; return to starting point.

(ii) **Note:** Map 95 follows:



(96) Oahu 4—*Schiedea hookeri*—c (247 ha; 612 ac)

(i) Unit consists of the following 109 boundary points: Start at 586341,

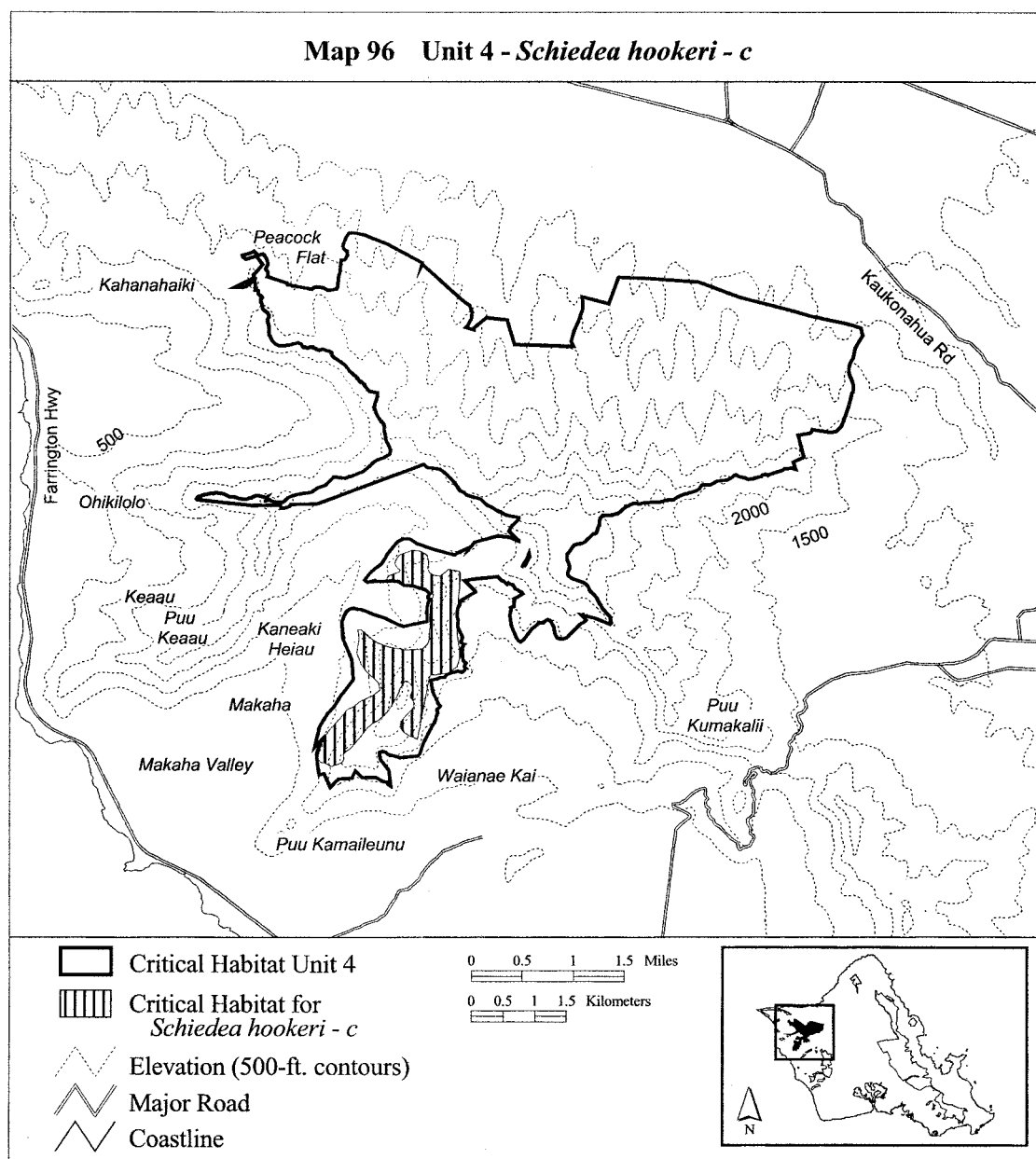
2377892; 586395, 2377926; 586472, 2377998; 586539, 2377993; 586654, 2377965; 586664, 2377897; 586654, 2377768; 586640, 2377566; 586621, 2377369; 586597, 2377138; 586606, 2376989; 586635, 2376797; 586683, 2376692; 586659, 2376572; 586611, 2376451; 586568, 2376418; 586462, 2376351; 586204, 2376318; 586175, 2376255; 585995, 2375312; 585867, 2375366; 585760, 2375443; 585723, 2375506; 585727, 2375589; 585800, 2375669; 585900, 2375779; 585936, 2375813; 585930, 2375906; 585870, 2375979; 585900, 2376066; 585903,

2376149; 585860, 2376212; 585797, 2376231; 585767, 2376169; 585717, 2376116; 585693, 2376033; 585660, 2375953; 585567, 2375799; 585497, 2375719; 585403, 2375623; 585290, 2375553; 585213, 2375496; 585120, 2375363; 585044, 2375283; 584960, 2375173; 584867, 2375116; 584830, 2375070; 584837, 2375006; 584817, 2374953; 584764, 2374923; 584647, 2374886; 584554, 2374933; 584477, 2374946; 584427, 2375016; 584467, 2375153; 584524, 2375320; 584634, 2375486; 584794, 2375649; 584894, 2375779; 584984, 2375823; 585097, 2375906; 585283, 2375989; 585403, 2376086; 585383, 2376189; 585287, 2376292; 585174, 2376389; 585100, 2376502; 585037, 2376662; 585064,

2376869; 585067, 2376959; 585047, 2377042; 585097, 2377175; 585170, 2376985; 585227, 2376932; 585362, 2376832; 585396, 2376821; 585549, 2376768; 585790, 2376716; 585939, 2376730; 586073, 2376740; 586145, 2376807; 586174, 2376884; 586174, 2376965; 586184, 2377081; 586184, 2377263; 586193, 2377417; 586236, 2377600; 586107, 2377672; 585914, 2377734; 585770, 2377748; 585680, 2377807; 585653, 2377810; 585498, 2377832; 585520, 2377883; 585631, 2377934; 585700, 2377952; 585717, 2377986; 585661, 2378033; 585627, 2378089; 585653, 2378166; 585708, 2378230; 585807, 2378264; 585897, 2378303; 586051, 2378286; 586141, 2378217; 586167, 2378106; 586145,

2378012; 586179, 2377943; 586239,
2377909; return to starting point.

(ii) **Note:** Map 96 follows:



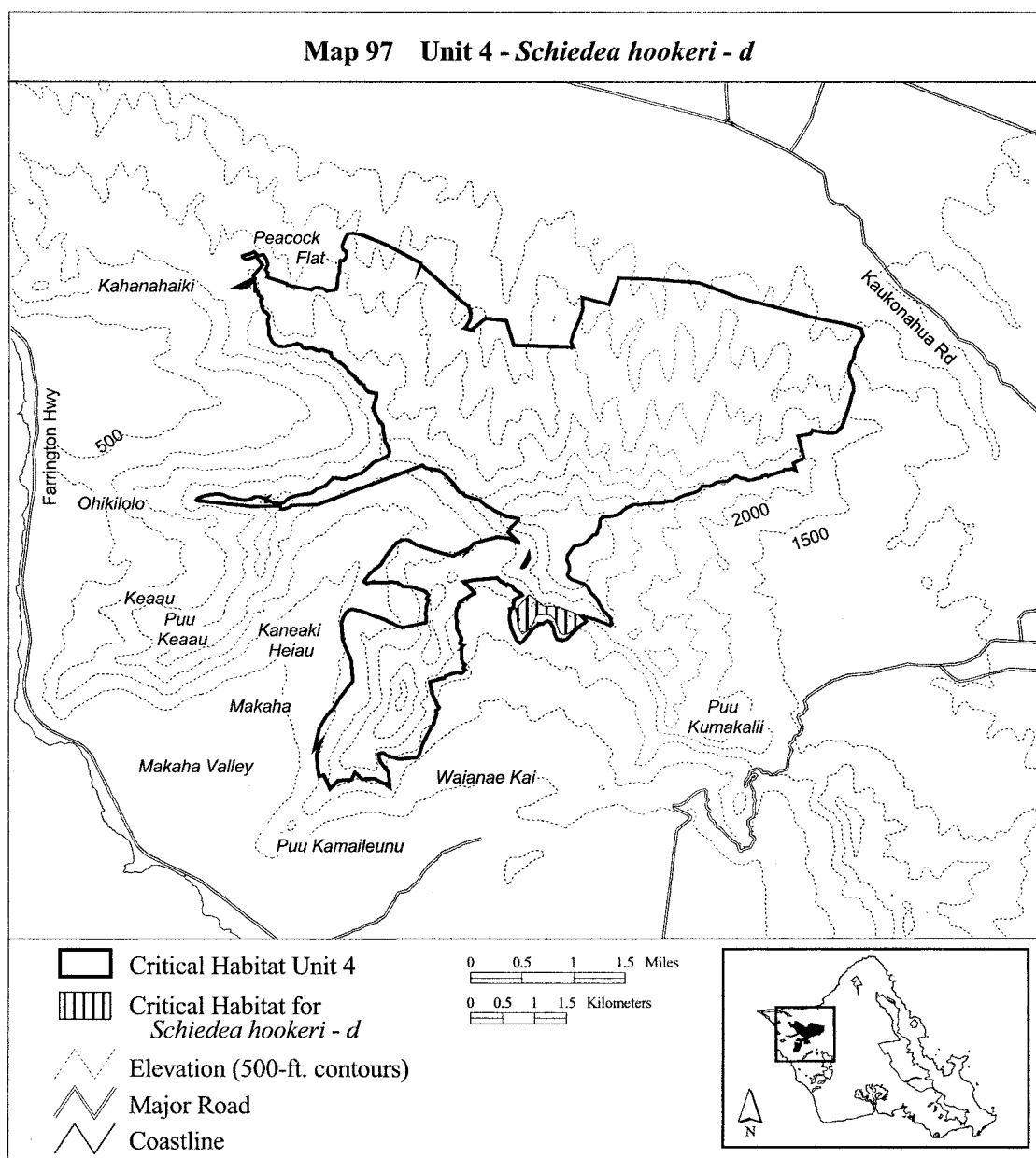
(97) Oahu 4—*Schiedea hookeri*—d (31 ha; 78 ac)

(i) Unit consists of the following 25 boundary points: Start at 587754, 2377619; 587985, 2377441; 588235, 2377417; 588403, 2377355; 588566,

2377283; 588643, 2377196; 588614, 2377167; 588470, 2377095; 588427, 2377047; 588355, 2376994; 588288, 2376985; 588230, 2377033; 588172, 2377162; 588163, 2377220; 588095, 2377292; 587990, 2377302; 587870,

2377297; 587826, 2377196; 587788, 2377105; 587740, 2377047; 587653, 2376994; 587596, 2377066; 587577, 2377177; 587562, 2377283; 587543, 2377379; return to starting point.

(ii) **Note:** Map 97 follows:



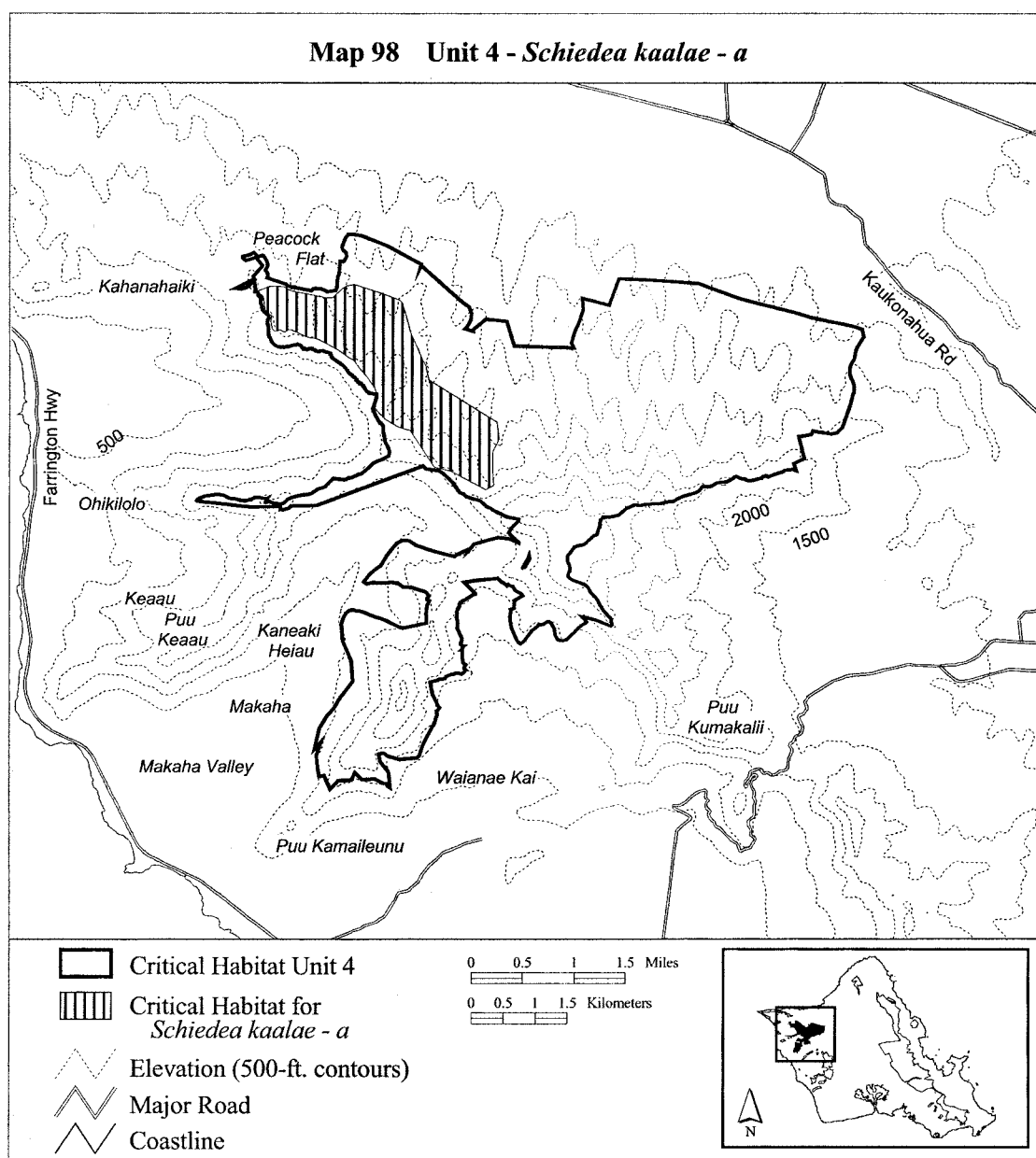
(98) Oahu 4—*Schiedea kaalae*—a (425 ha; 151 ac)

(i) Unit consists of the following 77 boundary points: Start at 585318, 2380589; 585359, 2380791; 585317, 2380901; 585201, 2381075; 585118, 2381169; 585045, 2381260; 584989, 2381336; 584997, 2381334; 584903, 2381389; 584744, 2381502; 584542, 2381618; 584429, 2381669; 584252, 2381704; 584107, 2381768; 584010, 2381816; 583957, 2381814; 583919, 2381792; 583898, 2381781; 583852, 2381806; 583817, 2381816; 583774,

2381800; 583742, 2381795; 583702, 2381846; 583688, 2381956; 583691, 2382045; 583643, 2382066; 583616, 2382109; 583586, 2382157; 583573, 2382233; 583565, 2382308; 583551, 2382361; 583514, 2382383; 583484, 2382437; 583562, 2382464; 583651, 2382496; 583766, 2382504; 583903, 2382493; 583967, 2382455; 584029, 2382429; 584239, 2382394; 584403, 2382353; 584543, 2382327; 584645, 2382327; 584683, 2382348; 584739, 2382399; 584830, 2382482; 584887, 2382512; 585005, 2382536; 585351, 2382429; 585717, 2382289; 585716,

2382286; 585752, 2382241; 585768, 2382198; 585824, 2382023; 585886, 2381779; 585980, 2381556; 586066, 2381360; 586117, 2381263; 586160, 2381102; 586187, 2381003; 586185, 2380994; 586194, 2381018; 587237, 2380368; 587270, 2380095; 587173, 2379878; 587172, 2379589; 587188, 2379357; 587068, 2379293; 586522, 2379581; 586266, 2379646; 585873, 2380239; 585834, 2380237; 585753, 2380262; 585675, 2380288; 585603, 2380334; 585495, 2380404; 585383, 2380509; return to starting point.

(ii) **Note:** Map 98 follows:



(99) Oahu 4—*Schiedea nuttallii*—a (527 ha; 1,303 ac)

(i) Unit consists of the following 248 boundary points: Start at 583882,

2381544; 583879, 2381544; 583760, 2381566; 583747, 2381571; 583730, 2381588; 583709, 2381612; 583707, 2381614; 583694, 2381639; 583685, 2381655; 583672, 2381685; 583659, 2381711; 583652, 2381731; 583651, 2381742; 583651, 2381757; 583651, 2381773; 583651, 2381789; 583651, 2381805; 583651, 2381806; 583649, 2381820; 583644, 2381847; 583642, 2381874; 583639, 2381896; 583638, 2381897; 583634, 2381907; 583631, 2381919; 583629, 2381934; 583630, 2381951; 583633, 2381969; 583638, 2381979; 583645, 2381993; 583645,

2381994; 583649, 2382013; 583649, 2382018; 583648, 2382029; 583647, 2382030; 583641, 2382045; 583640, 2382045; 583626, 2382059; 583610, 2382073; 583590, 2382091; 583570, 2382107; 583561, 2382120; 583552, 2382135; 583546, 2382153; 583536, 2382180; 583529, 2382214; 583523, 2382238; 583518, 2382254; 583517, 2382264; 583517, 2382276; 583518, 2382287; 583521, 2382299; 583528, 2382305; 583535, 2382312; 583535, 2382313; 583535, 2382319; 583531, 2382326; 583523, 2382334; 583522, 2382334; 583511, 2382337; 583498, 2382345; 583497, 2382345; 583486, 2382351; 583477, 2382362; 583474, 2382370; 583475, 2382383; 583475, 2382397; 583474, 2382404; 583474,

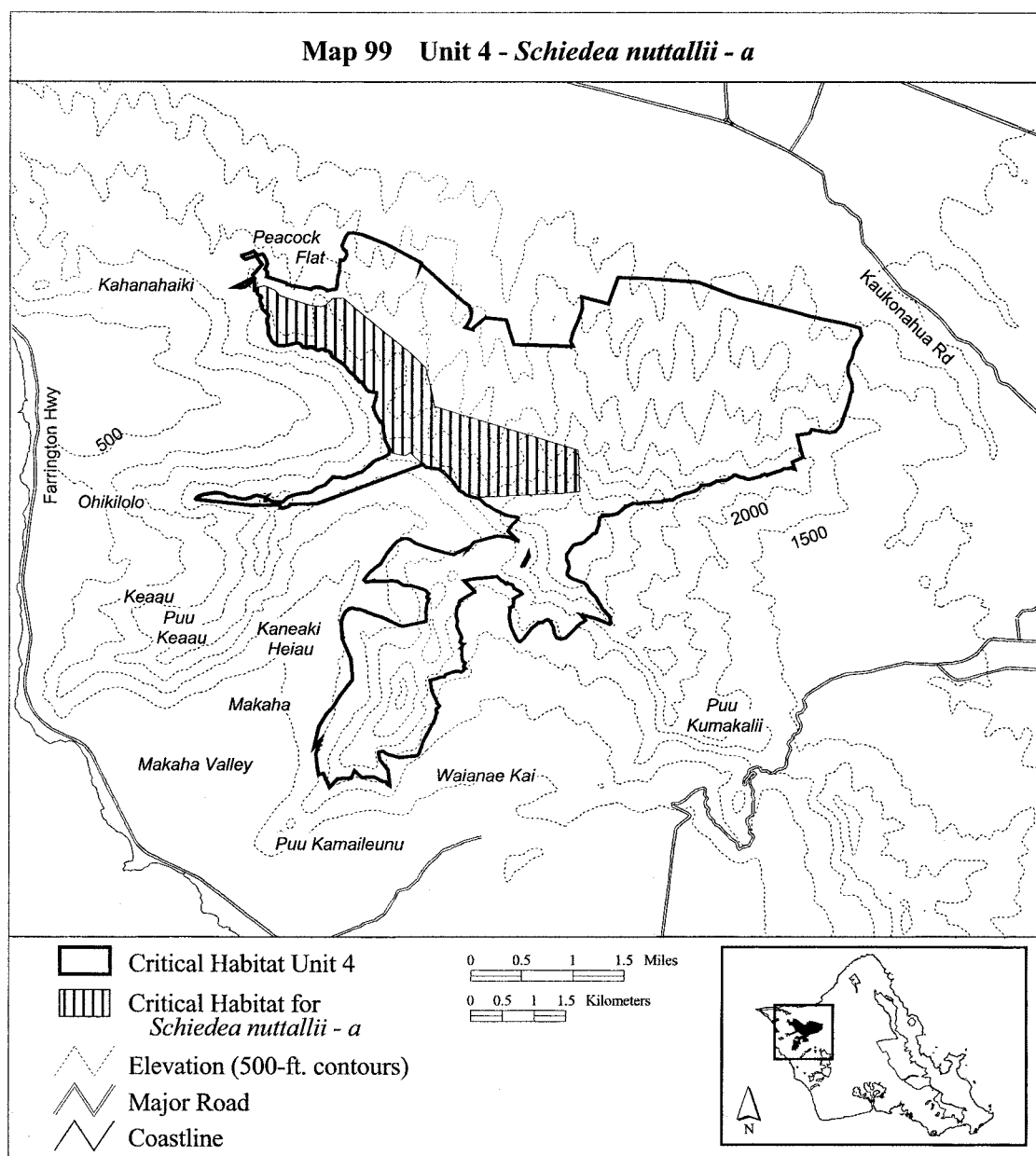
2382405; 583469, 2382411; 583468, 2382411; 583457, 2382416; 583443, 2382421; 583435, 2382424; 583430, 2382430; 583429, 2382440; 583430, 2382454; 583564, 2382494; 583605, 2382494; 583766, 2382417; 583833, 2382339; 583972, 2382293; 584282, 2382190; 584463, 2382159; 584546, 2382190; 584670, 2382298; 584825, 2382303; 585042, 2382122; 585408, 2381813; 585857, 2381456; 586121, 2381203; 586229, 2380760; 586265, 2380574; 586263, 2380570; 586271, 2380579; 588524, 2379889; 588546, 2379230; 588163, 2379202; 586906, 2379133; 586653, 2379250; 586421, 2379576; 586132, 2379620; 585877, 2379851; 585856, 2379830; 585789, 2379804; 585567, 2379851; 585554,

2379870; 585558, 2379891; 585558,
2379892; 585557, 2379892; 585548,
2379922; 585550, 2379928; 585550,
2379929; 585549, 2379929; 585549,
2379930; 585548, 2379930; 585547,
2379930; 585546, 2379929; 585545,
2379931; 585539, 2379943; 585531,
2379963; 585523, 2379982; 585522,
2379982; 585511, 2380001; 585498,
2380021; 585488, 2380040; 585483,
2380053; 585478, 2380071; 585475,
2380089; 585476, 2380103; 585474,
2380125; 585474, 2380128; 585472,
2380137; 585468, 2380149; 585465,
2380159; 585474, 2380228; 585469,
2380290; 585446, 2380303; 585443,
2380310; 585430, 2380325; 585430,
2380326; 585418, 2380335; 585393,
2380361; 585375, 2380388; 585364,
2380407; 585353, 2380428; 585342,
2380452; 585330, 2380478; 585322,
2381797; 585318, 2380512; 585308,
2380533; 585305, 2380540; 585309,
2380616; 585315, 2380636; 585327,
2380677; 585338, 2380712; 585339,

2380712; 585344, 2380738; 585346,
2380754; 585345, 2380767; 585345,
2380779; 585348, 2380789; 585348,
2380790; 585344, 2380798; 585344,
2380799; 585338, 2380802; 585329,
2380804; 585328, 2380804; 585308,
2380806; 585279, 2380811; 585245,
2380818; 585233, 2380820; 585181,
2380867; 585167, 2380888; 585157,
2380904; 585138, 2380929; 585119,
2380952; 585119, 2380953; 585107,
2380962; 585106, 2380963; 585094,
2380968; 585078, 2380975; 585067,
2380980; 585061, 2380987; 585053,
2381000; 585039, 2381021; 585027,
2381040; 585011, 2381059; 584993,
2381074; 584993, 2381075; 584973,
2381090; 584954, 2381104; 584939,
2381117; 584923, 2381137; 584905,
2381157; 584891, 2381175; 584867,
2381205; 584852, 2381221; 584844,
2381230; 584843, 2381230; 584813,
2381261; 584796, 2381273; 584778,
2381284; 584774, 2381287; 584751,
2381303; 584728, 2381318; 584708,

2381329; 584693, 2381342; 584638,
2381399; 584636, 2381408; 584633,
2381420; 584628, 2381430; 584618,
2381442; 584617, 2381442; 584601,
2381452; 584581, 2381462; 584562,
2381467; 584539, 2381475; 584519,
2381483; 584494, 2381489; 584478,
2381486; 584462, 2381479; 584401,
2381484; 584383, 2381494; 584357,
2381507; 584350, 2381511; 584325,
2381523; 584324, 2381523; 584310,
2381528; 584309, 2381528; 584291,
2381527; 584290, 2381527; 584281,
2381521; 584275, 2381516; 584266,
2381511; 584260, 2381511; 584181,
2381531; 584167, 2381553; 584150,
2381572; 584130, 2381584; 584129,
2381584; 584104, 2381586; 584065,
2381583; 584021, 2381575; 583992,
2381567; 583957, 2381557; 583934,
2381555; 583897, 2381549; return to
starting point.

(ii) **Note:** Map 99 follows:



(100) Oahu 4—*Silene lanceolata*—a (113 ha; 280 ac)

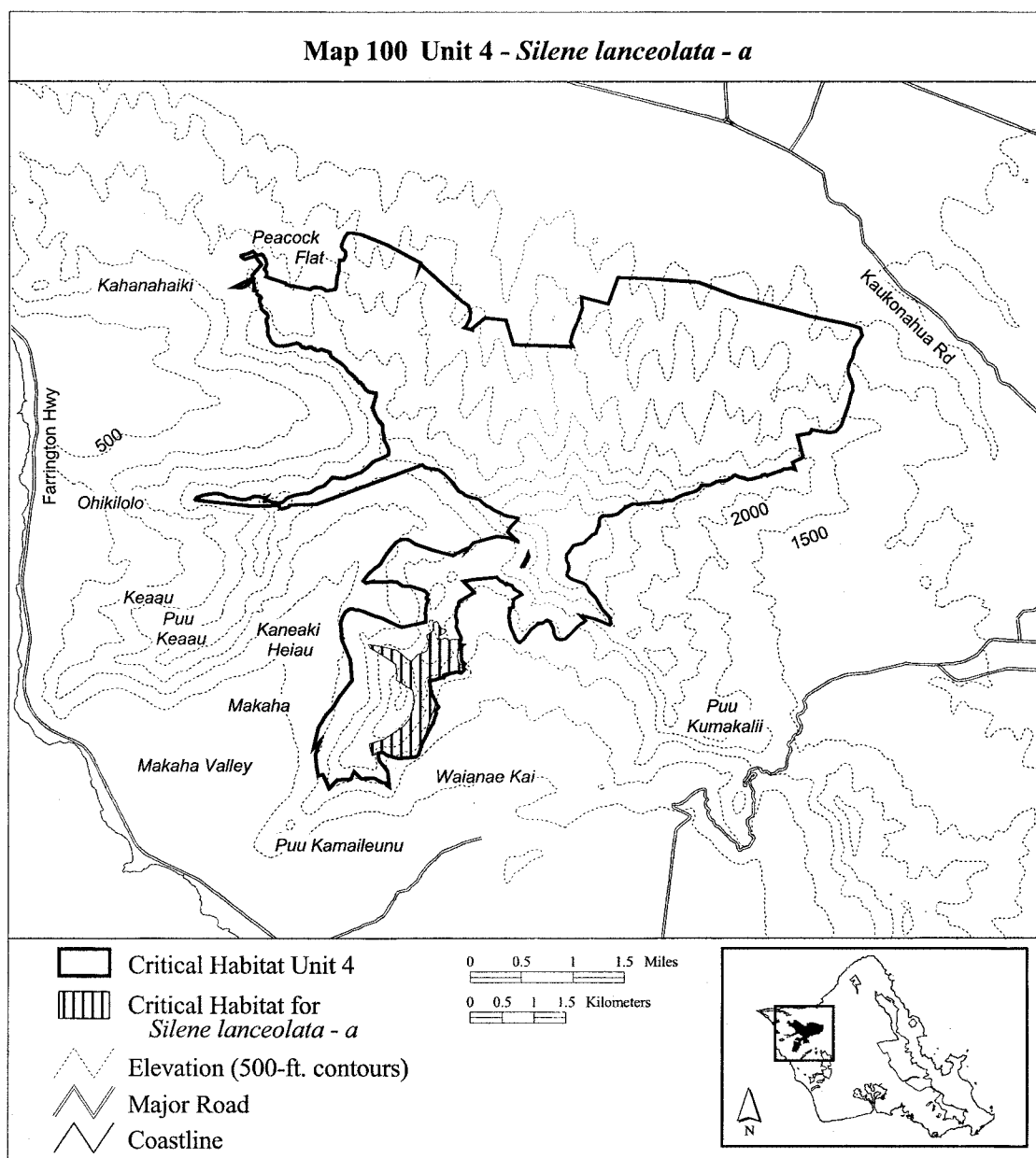
(i) Unit consists of the following 70 boundary points: Start at 585235,

2376822; 585462, 2376783; 585696, 2376727; 585781, 2376649; 585867, 2376571; 585916, 2376560; 585987, 2376620; 586016, 2376666; 586090, 2376680; 586157, 2376709; 586179, 2376805; 586182, 2376876; 586154, 2376950; 586164, 2376975; 586242, 2377032; 586267, 2377099; 586264, 2377163; 586321, 2377180; 586349,

2377141; 586395, 2377071; 586430, 2377067; 586462, 2377039; 586427, 2376996; 586342, 2376957; 586345, 2376918; 586395, 2376900; 586416, 2376911; 586448, 2376922; 586505, 2376897; 586562, 2376904; 586594, 2376904; 586657, 2376904; 586661, 2376851; 586682, 2376819; 586718, 2376798; 586657, 2376755; 586657, 2376712; 586633, 2376631; 586650, 2376585; 586668, 2376532; 586714, 2376489; 586735, 2376450; 586735, 2376404; 586696, 2376365; 586579, 2376400; 586519, 2376383; 586477,

2376376; 586413, 2376344; 586402, 2376308; 586186, 2376269; 586179, 2376162; 586312, 2375895; 586186, 2375546; 586127, 2375360; 586029, 2375074; 586003, 2375053; 585710, 2375018; 585450, 2375122; 585302, 2375070; 585257, 2375248; 585502, 2375327; 585800, 2375531; 585889, 2375650; 585963, 2375910; 585941, 2376095; 585673, 2376266; 585696, 2376326; 585666, 2376512; 585450, 2376653; 585264, 2376764; return to starting point.

(ii) **Note:** Map 100 follows:



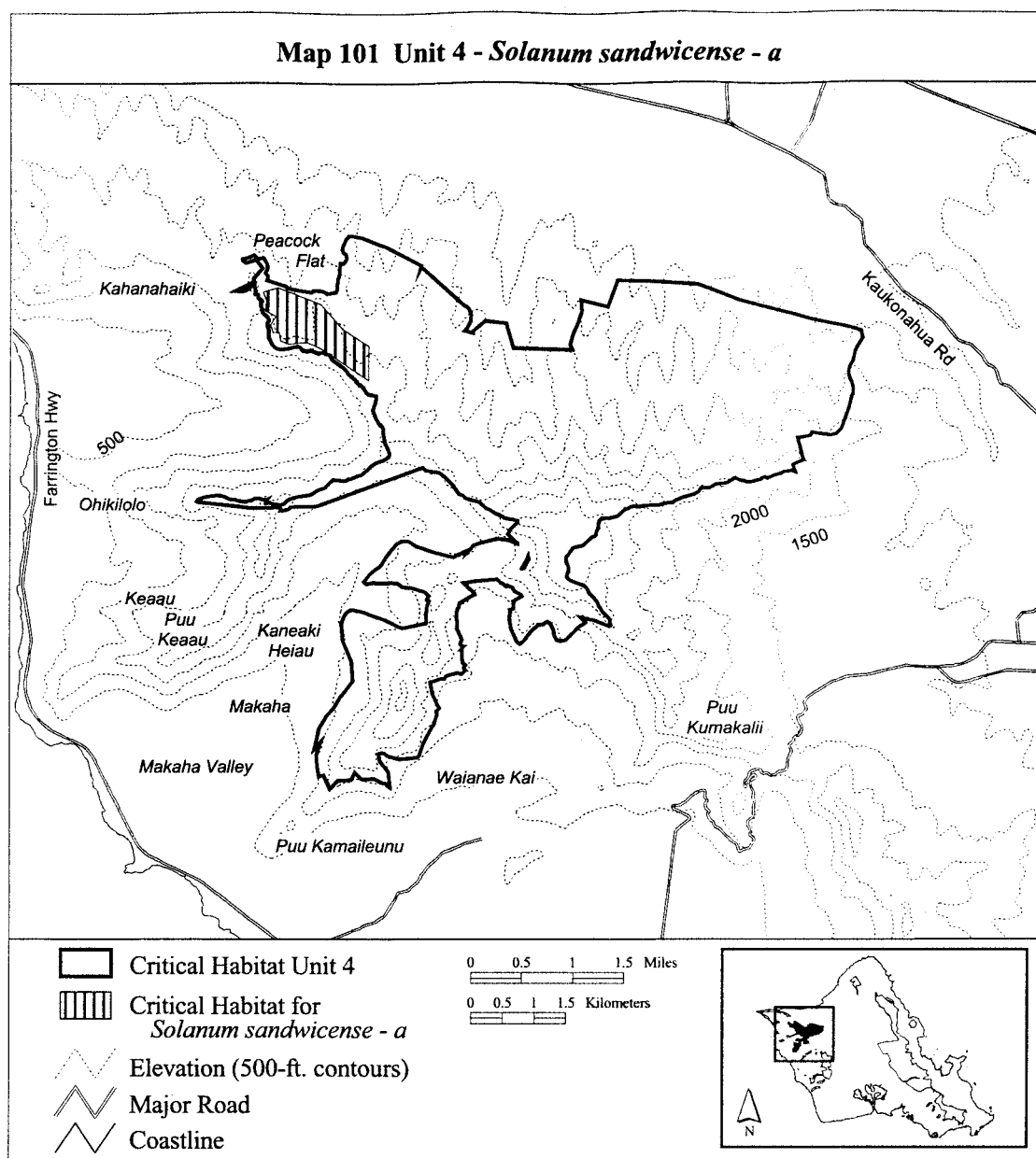
(101) Oahu 4—*Solanum sandwicense*—
a (105 ha; 258 ac)

(i) Unit consists of the following 16
boundary points: Start at 583559,

2382457; 583792, 2382513; 584478,
2382255; 584821, 2381863; 585232,
2381588; 585232, 2381049; 584471,
2381551; 584245, 2381655; 583969,
2381631; 583841, 2381680; 583810,

2381814; 583718, 2381808; 583675,
2381925; 583767, 2382072; 583590,
2382151; 583608, 2382317; return to
starting point.

(ii) **Note:** Map 101 follows:



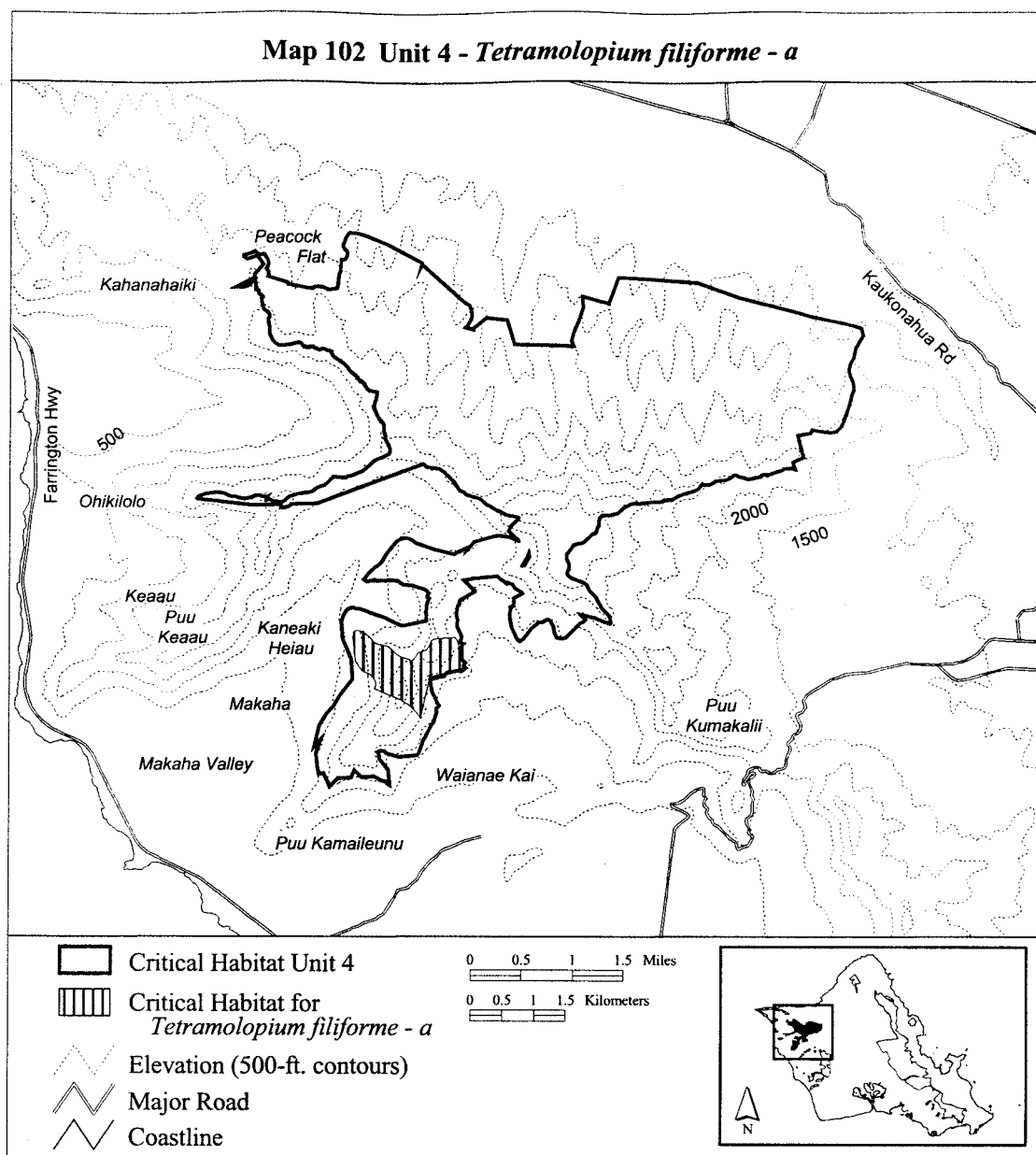
(102) Oahu 4—*Tetramolopium filiforme*—a (110 ha; 273 ac)

(i) Unit consists of the following 61 boundary points: Start at 585056, 2377021; 585144, 2376990; 585223, 2376941; 585273, 2376888; 585315, 2376838; 585364, 2376800; 585444, 2376781; 585535, 2376762; 585611, 2376705; 585664, 2376652; 585710, 2376622; 585748, 2376591; 585816, 2376576; 585870, 2376553; 585900, 2376530; 585949, 2376561; 585984,

2376614; 586014, 2376663; 586090, 2376694; 586151, 2376709; 586185, 2376770; 586216, 2376861; 586269, 2376888; 586360, 2376895; 586428, 2376899; 586497, 2376903; 586588, 2376907; 586638, 2376842; 586645, 2376781; 586664, 2376720; 586657, 2376675; 586657, 2376637; 586679, 2376584; 586717, 2376538; 586755, 2376508; 586717, 2376447; 586687, 2376409; 586615, 2376382; 586562, 2376363; 586451, 2376374; 586432,

2376336; 586193, 2376280; 586185, 2376207; 586052, 2375626; 585995, 2375721; 585911, 2375800; 585843, 2375854; 585767, 2375899; 585762, 2375889; 585758, 2375912; 585332, 2376097; 585349, 2376150; 585349, 2376207; 585311, 2376264; 585265, 2376317; 585136, 2376378; 585026, 2376527; 585007, 2376656; 584999, 2376770; 584980, 2376907; 584999, 2376998; return to starting point.

(ii) **Note:** Map 102 follows:



(103) Oahu 4—*Tetramolopium lepidotum* ssp. *lepidotum*—a (167 ha; 413 ac)

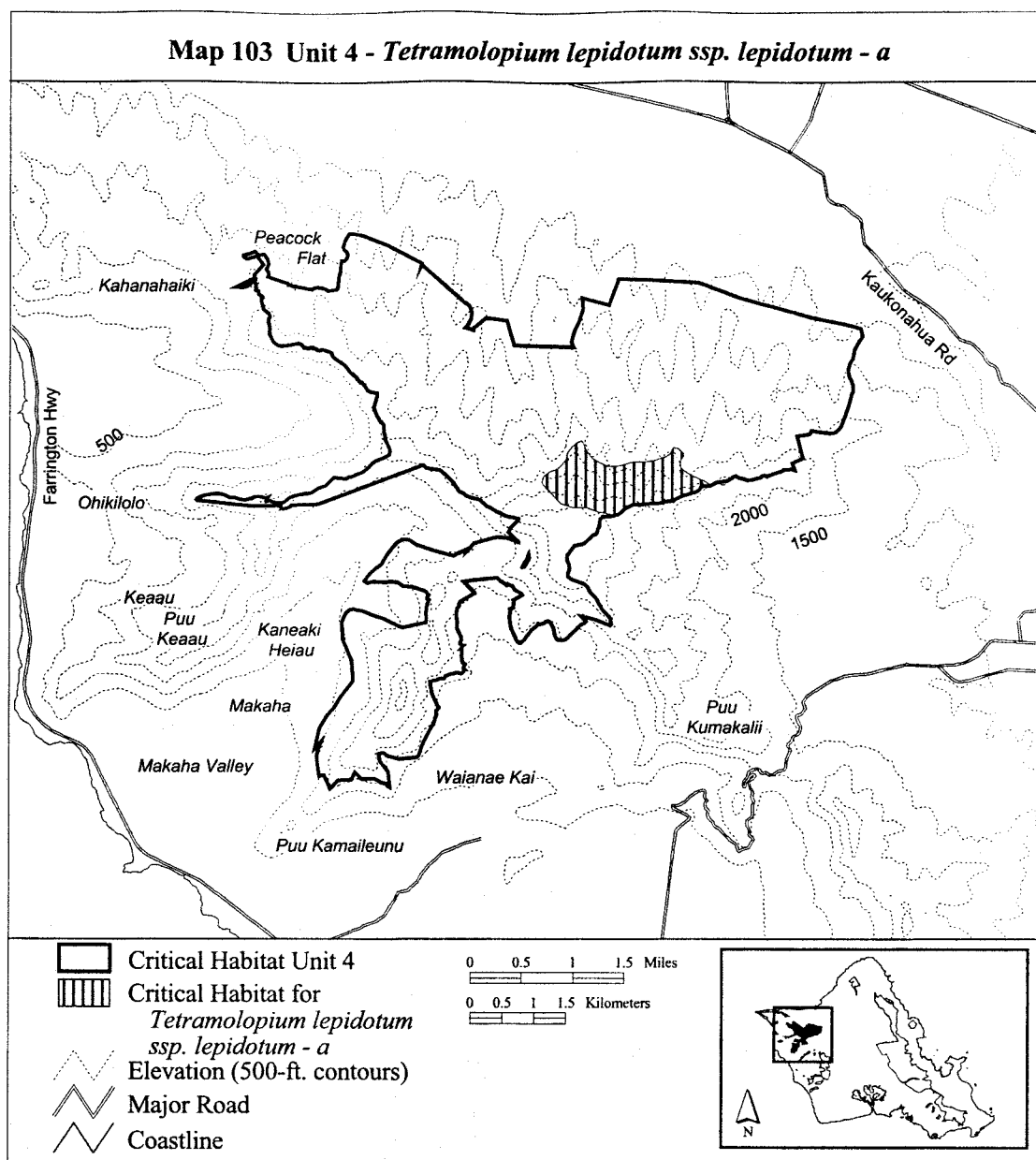
(i) Unit consists of the following 107 boundary points: Start at 588571, 2380048; 588609, 2379981; 588651, 2379880; 588730, 2379784; 588859, 2379700; 589002, 2379650; 589153, 2379658; 589270, 2379692; 589408, 2379717; 589559, 2379717; 589718, 2379746; 589890, 2379805; 589962, 2379847; 590016, 2379947; 590079, 2379935; 590125, 2379897; 590171, 2379851; 590163, 2379792; 590129, 2379733; 590117, 2379658; 590142, 2379612; 590255, 2379536; 590351, 2379478; 590448, 2379448; 590506, 2379419; 590586, 2379365; 590607, 2379344; 590593, 2379338; 590572,

2379336; 590525, 2379340; 590514, 2379339; 590479, 2379340; 590478, 2379340; 590462, 2379334; 590444, 2379312; 590415, 2379277; 590373, 2379247; 590347, 2379233; 590321, 2379227; 590285, 2379219; 590191, 2379191; 590084, 2379149; 590076, 2379145; 590067, 2379142; 590066, 2379141; 590039, 2379117; 590020, 2379104; 590012, 2379101; 589944, 2379099; 589907, 2379095; 589906, 2379095; 589881, 2379089; 589839, 2379075; 589839, 2379074; 589806, 2379068; 589790, 2379069; 589787, 2379069; 589747, 2379069; 589705, 2379066; 589675, 2379063; 589616, 2379059; 589604, 2379058; 589557, 2379052; 589519, 2379042; 589496, 2379035; 589462, 2379034; 589441,

2379042; 589424, 2379047; 589391, 2379048; 589370, 2379041; 589369, 2379041; 589348, 2379025; 589324, 2379009; 589303, 2379003; 589286, 2379001; 589285, 2379001; 589276, 2378998; 589275, 2378998; 589245, 2378974; 589244, 2378974; 589217, 2378943; 589164, 2378898; 589149, 2378886; 589123, 2378879; 589095, 2378872; 588960, 2378899; 588847, 2378916; 588775, 2378950; 588679, 2378979; 588620, 2378992; 588524, 2378992; 588432, 2378992; 588348, 2379017; 588256, 2379059; 588176, 2379130; 588084, 2379235; 587992, 2379318; 587950, 2379386; 587962, 2379461; 588008, 2379515; 588080, 2379562; 588190, 2379603; 588269, 2379683; 588328, 2379767; 588340,

2379847; 588408, 2379935; 588491,
2380023; return to starting point.

(ii) **Note:** Map 103 follows:



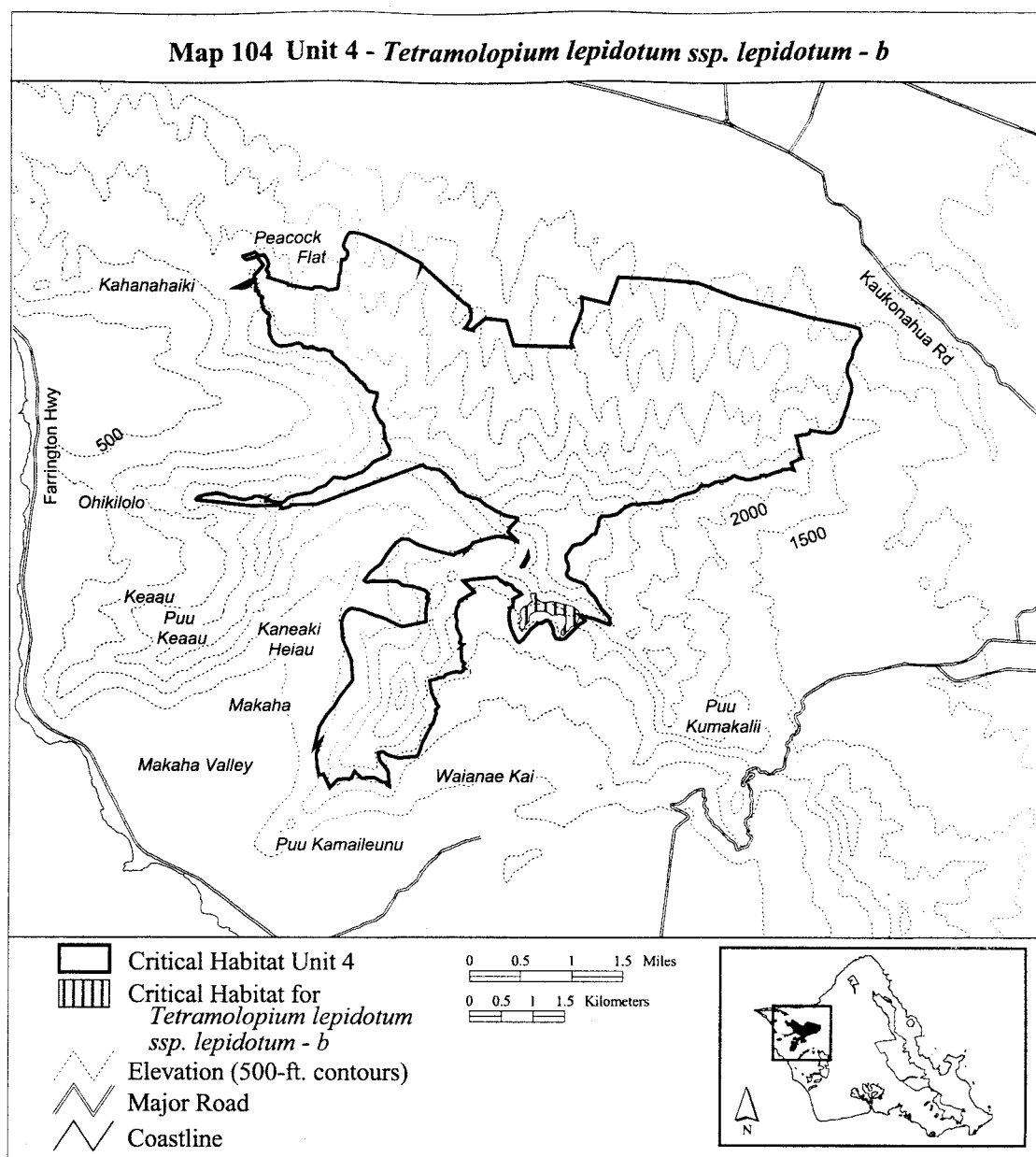
(104) Oahu 4—*Tetramolopium lepidotum* ssp. *lepidotum*—b (23 ha; 56 ac)

(i) Unit consists of the following 66 boundary points: Start at 587816, 2377513; 587792, 2377572; 587790, 2377601; 587795, 2377624; 587819, 2377630; 587851, 2377630; 587871, 2377624; 587880, 2377589; 587880, 2377548; 587912, 2377519; 587945, 2377490; 588021, 2377481; 588094, 2377490; 588167, 2377490; 588269, 2377469; 588360, 2377446; 588465,

2377408; 588541, 2377349; 588550, 2377305; 588553, 2377253; 588544, 2377215; 588526, 2377162; 588494, 2377118; 588430, 2377092; 588398, 2377045; 588354, 2377007; 588322, 2376955; 588290, 2376955; 588275, 2376981; 588275, 2377007; 588278, 2377034; 588307, 2377072; 588342, 2377145; 588342, 2377183; 588348, 2377232; 588342, 2377256; 588301, 2377285; 588243, 2377291; 588173, 2377285; 588129, 2377279; 588100, 2377300; 588029, 2377341; 587947, 2377343; 587880, 2377343; 587790,

2377297; 587763, 2377247; 587775, 2377186; 587740, 2377156; 587702, 2377115; 587696, 2377074; 587667, 2377045; 587632, 2377057; 587617, 2377083; 587614, 2377115; 587614, 2377148; 587629, 2377183; 587646, 2377206; 587649, 2377235; 587632, 2377253; 587629, 2377273; 587629, 2377297; 587629, 2377314; 587629, 2377341; 587655, 2377376; 587699, 2377417; 587746, 2377440; return to starting point.

(ii) **Note:** Map 104 follows:



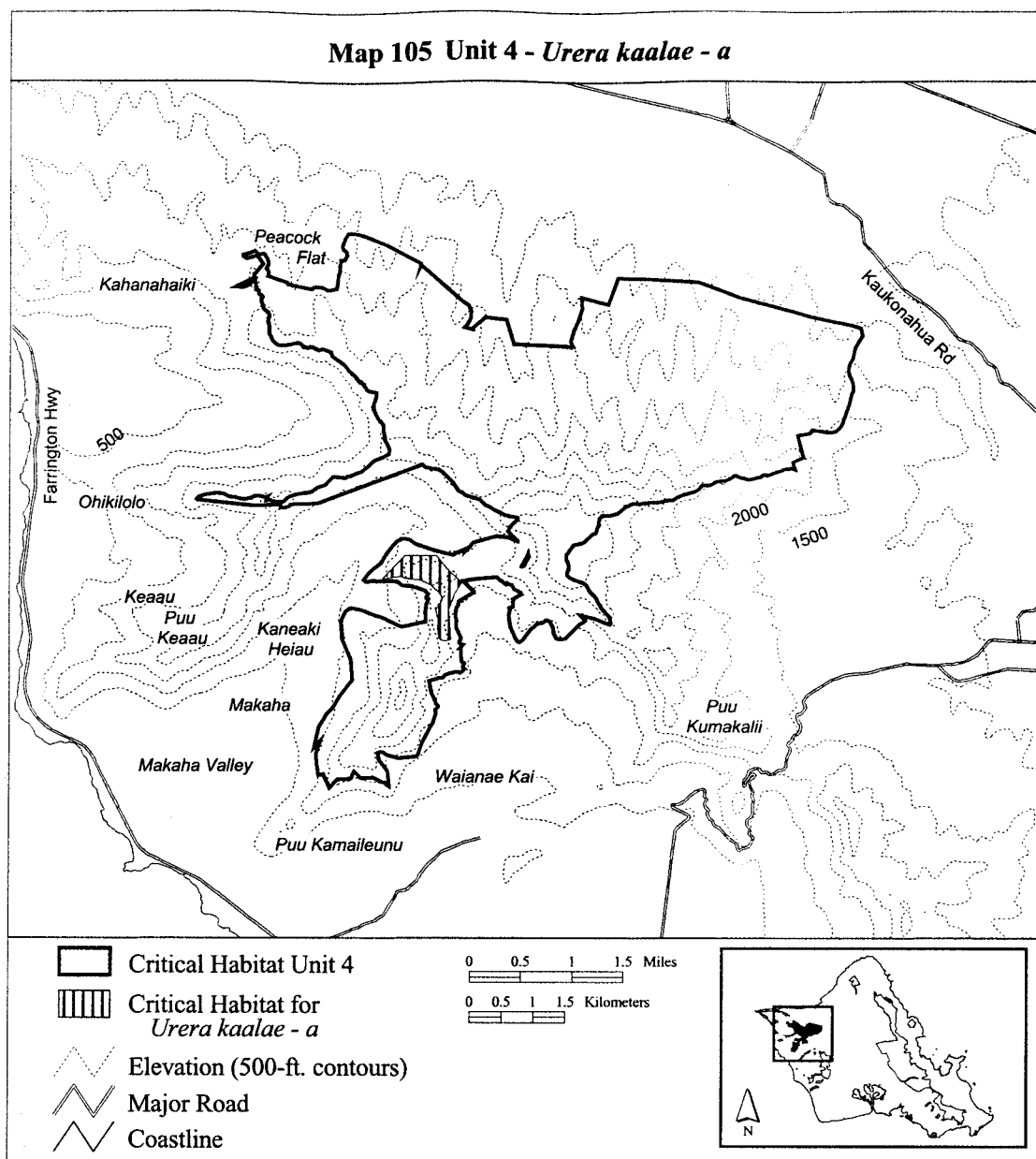
(105) Oahu 4—*Urera kaalae*—a (54 ha; 133 ac)

(i) Unit consists of the following 31 boundary points: Start at 585458, 2377846; 585812, 2378215; 586314, 2378215; 586485, 2378006; 586713, 2377795; 586580, 2377592; 586584,

2377579; 586581, 2377578; 586501, 2377367; 586539, 2376893; 586461, 2376877; 586391, 2376882; 586345, 2376923; 586333, 2376996; 586330, 2377057; 586333, 2377159; 586333, 2377211; 586316, 2377276; 586298, 2377354; 586336, 2377407; 586383,

2377482; 586397, 2377546; 586383, 2377590; 586333, 2377651; 586257, 2377718; 586220, 2377753; 586147, 2377794; 586042, 2377838; 585908, 2377849; 585826, 2377858; 585739, 2377890; return to starting point.

(ii) **Note:** Map 105 follows:



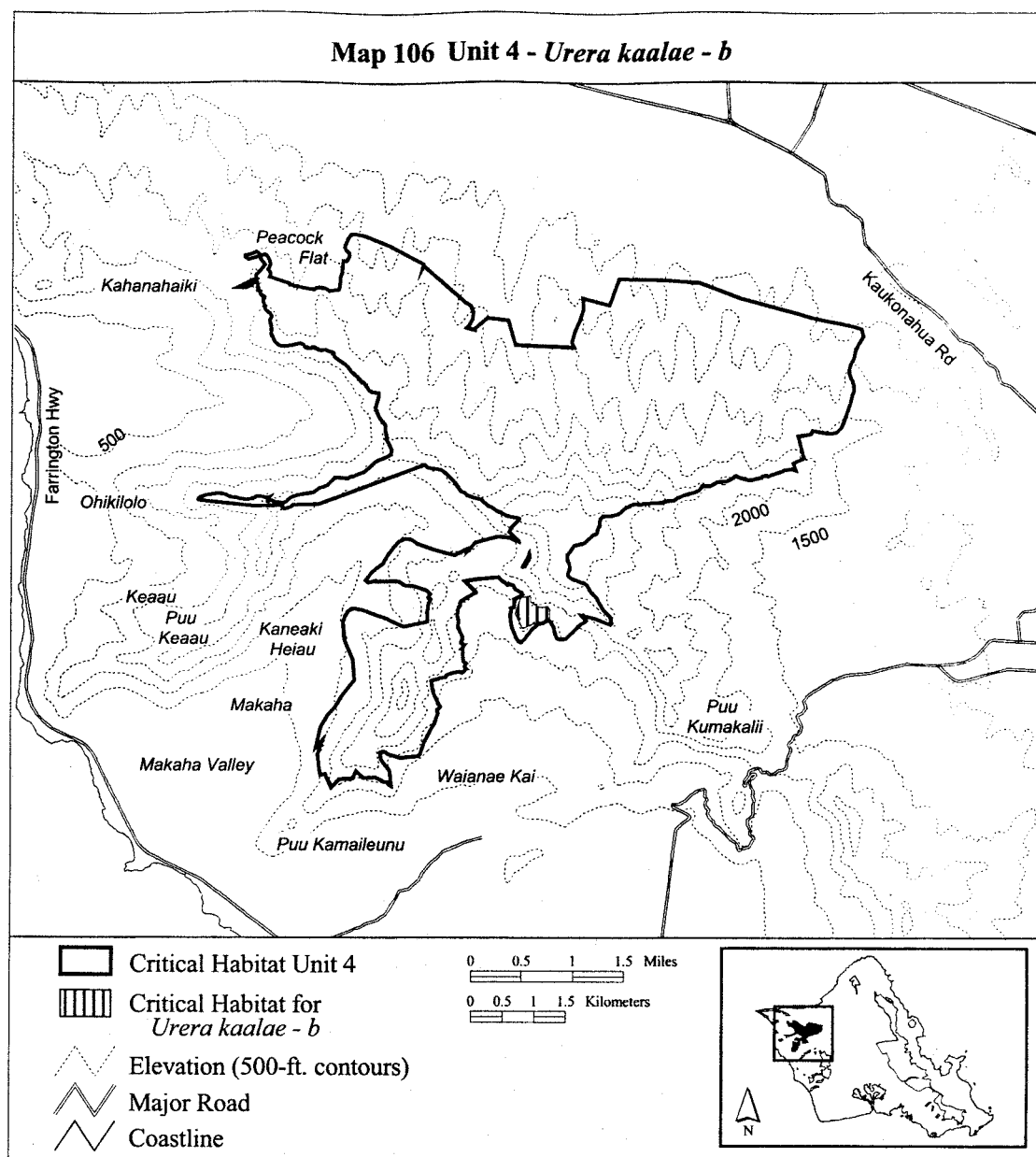
(106) Oahu 4—*Urera kaalae*—b (17 ha; 43 ac)

(i) Unit consists of the following 19 boundary points: Start at 587770, 2377591; 587772, 2377573; 587772,

2377497; 587839, 2377453; 587894, 2377418; 587949, 2377404; 588028, 2377418; 588048, 2377418; 588066, 2377395; 588077, 2377363; 588074, 2377316; 588072, 2377217; 588022,

2377191; 587970, 2377156; 587819, 2377145; 587817, 2377146; 587650, 2377076; 587531, 2377302; 587609, 2377557; return to starting point.

(ii) **Note:** Map 106 follows:



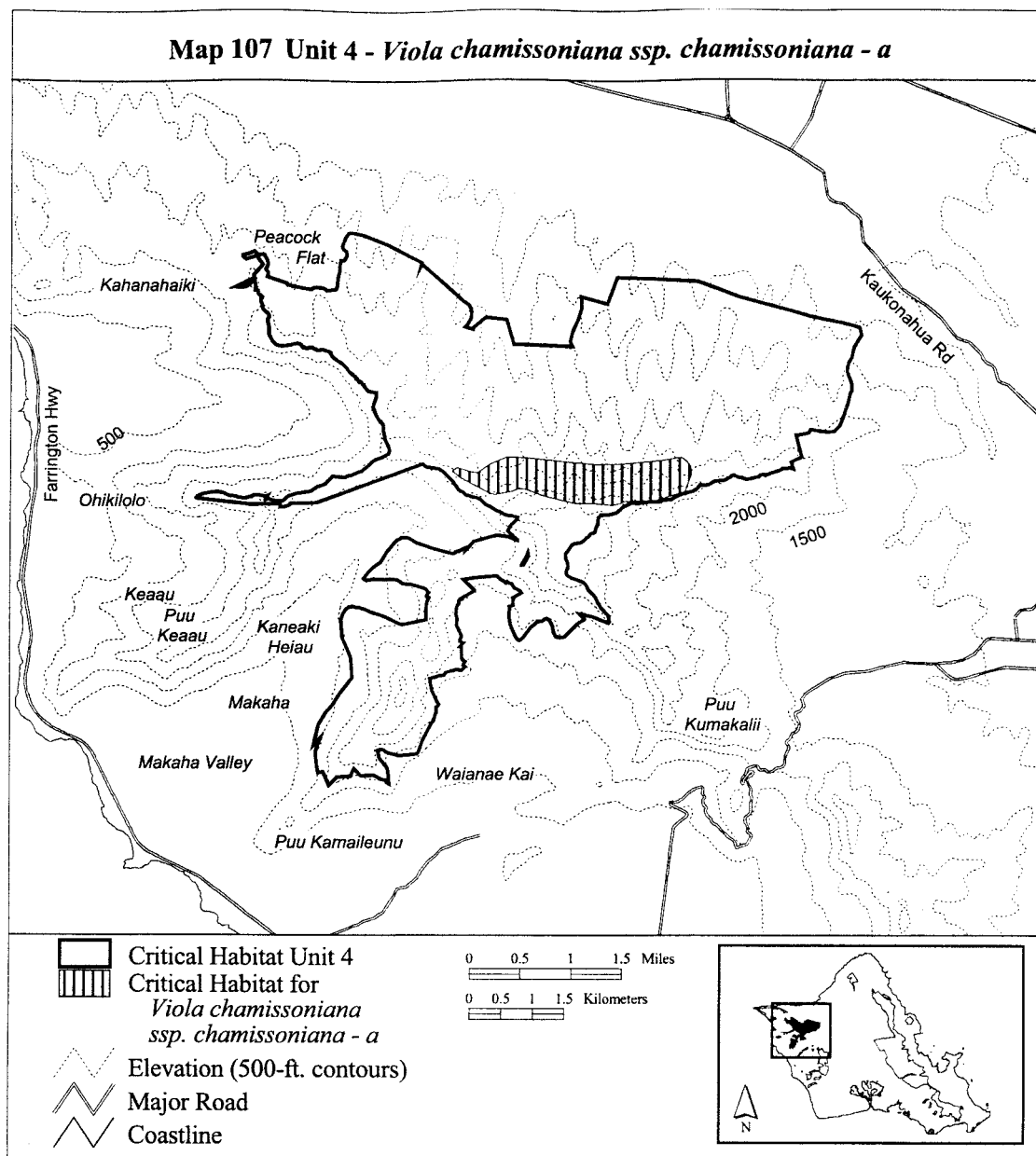
(107) Oahu 4—*Viola chamissoniana* ssp. *chamissoniana*—a (199 ha; 491 ac)

(i) Unit consists of the following 41 boundary points: Start at 590207, 2379196; 590092, 2379192; 589906, 2379127; 589750, 2379084; 589624, 2379079; 589290, 2379071; 589228, 2379052; 589230, 2379049; 589091,

2379014; 588770, 2379040; 588489, 2379036; 588276, 2379092; 588003, 2379153; 587743, 2379257; 587613, 2379279; 587501, 2379235; 587323, 2379201; 587215, 2379183; 587124, 2379214; 586963, 2379305; 586686, 2379448; 586543, 2379552; 586625, 2379612; 586799, 2379552; 586937, 2379530; 587158, 2379673; 587411,

2379781; 587701, 2379773; 588377, 2379703; 588887, 2379652; 588883, 2379660; 589178, 2379660; 589503, 2379690; 589888, 2379725; 590170, 2379781; 590265, 2379712; 590317, 2379638; 590339, 2379504; 590287, 2379404; 590244, 2379266; 590219, 2379199; return to starting point.

(ii) **Note:** Map 107 follows:



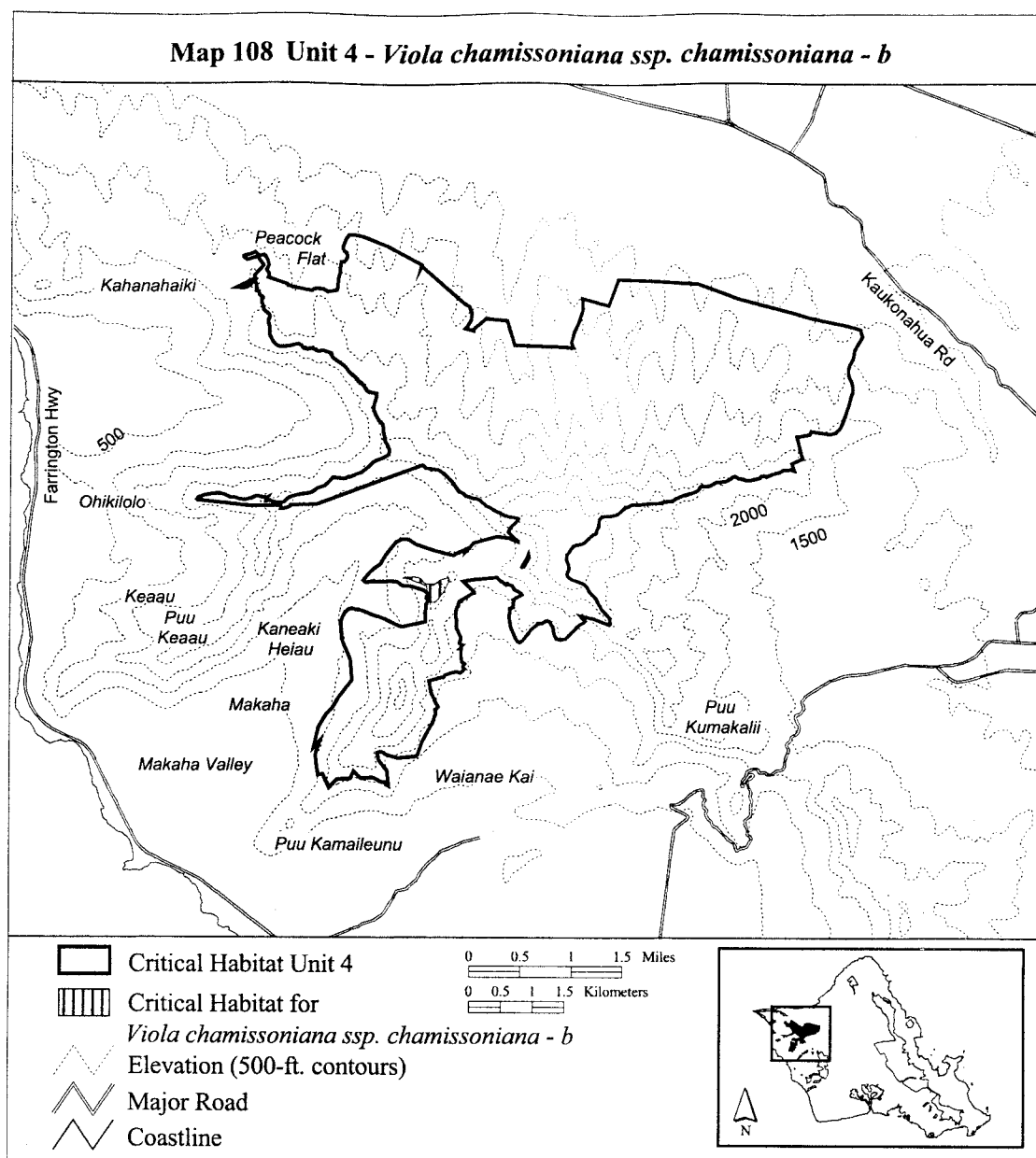
(108) Oahu 4—*Viola chamissoniana* ssp. *chamissoniana*—b (10 ha; 24 ac)

(i) Unit consists of the following 20 boundary points: Start at 585778, 2377867; 585813, 2377876; 585957,

2377886; 586055, 2377865; 586137, 2377773; 586287, 2377778; 586364, 2377840; 586494, 2377870; 586508, 2377829; 586425, 2377655; 586369, 2377577; 586292, 2377485; 586194, 2377485; 586173, 2377567; 586173,

2377649; 586167, 2377655; 586169, 2377657; 586142, 2377745; 586008, 2377805; 585868, 2377854; return to starting point.

(ii) **Note:** Map 108 follows:



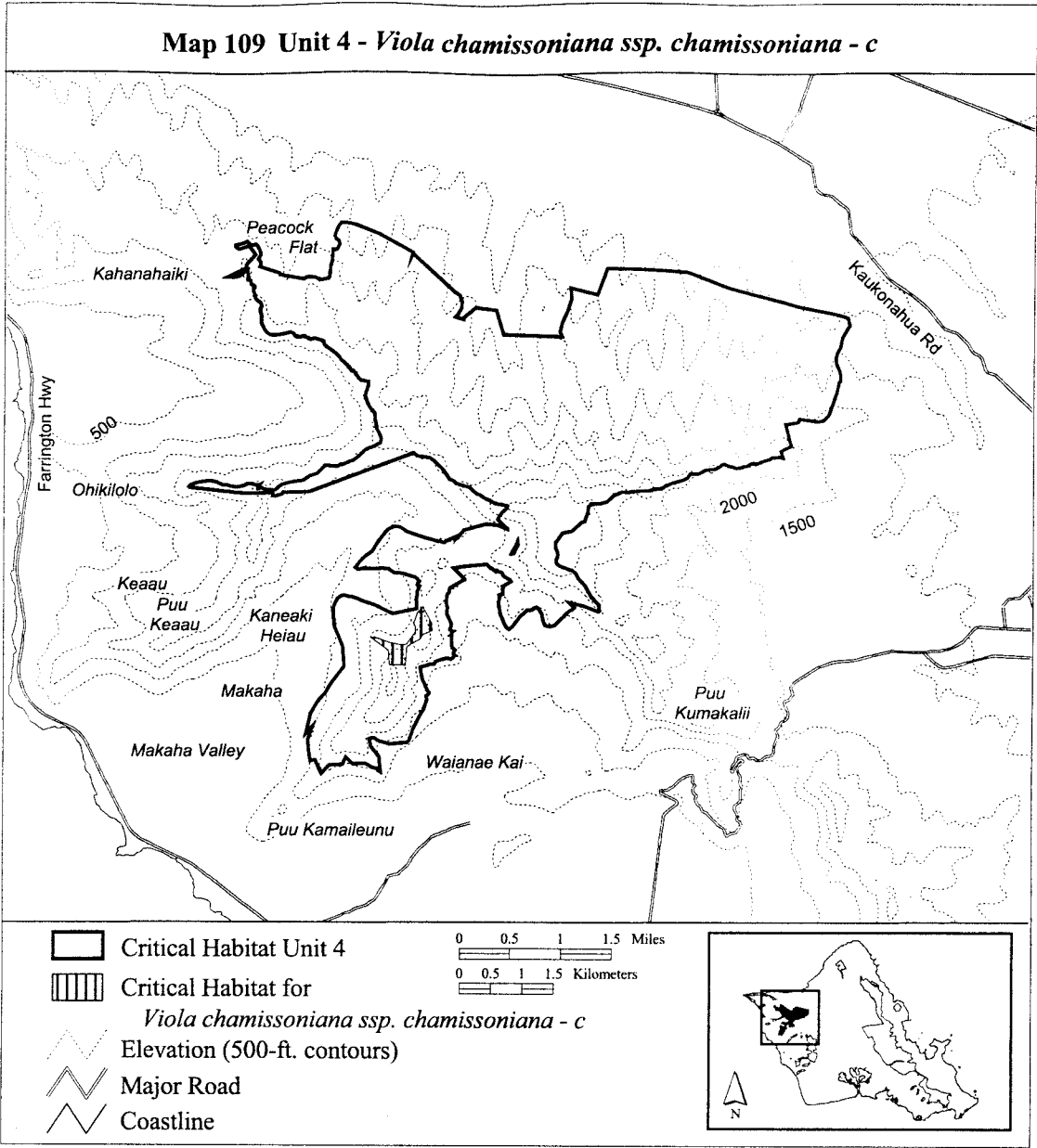
(109) Oahu 4—*Viola chamissoniana* ssp. *chamissoniana*—c (22 ha; 55 ac)

(i) Unit consists of the following 30 boundary points: Start at 585428, 2376708; 585474, 2376708; 585695, 2376636; 585880, 2376595; 585983, 2376600; 586009, 2376652; 586086,

2376749; 586122, 2376796; 586117, 2376873; 586096, 2376940; 586117, 2377007; 586158, 2377109; 586209, 2377161; 586240, 2377202; 586297, 2377094; 586384, 2376935; 586385, 2376934; 586388, 2376821; 586297, 2376788; 586233, 2376758; 586205,

2376688; 586122, 2376652; 585995, 2376564; 585996, 2376563; 585980, 2376564; 585968, 2376266; 585932, 2376276; 585708, 2376276; 585683, 2376512; 585423, 2376699; return to starting point.

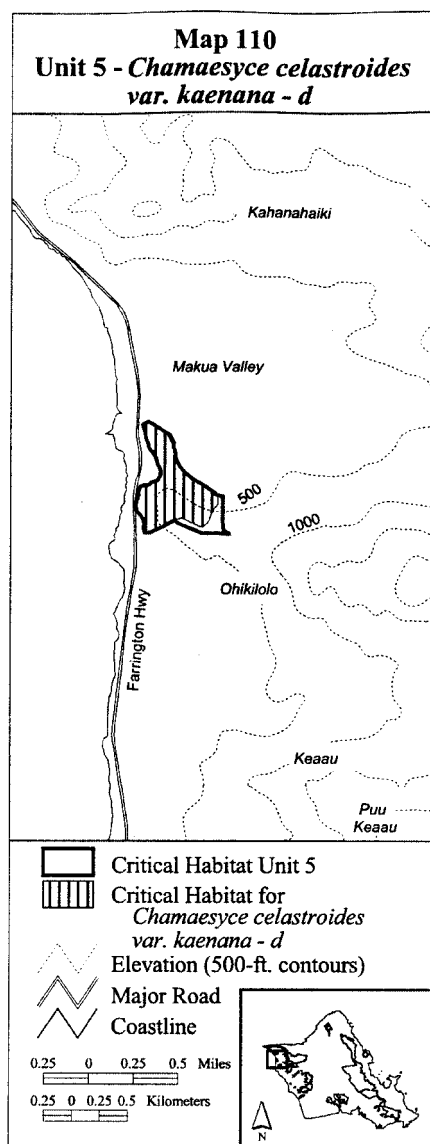
(ii) **Note:** Map 109 follows:



(110) Oahu 5—*Chamaesyce celastroides* var. *kaenana*—d (36 ha; 89 ac)

(i) Unit consists of the following 64 boundary points: Start at 580244, 2380495; 580287, 2380408; 580327, 2380329; 580333, 2380242; 580358, 2380198; 580391, 2380157; 580428, 2380124; 580482, 2380078; 580579, 2380022; 580685, 2379948; 580712, 2379892; 580712, 2379846; 580685, 2379815; 580652, 2379749; 580629, 2379697; 580604, 2379664; 580571, 2379639; 580521, 2379658; 580476, 2379680; 580426, 2379705; 580383, 2379724; 580329, 2379707; 580277, 2379680; 580217, 2379645; 580146, 2379612; 580097, 2379591; 580057, 2379587; 580051, 2379597; 580039, 2379624; 580047, 2379660; 580045, 2379689; 580026, 2379734; 579991, 2379776; 579971, 2379800; 579964, 2379818; 579966, 2379854; 580001, 2379917; 579995, 2379954; 580008, 2380000; 580028, 2380012; 580039, 2380016; 580094, 2380022; 580111, 2380039; 580165, 2380060; 580192, 2380103; 580194, 2380117; 580195, 2380118; 580196, 2380118; 580196, 2380119; 580196, 2380120; 580195, 2380123; 580198, 2380149; 580171, 2380198; 580159, 2380252; 580121, 2380315; 580100, 2380335; 580084, 2380370; 580084, 2380377; 580068, 2380433; 580055, 2380491; 580034, 2380557; 580070, 2380584; 580085, 2380590; 580235, 2380500; return to starting point.

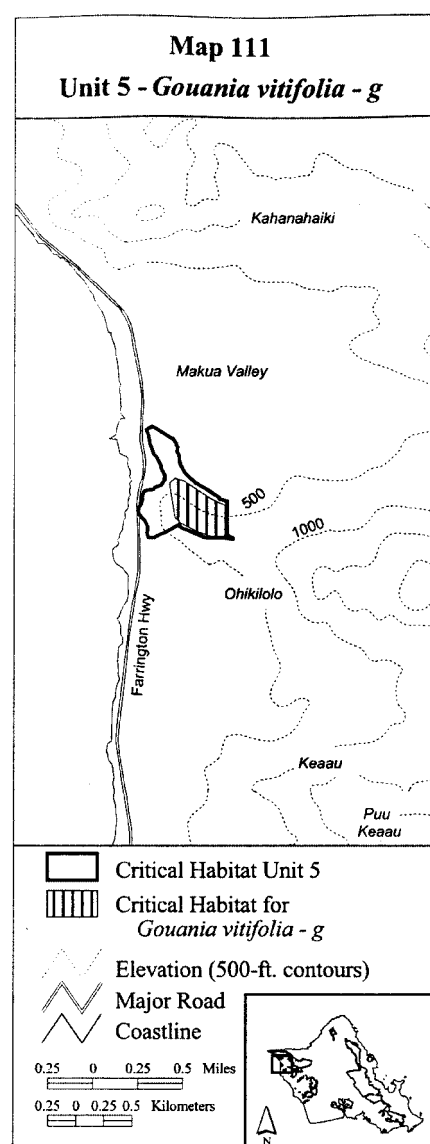
(ii) **Note:** Map 110 follows:



(111) Oahu 5—*Gouania vitifolia*—g (17 ha; 43 ac)

(i) Unit consists of the following 17 boundary points: Start at 580804, 2379587; 580691, 2379587; 580594, 2379609; 580481, 2379652; 580347, 2379722; 580287, 2379772; 580267, 2379896; 580239, 2380076; 580293, 2380120; 580373, 2380099; 580621, 2379932; 580754, 2379874; 580754, 2379672; 580764, 2379612; 580764, 2379611; 580765, 2379610; return to starting point.

(ii) **Note:** Map 111 follows:

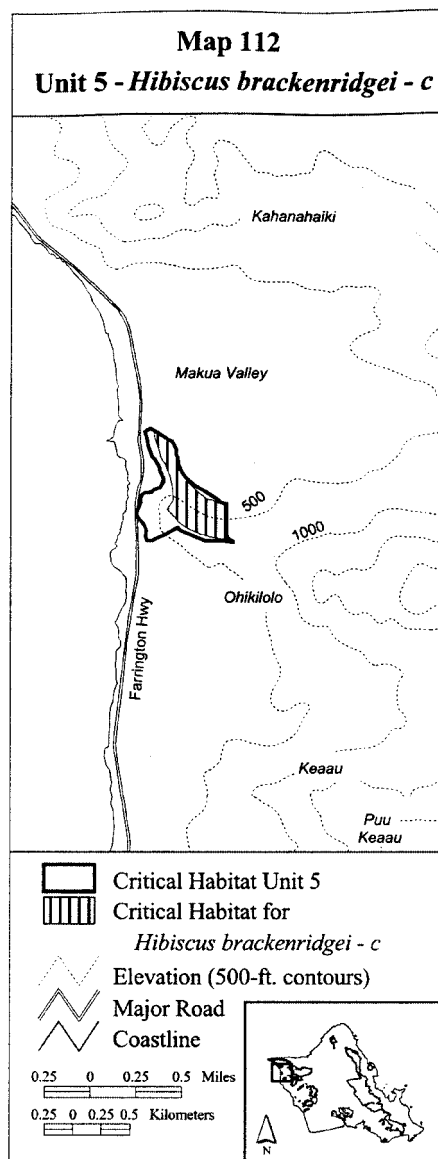


(112) Oahu 5—*Hibiscus brackenridgei*—c (23 ha; 56 ac)

(i) Unit consists of the following 46 boundary points: Start at 580785, 2379598; 580771, 2379599; 580645, 2379613; 580529, 2379645; 580415, 2379693; 580337, 2379752; 580298, 2379795; 580259, 2379844; 580235, 2379868; 580282, 2379943; 580277, 2380051; 580258, 2380152; 580259, 2380154; 580257, 2380160; 580247, 2380183; 580233, 2380213; 580225, 2380244; 580211, 2380280; 580189, 2380305; 580172, 2380341; 580162, 2380387; 580143, 2380450; 580128, 2380489; 580116, 2380538; 580128, 2380562; 580133, 2380562; 580235, 2380500; 580275, 2380478; 580296, 2380443; 580315, 2380399; 580310, 2380368; 580310, 2380324; 580332, 2380266; 580373, 2380169; 580427, 2380101; 580497, 2380026; 580577, 2379958; 580628, 2379950; 580742, 2379921; 580754, 2379920; 580754,

2379892; 580754, 2379672; 580764, 2379612; 580764, 2379611; 580765, 2379611; 580765, 2379610; return to starting point.

(ii) **Note:** Map 112 follows:

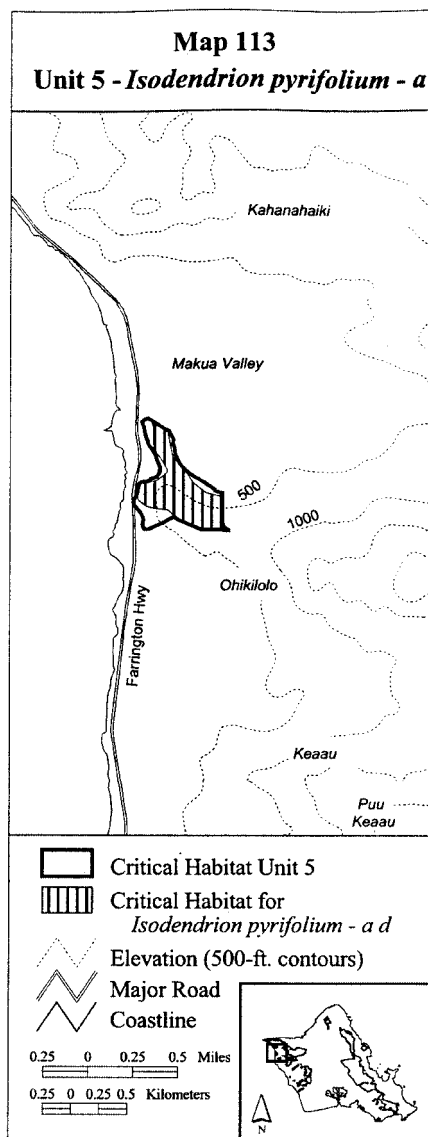


(113) Oahu 5—*Isodendron pyriformum*—a (30 ha; 75 ac)

(i) Unit consists of the following 38 boundary points: Start at 580262, 2380485; 580295, 2380309; 580312, 2380241; 580357, 2380192; 580436, 2380092; 580491, 2380011; 580610, 2379917; 580736, 2379889; 580754, 2379855; 580754, 2379672; 580764, 2379612; 580764, 2379611; 580765, 2379611; 580765, 2379610; 580815, 2379580; 580816, 2379580; 580822, 2379580; 580823, 2379577; 580789, 2379577; 580703, 2379591; 580563, 2379590; 580345, 2379682; 580321, 2379713; 580274, 2379760; 580151, 2379777; 580070, 2379798; 580002, 2379858; 580002, 2379900; 580024,

2379999; 580168, 2380028; 580259, 2380098; 580261, 2380130; 580193, 2380245; 580143, 2380312; 580138, 2380504; 580121, 2380555; 580130, 2380564; 580235, 2380500; return to starting point.

(ii) **Note:** Map 113 follows:

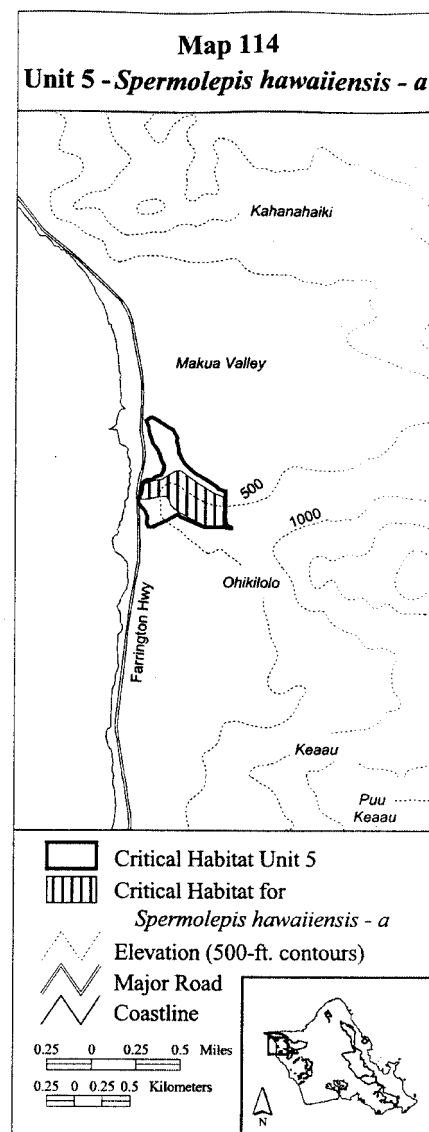


(114) Oahu 5—*Spermolepis hawaiiensis*—a (21 ha; 53 ac)

(i) Unit consists of the following 33 boundary points: Start at 580773, 2379589; 580678, 2379591; 580628, 2379591; 580552, 2379607; 580502, 2379632; 580411, 2379679; 580326, 2379733; 580282, 2379761; 580254, 2379796; 580244, 2379827; 580219, 2379868; 580156, 2379862; 580027, 2379836; 579983, 2379836; 579986, 2379884; 579996, 2379921; 580018, 2379978; 580103, 2380009; 580178, 2380019; 580238, 2380063; 580304, 2380100; 580348, 2380103; 580426, 2380047; 580489, 2380000; 580577,

2379940; 580646, 2379899; 580754, 2379857; 580754, 2379672; 580764, 2379612; 580764, 2379611; 580765, 2379611; 580765, 2379610; 580781, 2379601; return to starting point.

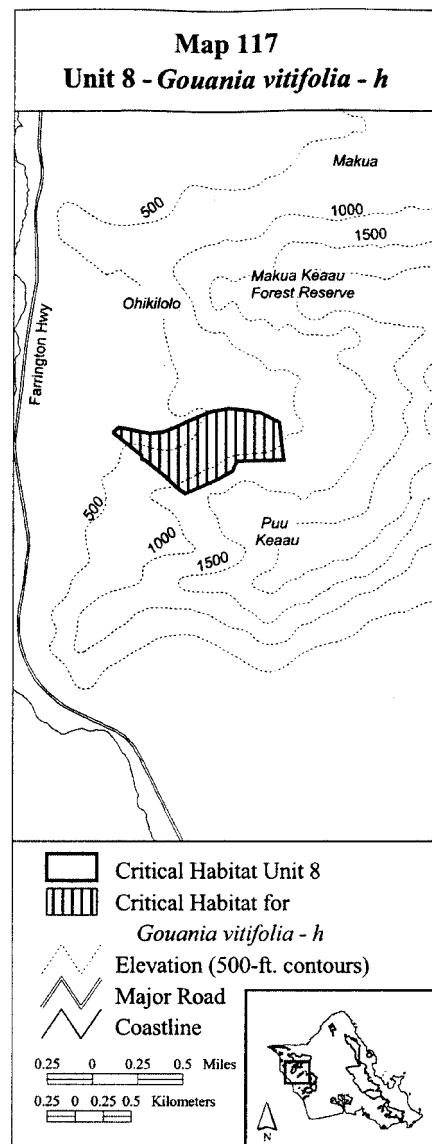
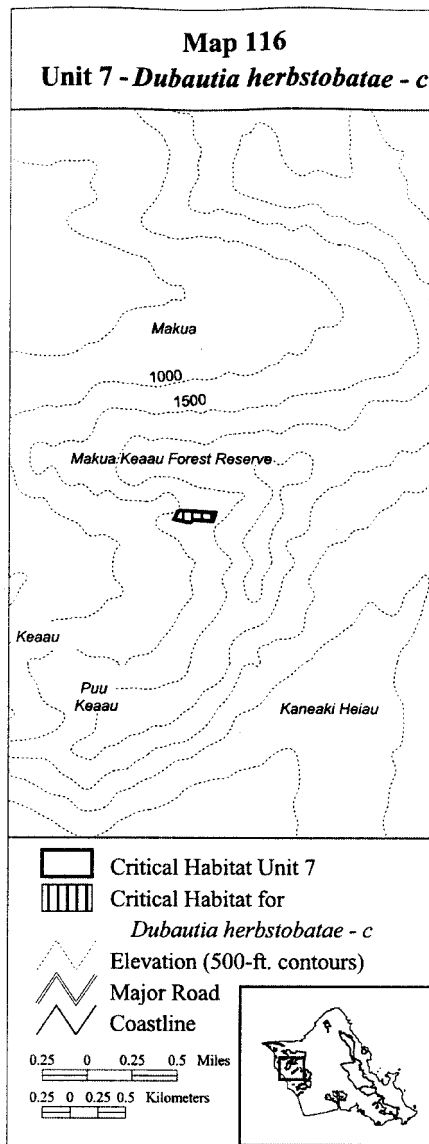
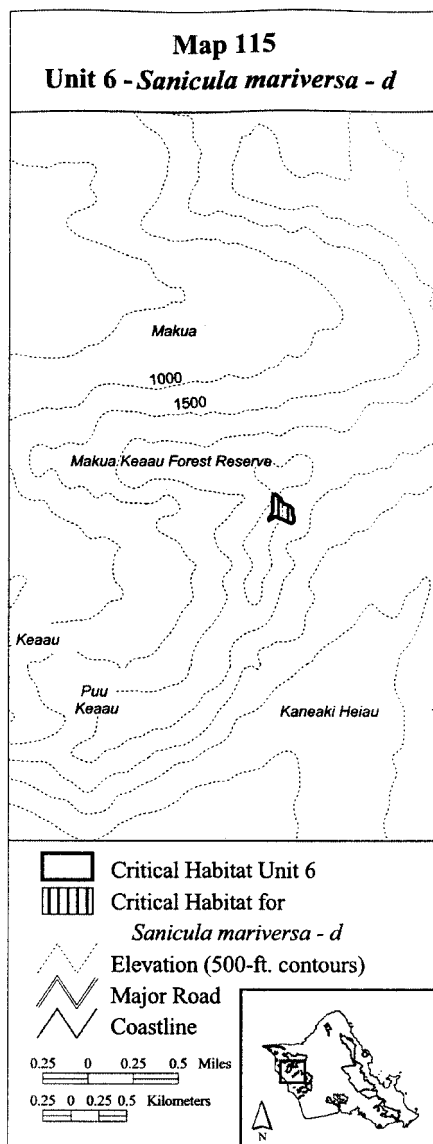
(ii) **Note:** Map 114 follows:



(115) Oahu 6—*Sanicula maritima*—d (3 ha; 8 ac)

(i) Unit consists of the following 24 boundary points: Start at 583697, 2378888; 583747, 2378848; 583761, 2378823; 583779, 2378796; 583806, 2378789; 583834, 2378776; 583859, 2378754; 583859, 2378731; 583859, 2378704; 583869, 2378684; 583869, 2378664; 583871, 2378634; 583846, 2378622; 583804, 2378639; 583764, 2378662; 583712, 2378681; 583689, 2378674; 583649, 2378652; 583647, 2378662; 583667, 2378691; 583679, 2378734; 583682, 2378786; 583682, 2378826; 583682, 2378858; return to starting point.

(ii) **Note:** Map 115 follows:



(116) Oahu 7—*Dubautia herbstobatae*—c (3 ha; 7 ac)

(i) Unit consists of the following 7 boundary points: Start at 582848, 2378716; 583079, 2378700; 583176, 2378698; 583153, 2378621; 582980, 2378631; 582949, 2378607; 582806, 2378636; return to starting point.

(ii) **Note:** Map 116 follows:

(117) Oahu 8—*Gouania vitifolia*—h (64 ha; 158 ac)

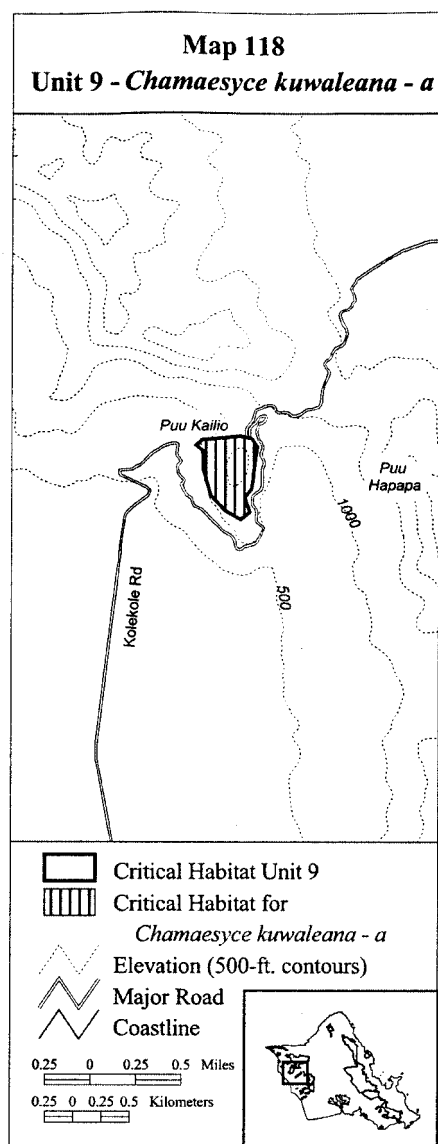
(i) Unit consists of the following 28 boundary points: Start at 580654, 2377938; 580709, 2377984; 580806, 2377963; 580926, 2377936; 580985, 2377929; 581093, 2377939; 581094, 2377939; 581095, 2377939; 581101, 2377941; 581175, 2377970; 581257, 2378005; 581291, 2378025; 581512, 2378121; 581530, 2378125; 581689, 2378150; 581847, 2378136; 581960, 2378115; 582134, 2378030; 582172, 2377688; 581756, 2377679; 581718, 2377589; 581587, 2377509; 581302, 2377381; 581231, 2377433; 581120, 2377540; 580943, 2377683; 580914, 2377696; 580911, 2377730; return to starting point.

(ii) **Note:** Map 117 follows:

(118) Oahu 9—*Chamaesyce kuwaleana*—a (27 ha; 68 ac)

(i) Unit consists of the following 16 boundary points: Start at 590764, 2374474; 590702, 2374527; 590756, 2374577; 591092, 2374605; 591194, 2374586; 591246, 2374509; 591192, 2374128; 591132, 2374054; 591132, 2374053; 591178, 2373922; 591094, 2373855; 590958, 2373934; 590827, 2374078; 590765, 2374307; 590764, 2374472; 590764, 2374473; return to starting point.

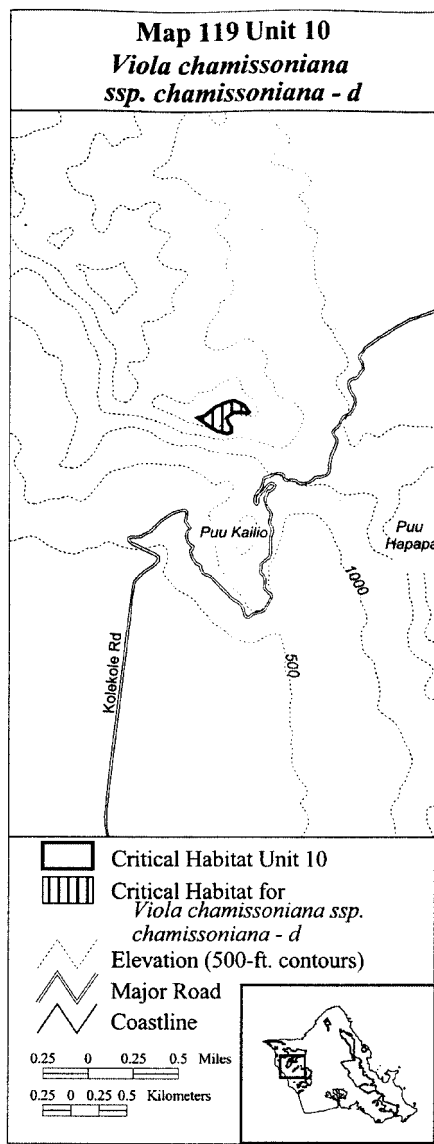
(ii) **Note:** Map 118 follows:



(119) Oahu 10—*Viola chamissoniana* ssp. *chamissoniana*—d (6 ha; 15 ac)

(i) Unit consists of the following 28 boundary points: Start at 591102, 2375422; 591028, 2375433; 590980, 2375431; 590964, 2375433; 590963, 2375433; 590960, 2375430; 590957, 2375430; 590894, 2375384; 590898, 2375364; 590897, 2375363; 590896, 2375362; 590896, 2375361; 590899, 2375358; 590902, 2375343; 590932, 2375301; 590935, 2375249; 590891, 2375236; 590801, 2375263; 590758, 2375290; 590631, 2375381; 590696, 2375399; 590697, 2375399; 590727, 2375419; 590807, 2375489; 590906, 2375529; 590965, 2375539; 590985, 2375529; 591044, 2375499; return to starting point.

(ii) **Note:** Map 119 follows:

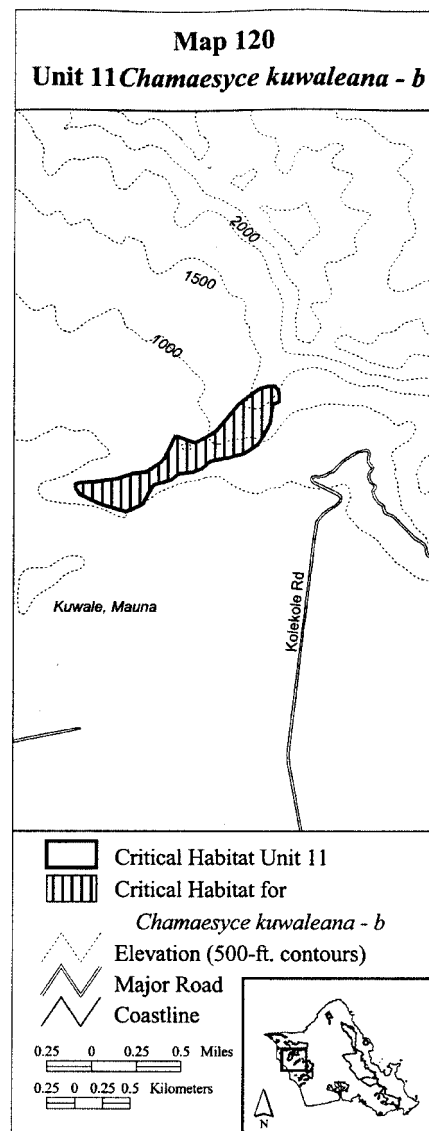


(120) Oahu 11—*Chamaesyce kuwaleana*—b (53 ha; 131 ac)

(i) Unit consists of the following 50 boundary points: Start at 589731, 2375043; 589731, 2374988; 589675, 2374965; 589652, 2374797; 589587, 2374675; 589540, 2374596; 589423, 2374516; 589292, 2374479; 589213, 2374465; 589114, 2374446; 589077, 2374409; 589030, 2374376; 588946, 2374343; 588820, 2374329; 588764, 2374278; 588684, 2374254; 588605, 2374231; 588549, 2374138; 588523, 2374090; 588506, 2374059; 588407, 2374010; 588348, 2373988; 588254, 2374016; 588133, 2374053; 588048, 2374091; 587941, 2374142; 587904, 2374198; 587904, 2374236; 587950, 2374250; 588095, 2374264; 588273, 2374287; 588418, 2374334; 588539, 2374348; 588661, 2374427; 588712, 2374484; 588712, 2374502; 588740, 2374558; 588792, 2374666; 588815, 2374666; 588890, 2374642; 588974,

2374614; 589068, 2374656; 589161, 2374717; 589255, 2374825; 589367, 2374965; 589456, 2375035; 589554, 2375105; 589629, 2375124; 589689, 2375129; 589725, 2375086; return to starting point.

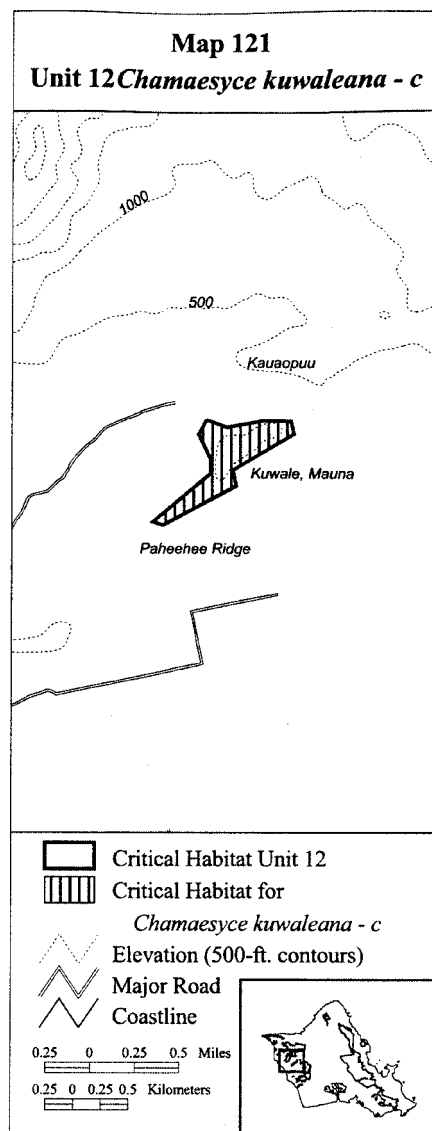
(ii) **Note:** Map 120 follows:



(121) Oahu 12—*Chamaesyce kuwaleana*—c (37 ha; 93 ac)

(i) Unit consists of the following 17 boundary points: Start at 587305, 2373616; 587489, 2373551; 587490, 2373551; 587822, 2373609; 588064, 2373606; 588091, 2373489; 587546, 2373163; 587545, 2373163; 587545, 2373162; 587573, 2373017; 586913, 2372661; 586822, 2372689; 587344, 2373134; 587344, 2373135; 587341, 2373263; 587341, 2373264; 587235, 2373485; return to starting point.

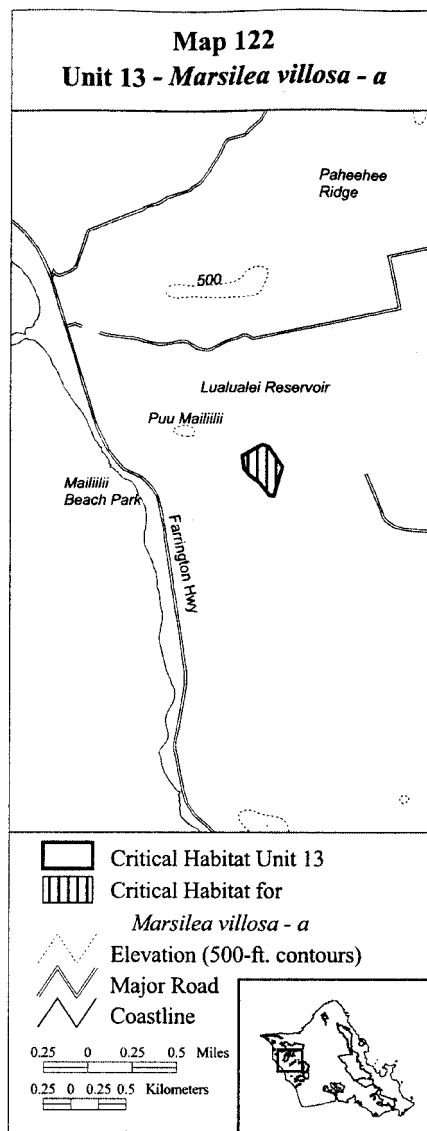
(ii) **Note:** Map 121 follows:



(122) Oahu 13—*Marsilea villosa*—a (10 ha; 25 ac)

(i) Unit consists of the following 9 boundary points: Start at 586020, 2369827; 585930, 2369901; 585879, 2369959; 585861, 2370075; 586047, 2370179; 586104, 2370158; 586226, 2369973; 586147, 2369710; 586105, 2369714; return to starting point.

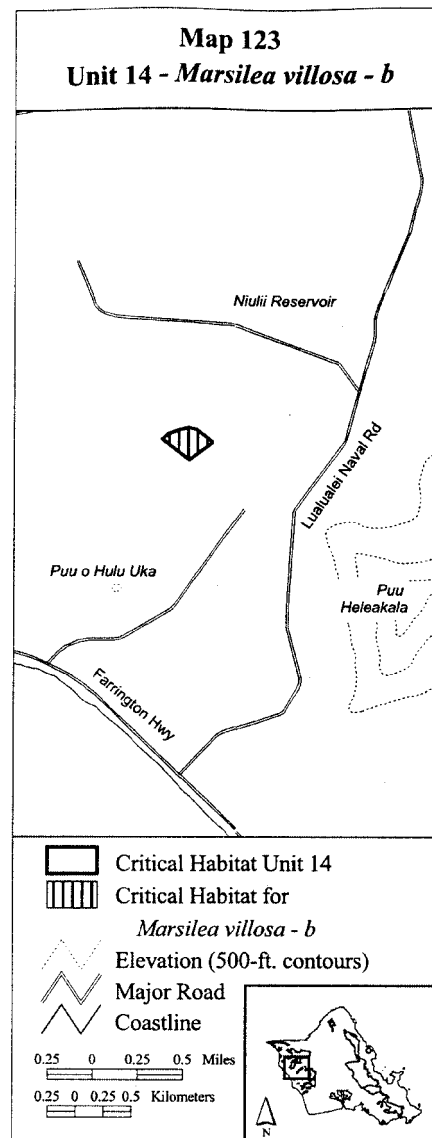
(ii) **Note:** Map 122 follows:



(123) Oahu 14—*Marsilea villosa*—b (7 ha; 18 ac)

(i) Unit consists of the following 7 boundary points: Start at 588190, 2368272; 587975, 2368116; 587738, 2368302; 587785, 2368349; 587880, 2368388; 587969, 2368406; 588040, 2368389; return to starting point.

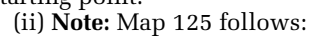
(ii) **Note:** Map 123 follows:

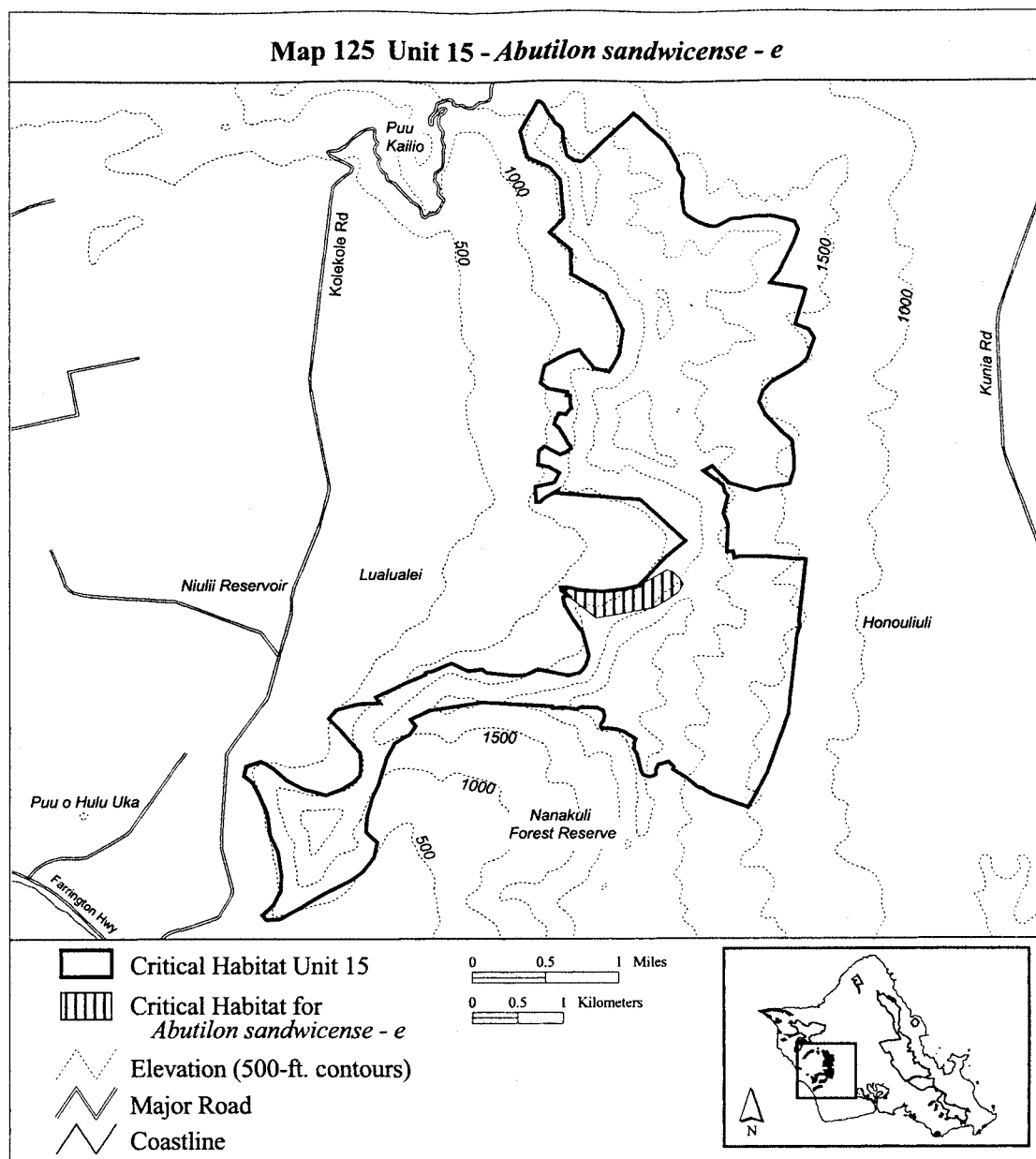


(124) Oahu 15—*Abutilon sandwicense*—d (49 ha; 121 ac)

(i) Unit consists of the following 11 boundary points: Start at 595071, 2372102; 595052, 2372104; 594771, 2372182; 594673, 2372285; 594450, 2372410; 594399, 2372438; 594400, 2372447; 594222, 2372665; 594678, 2372866; 595230, 2372788; 595275, 2372773; return to starting point.

(ii) **Note:** Map 124 follows:





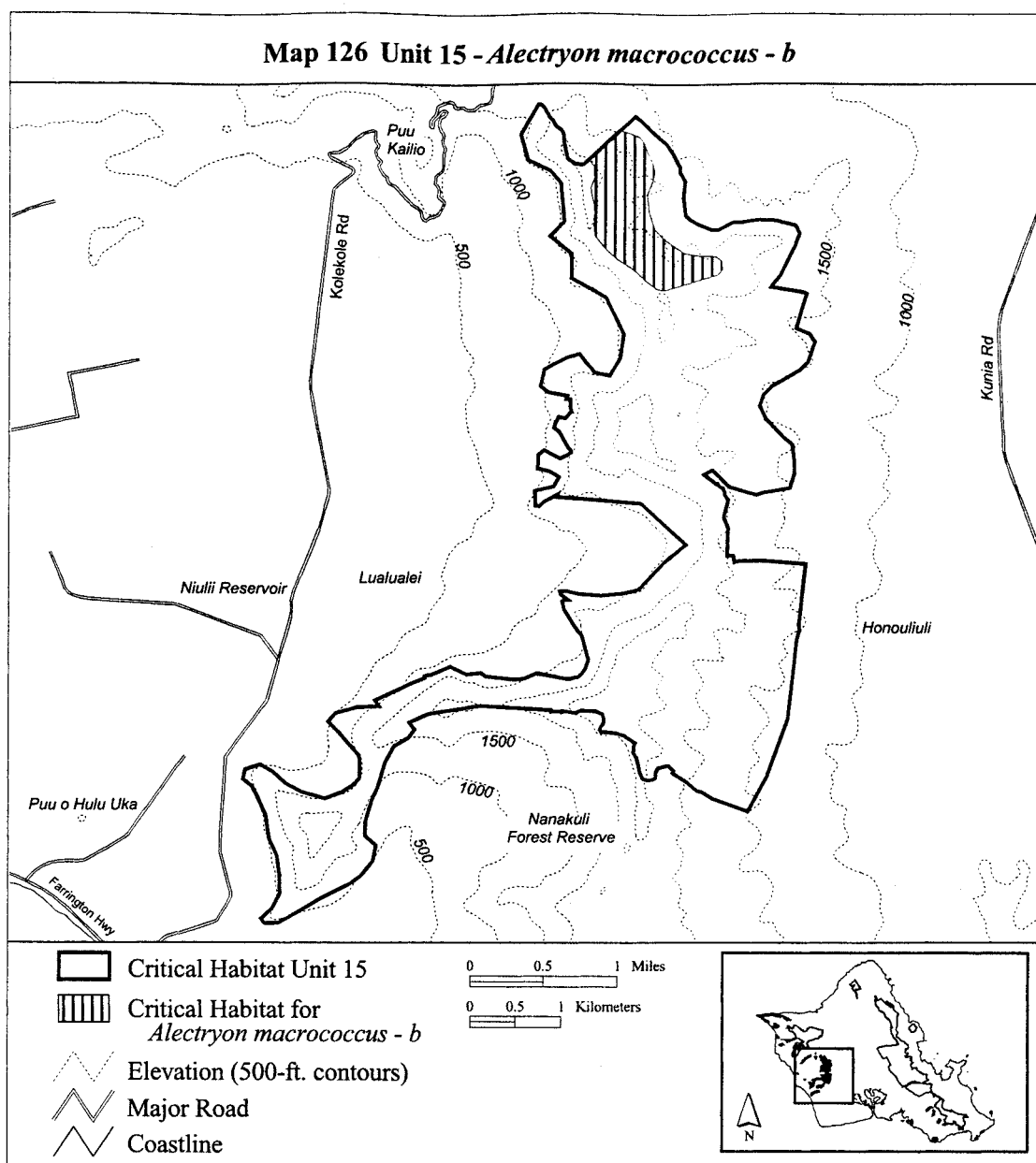
(126) Oahu 15—*Alectryon macrococcus*—b (112 ha; 278 ac)

(i) Unit consists of the following 45 boundary points: Start at 593221, 2374560; 593235, 2374556; 593343, 2374523; 593436, 2374483; 593475, 2374432; 593513, 2374340; 593574, 2374201; 593597, 2374102; 593577, 2374005; 593517, 2373864; 593533,

2373685; 593559, 2373602; 593597, 2373487; 593704, 2373370; 593817, 2373291; 593921, 2373215; 593923, 2373216; 594013, 2373194; 594092, 2373185; 594170, 2373185; 594266, 2373174; 594326, 2373130; 594333, 2373081; 594337, 2373029; 594297, 2372971; 593825, 2372840; 593697, 2372803; 593678, 2372808; 593619, 2372819; 593555, 2372874; 593497,

2372923; 593407, 2373011; 593336, 2373064; 593191, 2373152; 593065, 2373275; 592946, 2373412; 592933, 2373511; 592940, 2373661; 592933, 2373751; 592907, 2373870; 592905, 2373936; 592940, 2374033; 592938, 2374122; 592933, 2374163; 592875, 2374236; return to starting point.

(ii) **Note:** Map 126 follows:



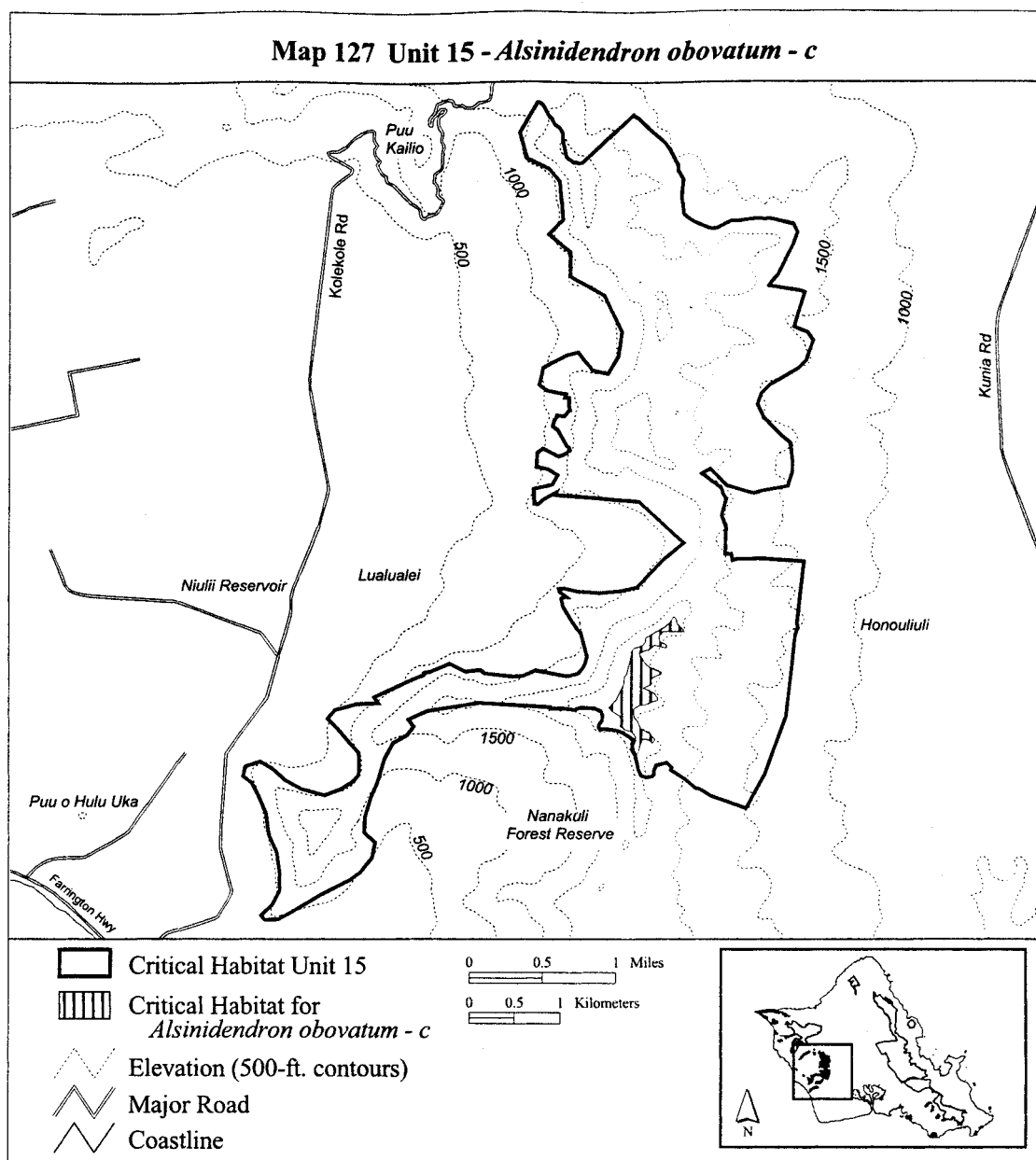
(127) Oahu 15—*Alsinidendron obovatum*—c (31 ha; 77 ac)

(i) Unit consists of the following 86 boundary points: Start at 593377, 2368762; 593383, 2368765; 593371, 2368765; 593408, 2368817; 593498, 2368851; 593529, 2368892; 593535, 2368933; 593628, 2368992; 593748, 2369057; 593800, 2369105; 593845, 2369174; 593876, 2369139; 593876, 2369098; 593906, 2369064; 593951, 2369019; 593944, 2369009; 593869, 2369009; 593831, 2369009; 593731, 2369009; 593683, 2368957; 593680, 2368944; 593690, 2368896; 593742, 2368878; 593766, 2368847; 593762,

2368834; 593735, 2368834; 593635, 2368854; 593573, 2368803; 593529, 2368799; 593484, 2368768; 593464, 2368768; 593487, 2368727; 593518, 2368669; 593553, 2368631; 593611, 2368593; 593666, 2368573; 593711, 2368555; 593697, 2368531; 593632, 2368504; 593597, 2368480; 593587, 2368452; 593604, 2368432; 593597, 2368418; 593532, 2368390; 593515, 2368377; 593621, 2368329; 593642, 2368308; 593666, 2368270; 593663, 2368246; 593587, 2368219; 593532, 2368195; 593467, 2368188; 593408, 2368153; 593408, 2368095; 593412, 2368054; 593436, 2368023; 593456, 2367985; 593474, 2367940; 593525,

2367909; 593577, 2367892; 593597, 2367858; 593639, 2367813; 593608, 2367765; 593587, 2367796; 593542, 2367820; 593501, 2367813; 593470, 2367731; 593456, 2367683; 593436, 2367641; 593419, 2367683; 593405, 2367748; 593429, 2367796; 593415, 2367858; 593371, 2367903; 593312, 2367920; 593250, 2367958; 593264, 2368026; 593247, 2368078; 593178, 2368122; 593137, 2368164; 593212, 2368253; 593247, 2368322; 593288, 2368411; 593305, 2368504; 593322, 2368518; 593357, 2368655; return to starting point.

(ii) **Note:** Map 127 follows:



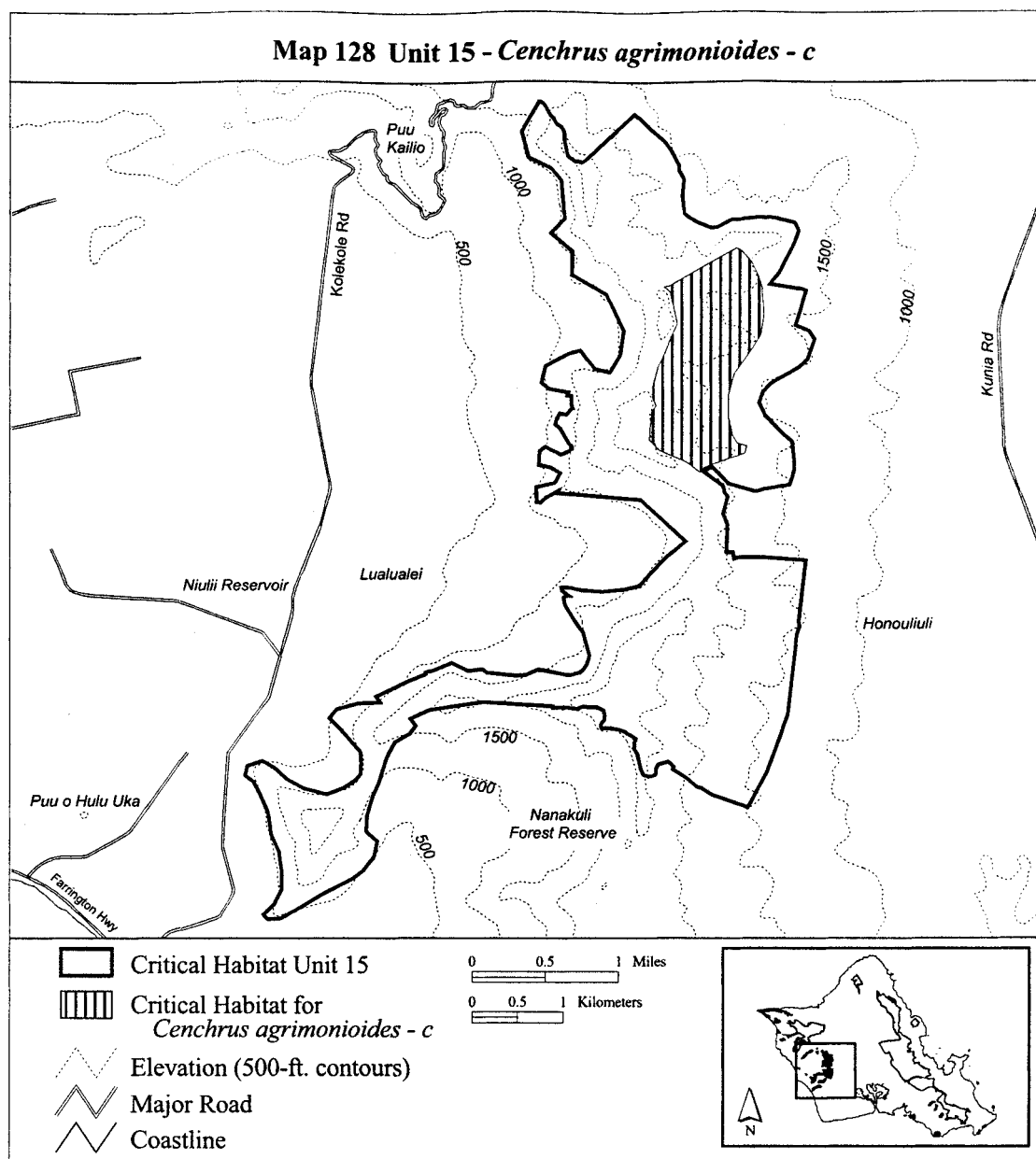
(128) Oahu 15—*Cenchrus agrimonioides*—c (200 ha; 495 ac)

(i) Unit consists of the following 40 boundary points: Start at 594510, 2373238; 594554, 2373214; 594677, 2373079; 594734, 2372964; 594788, 2372811; 594788, 2372810; 594796, 2372788; 594789, 2372787; 594807,

2372505; 594780, 2372283; 594685, 2372122; 594482, 2371850; 594424, 2371613; 594421, 2371368; 594463, 2371177; 594516, 2371089; 594627, 2371047; 594608, 2370974; 594455, 2370924; 594245, 2370844; 594153, 2370809; 594103, 2370764; 593969, 2370871; 593659, 2371005; 593552, 2371119; 593559, 2371250; 593579,

2371430; 593621, 2371492; 593586, 2371587; 593582, 2371683; 593648, 2371928; 593724, 2372081; 593793, 2372261; 593858, 2372402; 593789, 2372739; 593794, 2372740; 593762, 2372781; 593715, 2372815; 593771, 2372828; 594191, 2373064; return to starting point.

(ii) **Note:** Map 128 follows:



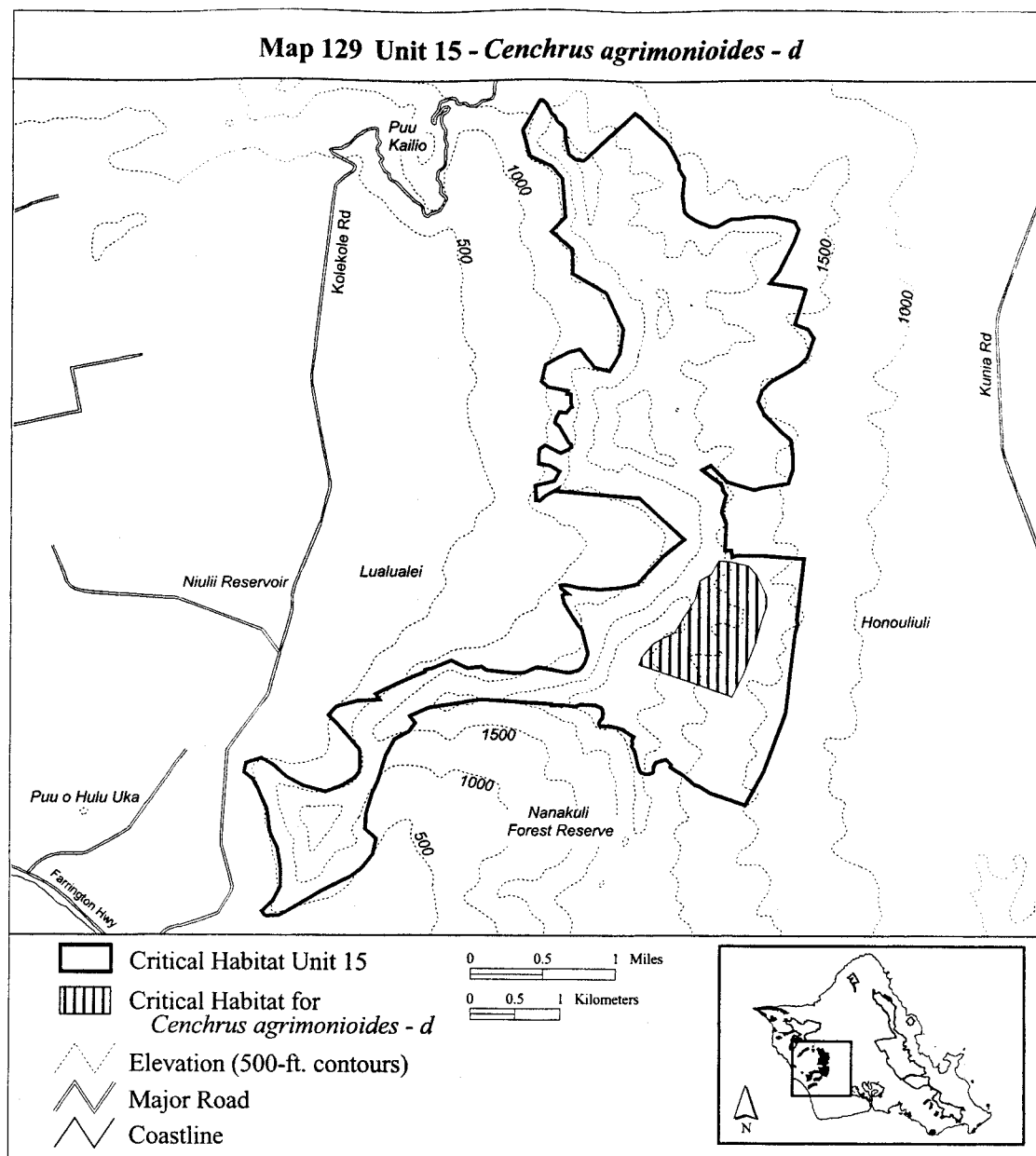
(129) Oahu 15—*Cenchrus agrimonioides*—d (117 ha; 290 ac)

(i) Unit consists of the following 20 boundary points: Start at 594341, 2369756; 594462, 2369749; 594672,

2369699; 594756, 2369602; 594869, 2369372; 594866, 2369258; 594816, 2369114; 594742, 2368834; 594619, 2368503; 594494, 2368251; 594139, 2368381; 593465, 2368603; 593489, 2368680; 593610, 2368830; 593716,

2368897; 593850, 2368961; 593934, 2369098; 594076, 2369327; 594127, 2369535; 594254, 2369615; return to starting point.

(ii) **Note:** Map 129 follows:



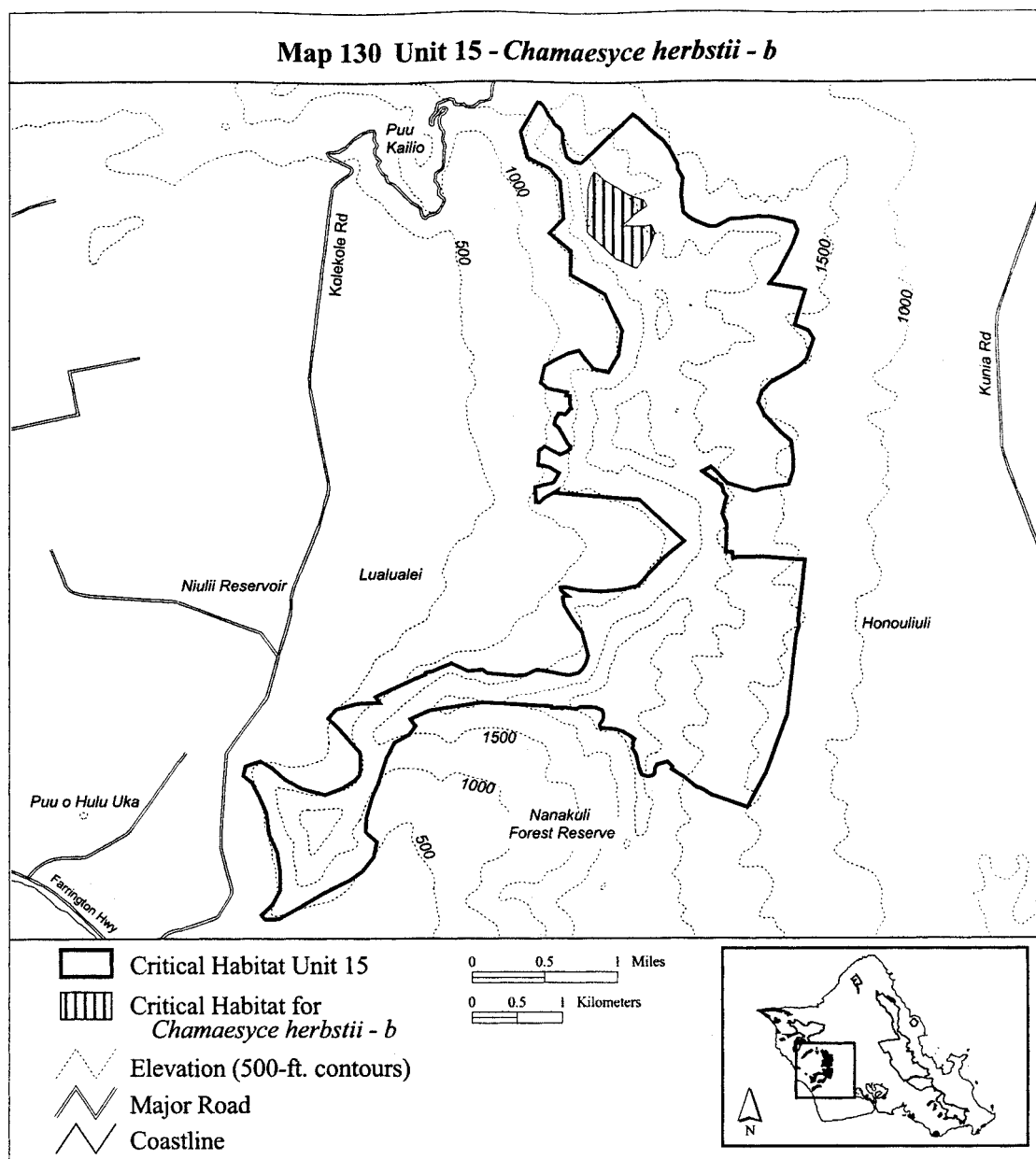
(130) Oahu 15—*Chamaesyce herbstii*—b
(47 ha; 116 ac)

(i) Unit consists of the following 22
boundary points: Start at 592991,
2374069; 593075, 2373990; 593219,

2373906; 593336, 2373831; 593504,
2373766; 593540, 2373702; 593404,
2373617; 593362, 2373569; 593307,
2373526; 593259, 2373490; 593512,
2373484; 593591, 2373502; 593625,
2373411; 593593, 2373313; 593523,

2373150; 593434, 2373024; 593412,
2373027; 593193, 2373124; 592880,
2373418; 592886, 2373893; 592921,
2374014; 592953, 2374078; return to
starting point.

(ii) **Note:** Map 130 follows:



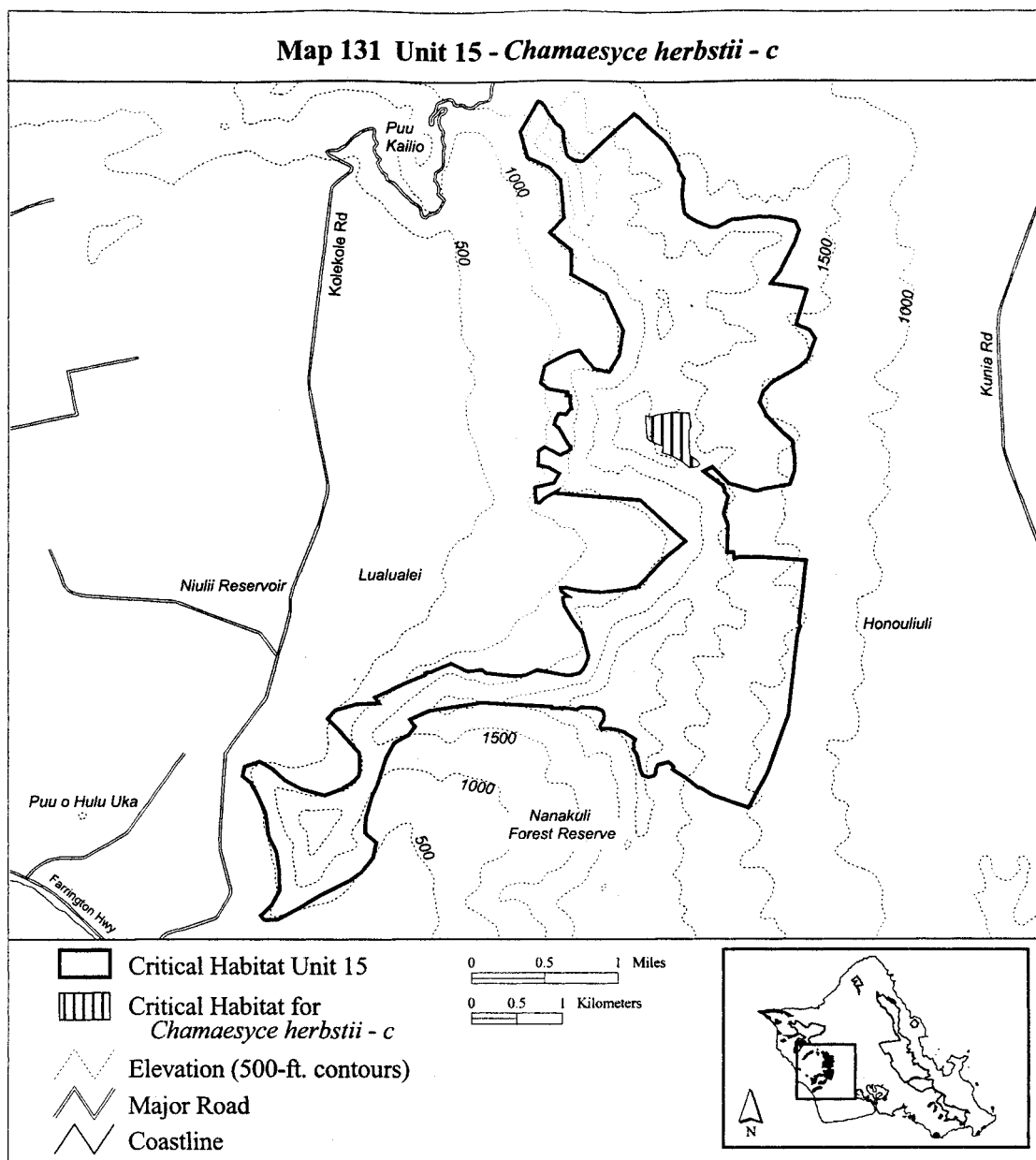
(131) Oahu 15—*Chamaesyce herbstii*—c
(21 ha; 53 ac)

(i) Unit consists of the following 26 boundary points: Start at 593994, 2371231; 593987, 2371233; 593999, 2370955; 594083, 2370881; 594111,

2370848; 594083, 2370820; 593999, 2370815; 593910, 2370881; 593840, 2370923; 593770, 2370955; 593691, 2370979; 593709, 2371043; 593708, 2371048; 593714, 2371049; 593709, 2371049; 593672, 2371063; 593579, 2371100; 593532, 2371133; 593523,

2371165; 593512, 2371386; 593581, 2371372; 593644, 2371395; 593807, 2371422; 593989, 2371417; 593999, 2371357; 594013, 2371263; return to starting point.

(ii) **Note:** Map 131 follows:



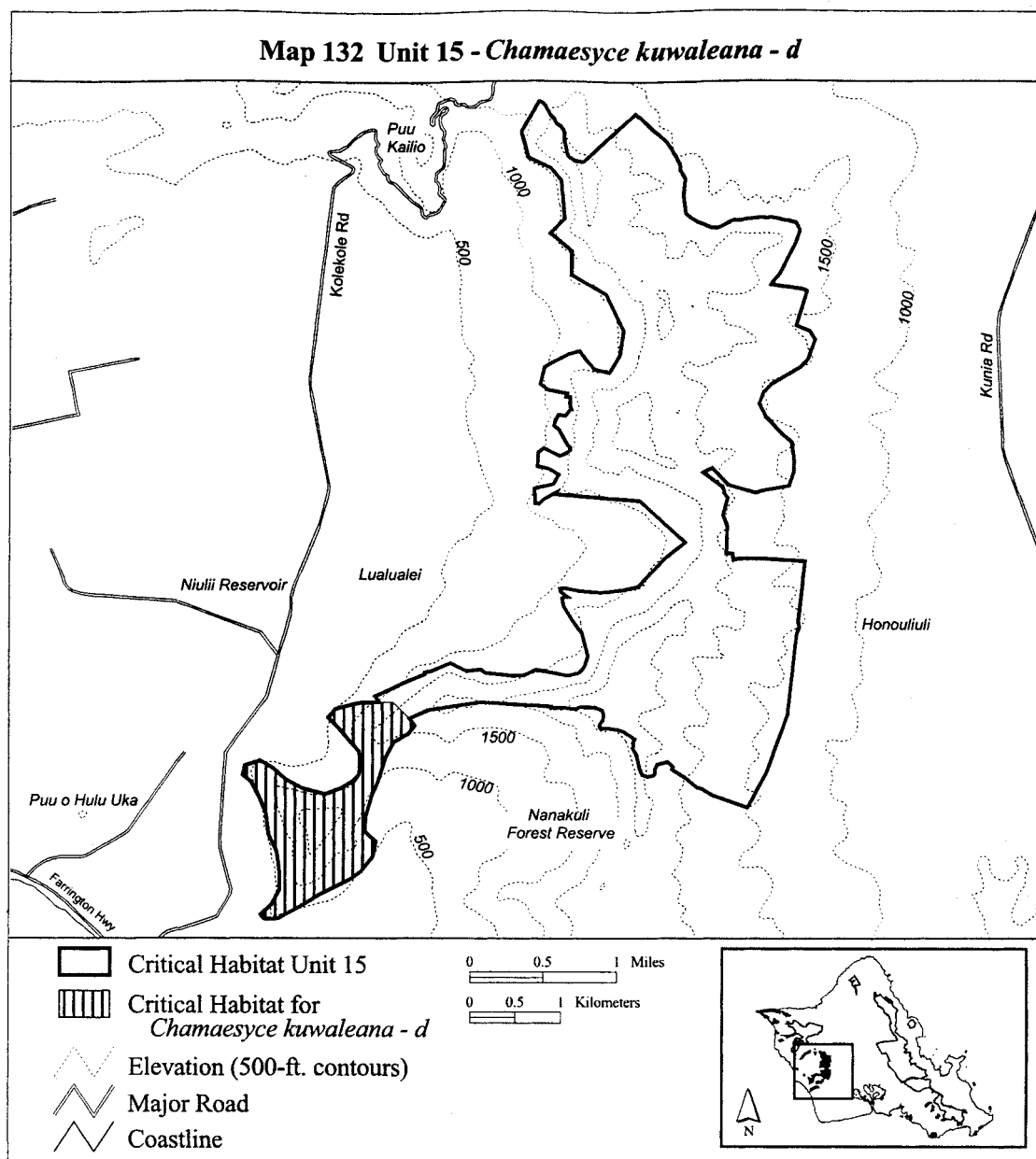
(132) Oahu 15—*Chamaesyce kuwaleana*—d (184 ha; 454 ac)

(i) Unit consists of the following 59 boundary points: Start at 590890, 2367845; 590753, 2367768; 590663, 2367594; 590573, 2367305; 590515, 2367177; 590444, 2366939; 590438, 2366792; 590436, 2366785; 590436, 2366784; 590437, 2366784; 590457, 2366768; 590560, 2366676; 590528, 2366509; 590399, 2366348; 590265,

2366252; 589963, 2366098; 589738, 2365969; 589494, 2365828; 589348, 2365822; 589335, 2365828; 589301, 2365873; 589423, 2365982; 589506, 2366143; 589506, 2366167; 589507, 2366167; 589507, 2366168; 589506, 2366172; 589506, 2366342; 589474, 2366560; 589384, 2366753; 589352, 2366997; 589256, 2367209; 589192, 2367331; 589095, 2367408; 589121, 2367511; 589288, 2367569; 589429, 2367485; 589564, 2367363; 589751,

2367260; 590001, 2367190; 590181, 2367260; 590309, 2367344; 590374, 2367415; 590380, 2367530; 590374, 2367665; 590265, 2367781; 590155, 2367916; 590033, 2368038; 590117, 2368134; 590342, 2368198; 590605, 2368211; 590746, 2368211; 590900, 2368063; 590984, 2367954; 590913, 2367858; 590904, 2367853; 590903, 2367853; 590903, 2367854; 590902, 2367853; return to starting point.

(ii) **Note:** Map 132 follows:



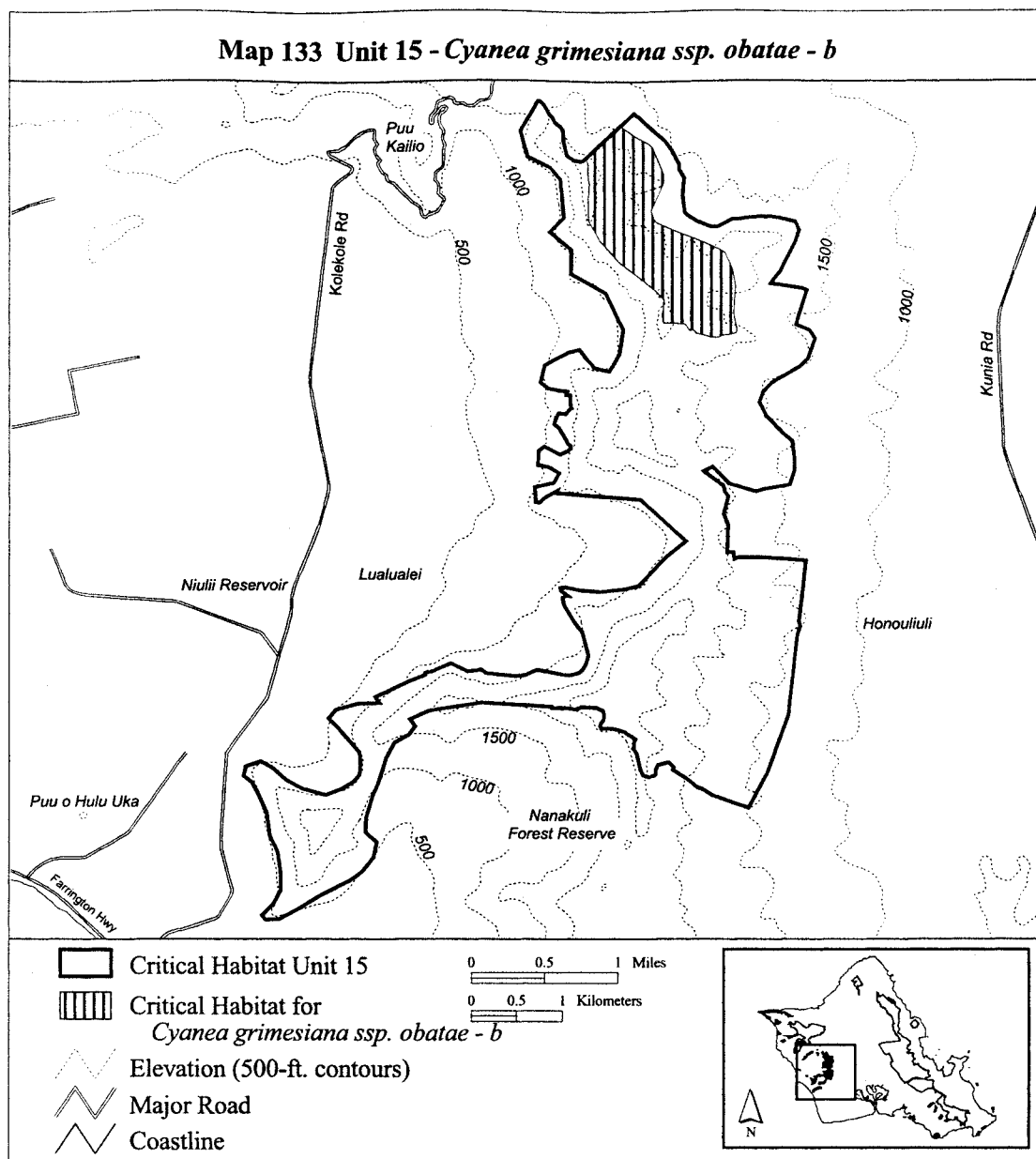
(133) Oahu 15—*Cyanea grimesiana* ssp. *obatae*—b (184 ha; 455 ac)

(i) Unit consists of the following 45 boundary points: Start at 593238, 2374575; 593285, 2374543; 593404, 2374463; 593535, 2374388; 593586, 2374348; 593713, 2374039; 593713, 2373948; 593602, 2373707; 593571, 2373639; 593598, 2373556; 593626,

2373520; 593856, 2373421; 594066, 2373334; 594316, 2373223; 594375, 2373183; 594462, 2372997; 594490, 2372815; 594474, 2372517; 594502, 2372346; 594506, 2372307; 594482, 2372295; 594415, 2372283; 594351, 2372276; 594304, 2372248; 594232, 2372248; 594157, 2372272; 594070, 2372292; 594025, 2372329; 593991, 2372327; 593947, 2372395; 593820,

2372407; 593705, 2372407; 593693, 2372498; 593713, 2372569; 593713, 2372668; 593626, 2372759; 593487, 2372870; 593222, 2373076; 593008, 2373318; 592885, 2373532; 592881, 2373762; 592897, 2373921; 592881, 2374028; 592881, 2374158; 592851, 2374213; return to starting point.

(ii) **Note:** Map 133 follows:



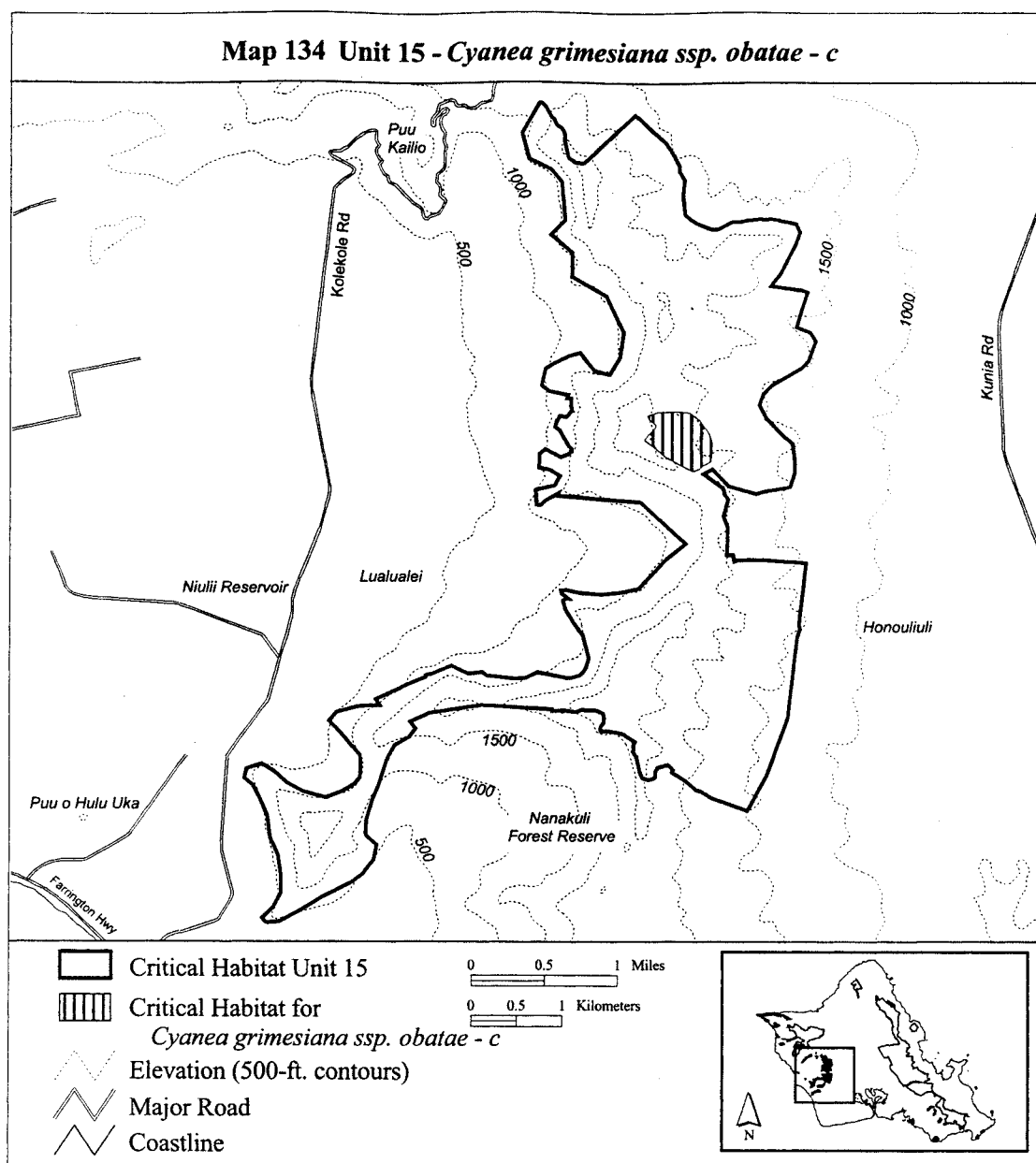
(134) Oahu 15—*Cyanea grimesiana* ssp. *obatae*—c (34 ha; 84 ac)

(i) Unit consists of the following 22 boundary points: Start at 593638, 2371452; 593884, 2371463; 593999,

2371443; 594106, 2371360; 594205, 2371221; 594240, 2371126; 594236, 2371019; 594224, 2370900; 594141, 2370860; 594094, 2370817; 594034, 2370793; 593884, 2370868; 593725, 2370959; 593618, 2371046; 593499,

2371146; 593539, 2371197; 593575, 2371233; 593614, 2371276; 593618, 2371308; 593586, 2371345; 593551, 2371372; 593531, 2371412; return to starting point.

(ii) **Note:** Map 134 follows:



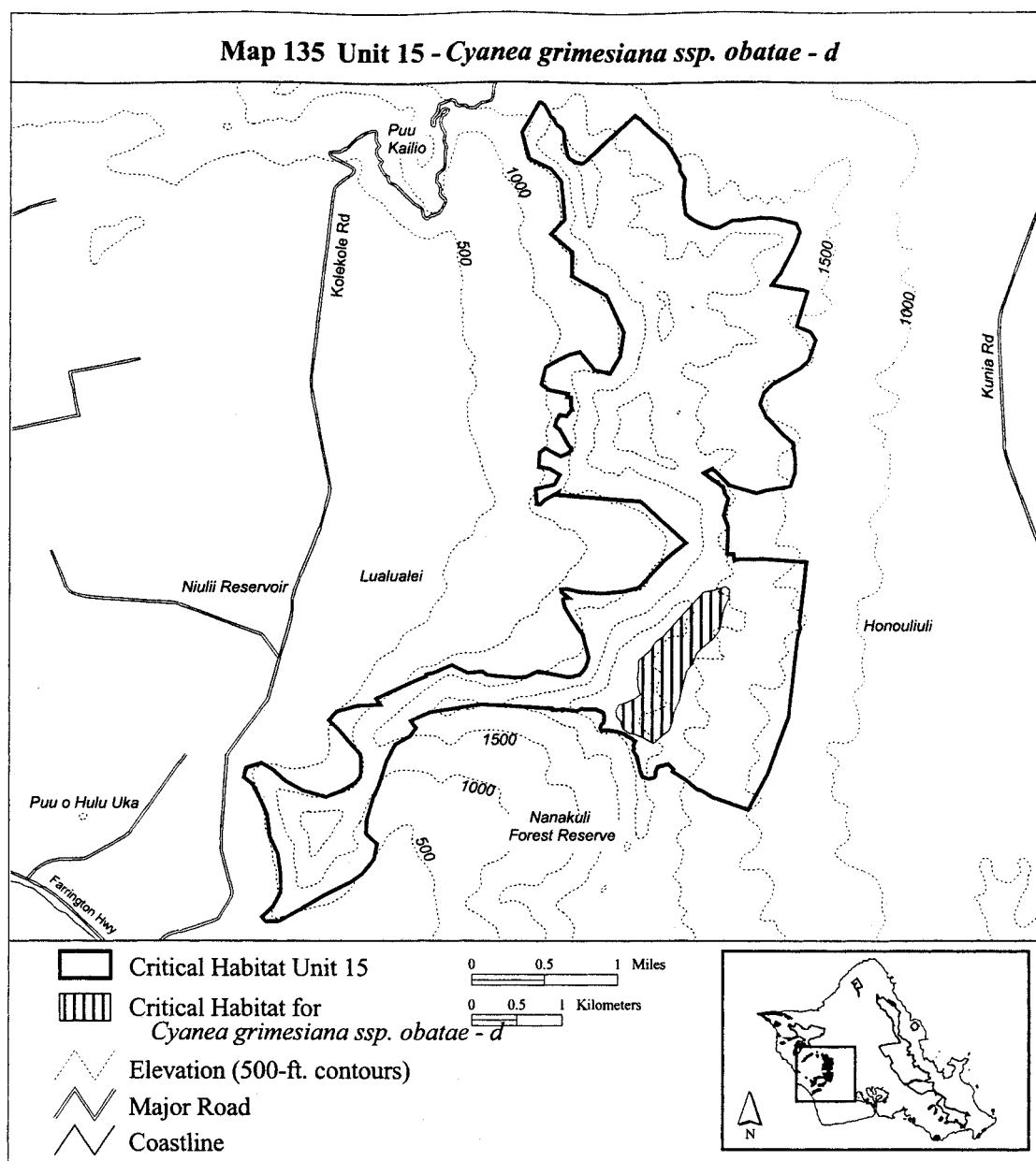
(135) Oahu 15—*Cyanea grimesiana* ssp. *obatae*—d (83 ha; 205 ac)

(i) Unit consists of the following 42 boundary points: Start at 594150, 2369456; 594262, 2369473; 594391, 2369508; 594429, 2369478; 594425, 2369388; 594395, 2369323; 594373, 2369259; 594348, 2369135; 594322, 2369023; 594270, 2368950; 594168,

2368860; 594073, 2368766; 594043, 2368672; 593962, 2368577; 593923, 2368423; 593889, 2368252; 593825, 2368114; 593812, 2368016; 593773, 2367926; 593662, 2367836; 593610, 2367784; 593482, 2367853; 593396, 2367887; 593345, 2367892; 593259, 2367952; 593255, 2367986; 593242, 2368037; 593195, 2368084; 593190,

2368136; 593229, 2368209; 593323, 2368243; 593405, 2368277; 593456, 2368316; 593430, 2368414; 593422, 2368509; 593430, 2368547; 593435, 2368629; 593439, 2368697; 593486, 2368736; 593572, 2368809; 593619, 2368899; 593709, 2368967; return to starting point.

(ii) **Note:** Map 135 follows:



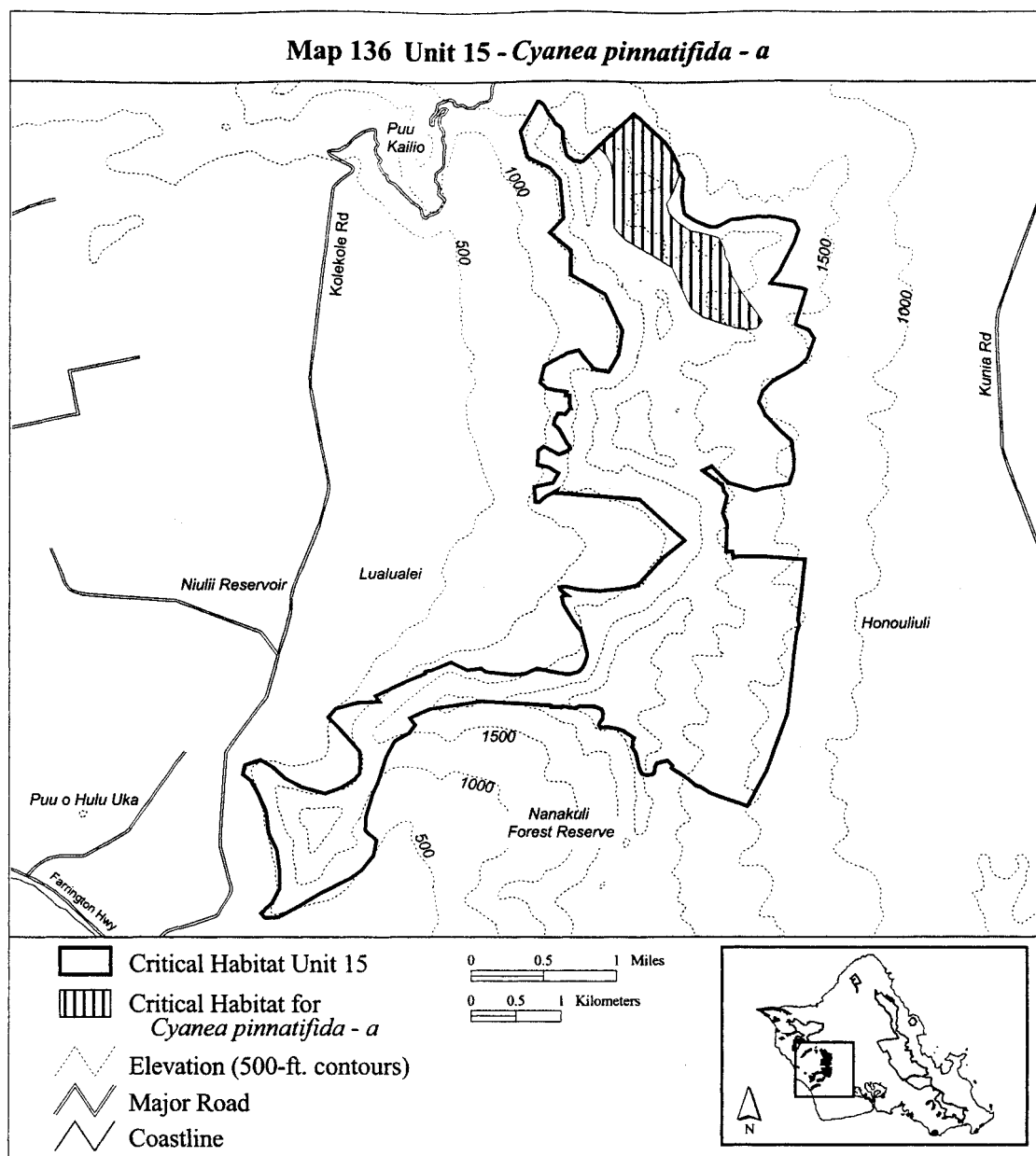
(136) Oahu 15—*Cyanea pinnatifida*—a
(154 ha; 380 ac)

(i) Unit consists of the following 41 boundary points: Start at 593385, 2374713; 593425, 2374682; 593429, 2374682; 593577, 2374542; 593721, 2374415; 593793, 2374314; 593874, 2374157; 593882, 2374030; 593819,

2373852; 593747, 2373721; 593776, 2373624; 593865, 2373531; 594009, 2373433; 594132, 2373404; 594318, 2373349; 594377, 2373226; 594381, 2373150; 594428, 2373061; 594462, 2372926; 594546, 2372768; 594648, 2372624; 594745, 2372497; 594796, 2372421; 594733, 2372345; 594678, 2372332; 594585, 2372332; 594504,

2372349; 594339, 2372401; 594149, 2372469; 594018, 2372570; 593903, 2372820; 593810, 2373027; 593599, 2373154; 593290, 2373336; 593167, 2373467; 593163, 2373679; 593163, 2373967; 593133, 2374170; 593078, 2374259; 592993, 2374346; 593303, 2374636; return to starting point.

(ii) **Note:** Map 136 follows:



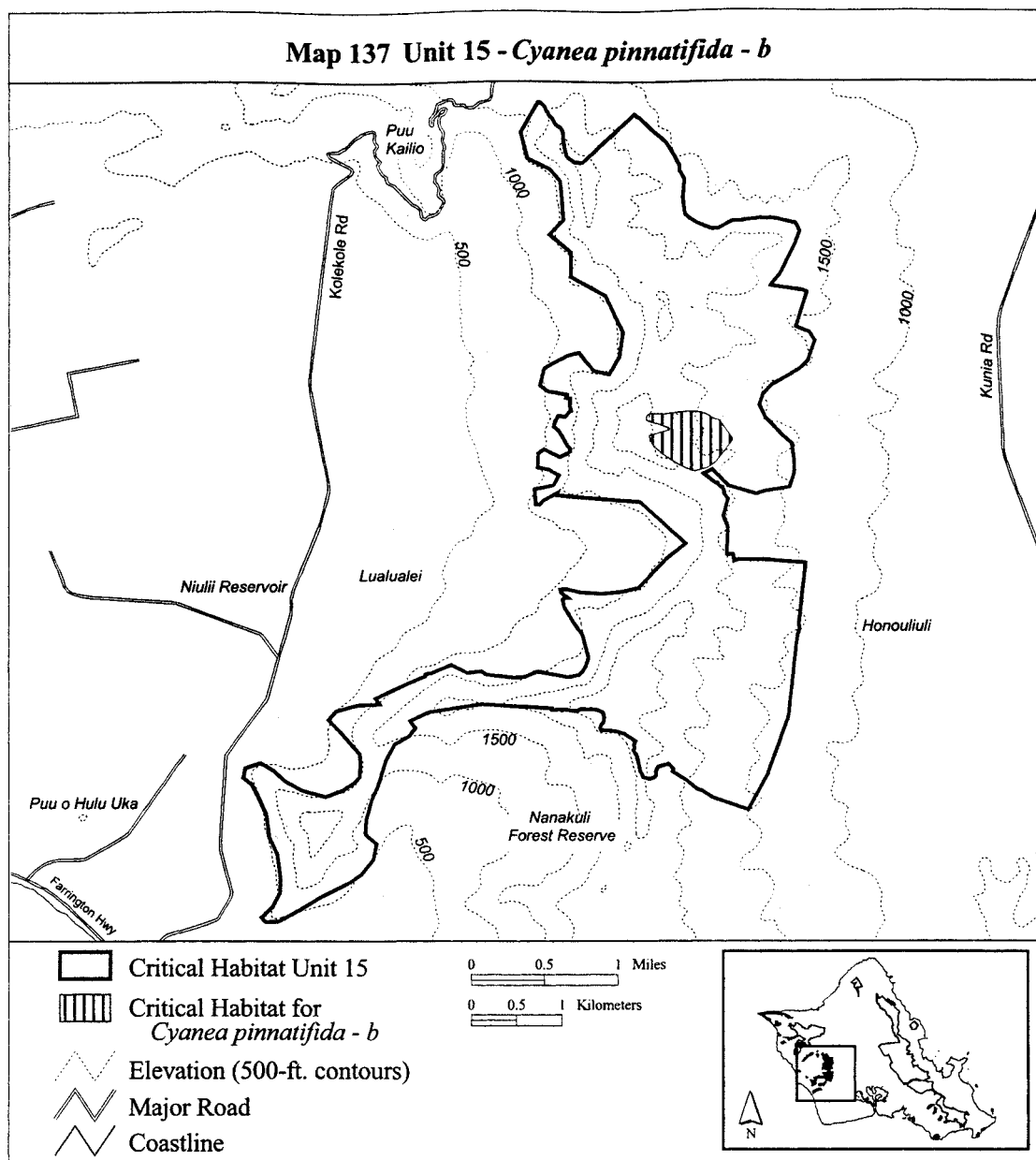
(137) Oahu 15—*Cyanea pinnatifida*—b
(42 ha; 104 ac)

(i) Unit consists of the following 34 boundary points: Start at 594269, 2371382; 594330, 2371362; 594330, 2371348; 594458, 2371171; 594457, 2371170; 594458, 2371170; 594470,

2371145; 594394, 2371042; 594317, 2370945; 594269, 2370886; 594177, 2370831; 594049, 2370792; 593891, 2370864; 593690, 2370992; 593604, 2371076; 593568, 2371123; 593570, 2371123; 593565, 2371124; 593554, 2371189; 593769, 2371254; 593758, 2371277; 593646, 2371322; 593557,

2371344; 593520, 2371366; 593526, 2371411; 593573, 2371436; 593646, 2371433; 593707, 2371427; 593738, 2371430; 593874, 2371449; 593971, 2371460; 594063, 2371457; 594127, 2371451; 594205, 2371418; return to starting point.

(ii) **Note:** Map 137 follows:



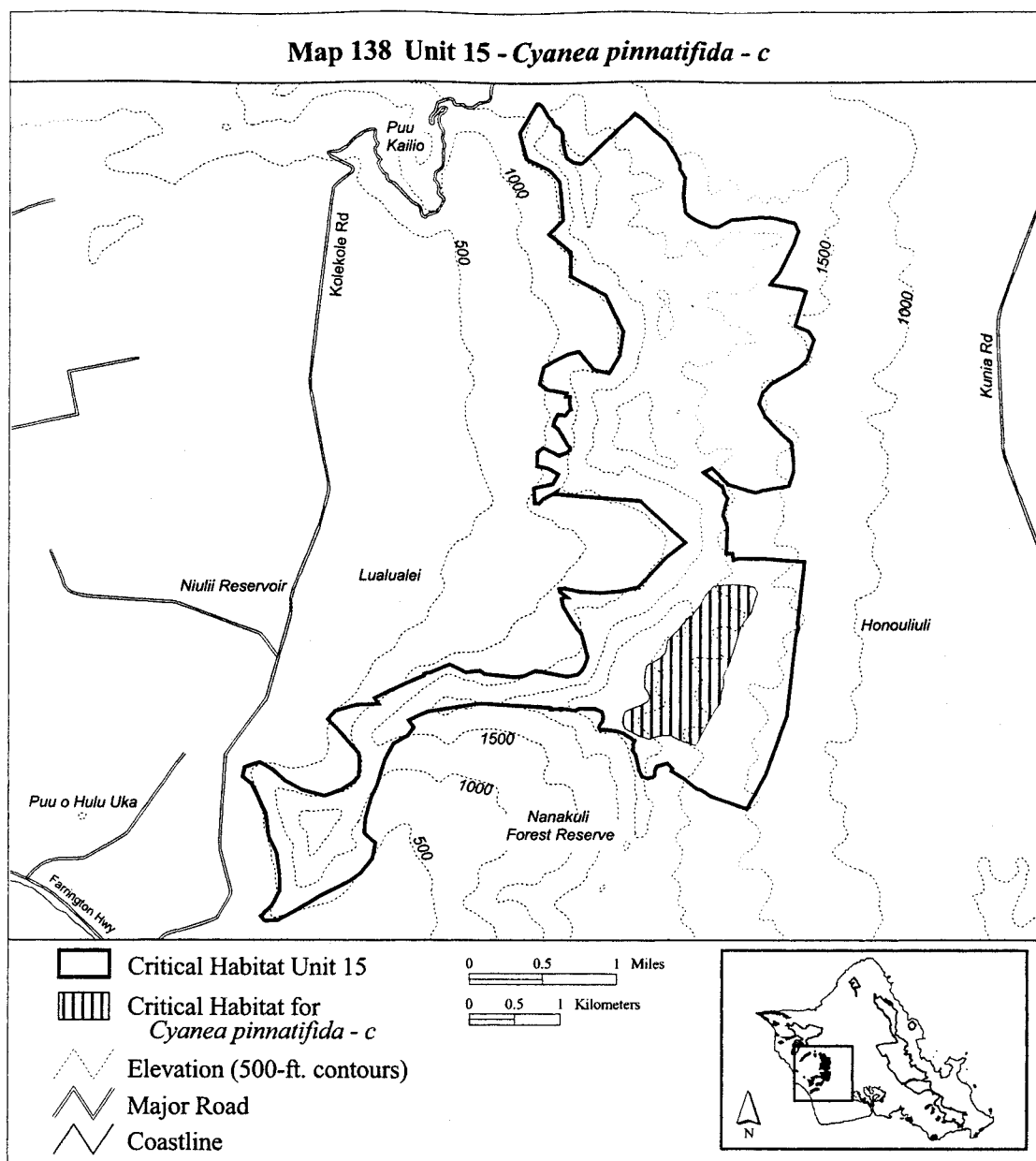
(138) Oahu 15—*Cyanea pinnatifida*—c
(129 ha; 318 ac)

(i) Unit consists of the following 55 boundary points: Start at 594158, 2369378; 594159, 2369378; 594186, 2369419; 594266, 2369517; 594347, 2369525; 594456, 2369531; 594639, 2369522; 594717, 2369497; 594753, 2369442; 594717, 2369347; 594673, 2369208; 594620, 2369133; 594564, 2369041; 594475, 2368746; 594447,

2368662; 594375, 2368512; 594383, 2368423; 594353, 2368326; 594344, 2368212; 594292, 2368155; 594077, 2367755; 594058, 2367761; 593899, 2367813; 593799, 2367869; 593660, 2367861; 593573, 2367825; 593462, 2367861; 593373, 2367903; 593295, 2367942; 593270, 2368003; 593276, 2368072; 593306, 2368125; 593379, 2368164; 593470, 2368195; 593548, 2368242; 593568, 2368287; 593554,

2368348; 593515, 2368390; 593512, 2368470; 593512, 2368545; 593532, 2368621; 593562, 2368651; 593657, 2368704; 593738, 2368765; 593749, 2368824; 593760, 2368907; 593829, 2368982; 593880, 2369027; 593927, 2369091; 593996, 2369166; 594033, 2369183; 594077, 2369250; 594124, 2369303; 594155, 2369372; 594156, 2369374; return to starting point.

(ii) **Note:** Map 138 follows:



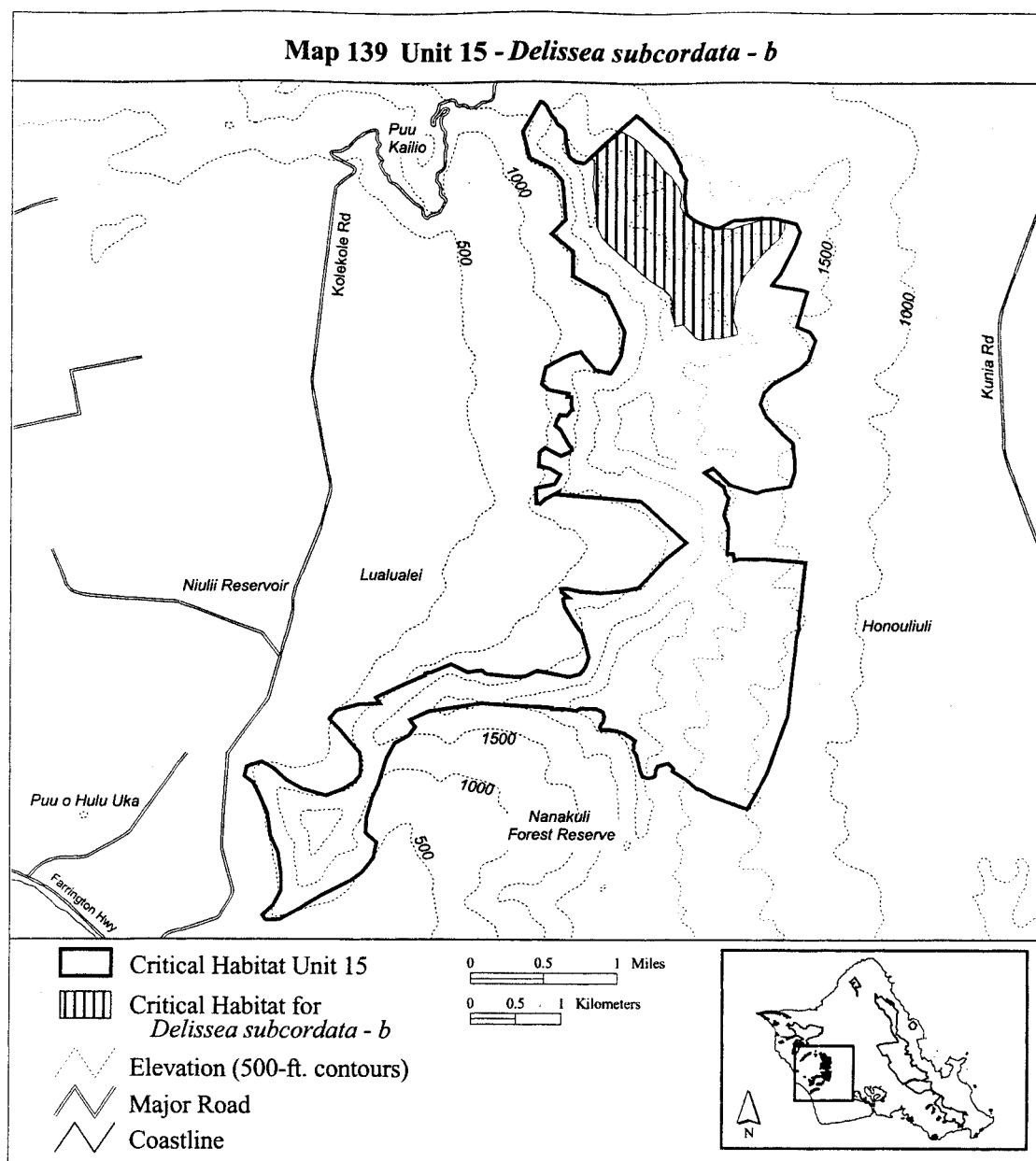
(139) Oahu 15—*Delissea subcordata*—
(220 ha; 545ac)

(i) Unit consists of the following 58 boundary points: Start at 593234, 2374539; 593402, 2374434; 593503, 2374332; 593561, 2374272; 593700, 2374102; 593689, 2374102; 593761, 2374051; 593845, 2373930; 593879, 2373842; 593862, 2373713; 593923, 2373622; 594069, 2373534; 594211, 2373473; 594448, 2373456; 594553,

2373500; 594705, 2373537; 594864, 2373580; 594962, 2373566; 595017, 2373539; 595020, 2373455; 594959, 2373353; 594868, 2373272; 594732, 2373123; 594576, 2372940; 594485, 2372730; 594455, 2372473; 594485, 2372375; 594505, 2372317; 594495, 2372293; 594377, 2372270; 594309, 2372250; 594241, 2372247; 594191, 2372247; 594109, 2372230; 594042, 2372261; 593910, 2372410; 593818, 2372389; 593801, 2372454; 593767,

2372552; 593781, 2372636; 593767, 2372718; 593693, 2372799; 593537, 2372890; 593395, 2373026; 593266, 2373131; 593114, 2373269; 593016, 2373364; 592955, 2373486; 592945, 2373550; 592945, 2373635; 592931, 2373831; 592911, 2373930; 592924, 2374068; 592924, 2374143; 592924, 2374221; 592878, 2374238; 593146, 2374489; 593165, 2374499; return to starting point.

(ii) **Note:** Map 139 follows:



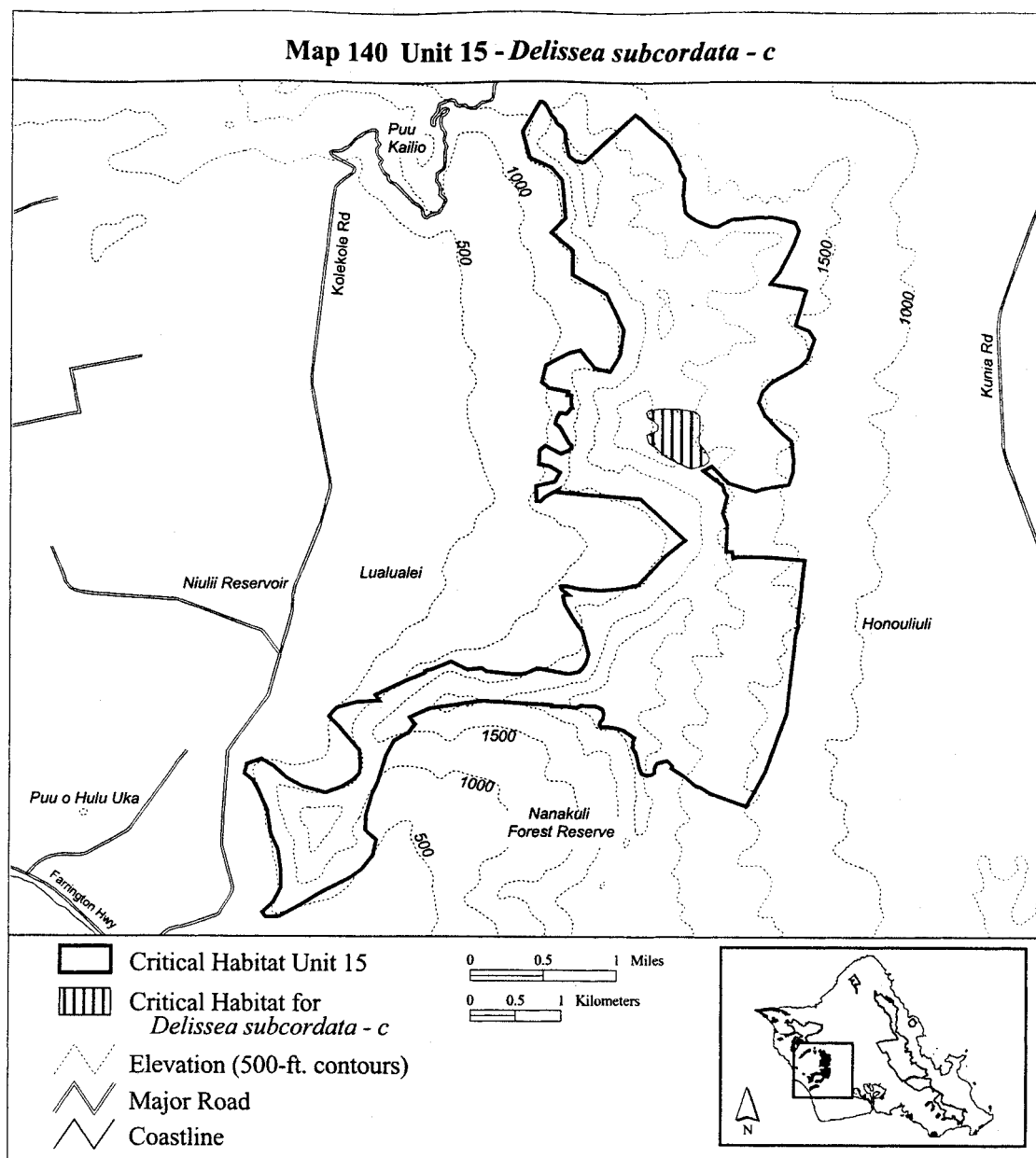
(140) Oahu 15—*Delissea subcordata*—c
(32 ha; 78ac)

(i) Unit consists of the following 23
boundary points: Start at 593547,
2371434; 593683, 2371458; 593893,

2371450; 594059, 2371423; 594113,
2371379; 594113, 2371278; 594106,
2371200; 594096, 2371081; 594160,
2371007; 594214, 2370916; 594214,
2370868; 594153, 2370824; 594014,
2370787; 593913, 2370834; 593737,

2370919; 593625, 2371017; 593547,
2371078; 593517, 2371163; 593642,
2371210; 593649, 2371271; 593605,
2371316; 593534, 2371363; 593517,
2371414; return to starting point.

(ii) **Note:** Map 140 follows:



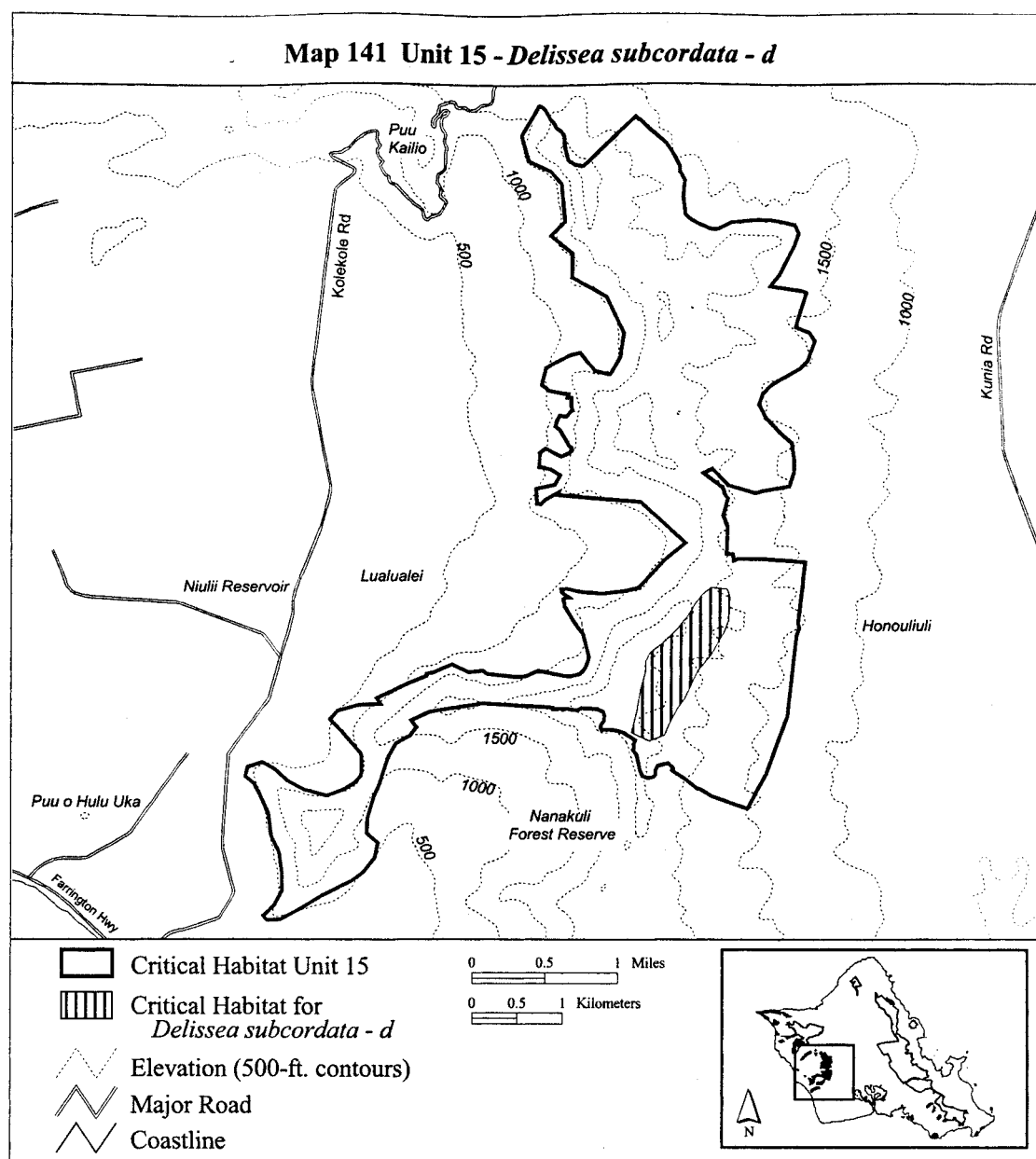
(141) Oahu 15—*Delissea subcordata*—d
(81 ha; 200 ac)

(i) Unit consists of the following 27
boundary points: Start at 594143,
2369424; 594236, 2369495; 594412,
2369484; 594439, 2369409; 594442,

2369289; 594427, 2369132; 594371,
2368986; 594315, 2368885; 594248,
2368768; 594098, 2368581; 594019,
2368427; 593952, 2368266; 593873,
2368165; 593775, 2367978; 593730,
2367865; 593562, 2367805; 593360,
2367899; 593386, 2367989; 593427,

2368146; 593464, 2368360; 593513,
2368559; 593521, 2368679; 593569,
2368780; 593704, 2368881; 593880,
2369061; 593978, 2369173; 594045,
2369297; return to starting point.

(ii) **Note:** Map 141 follows:



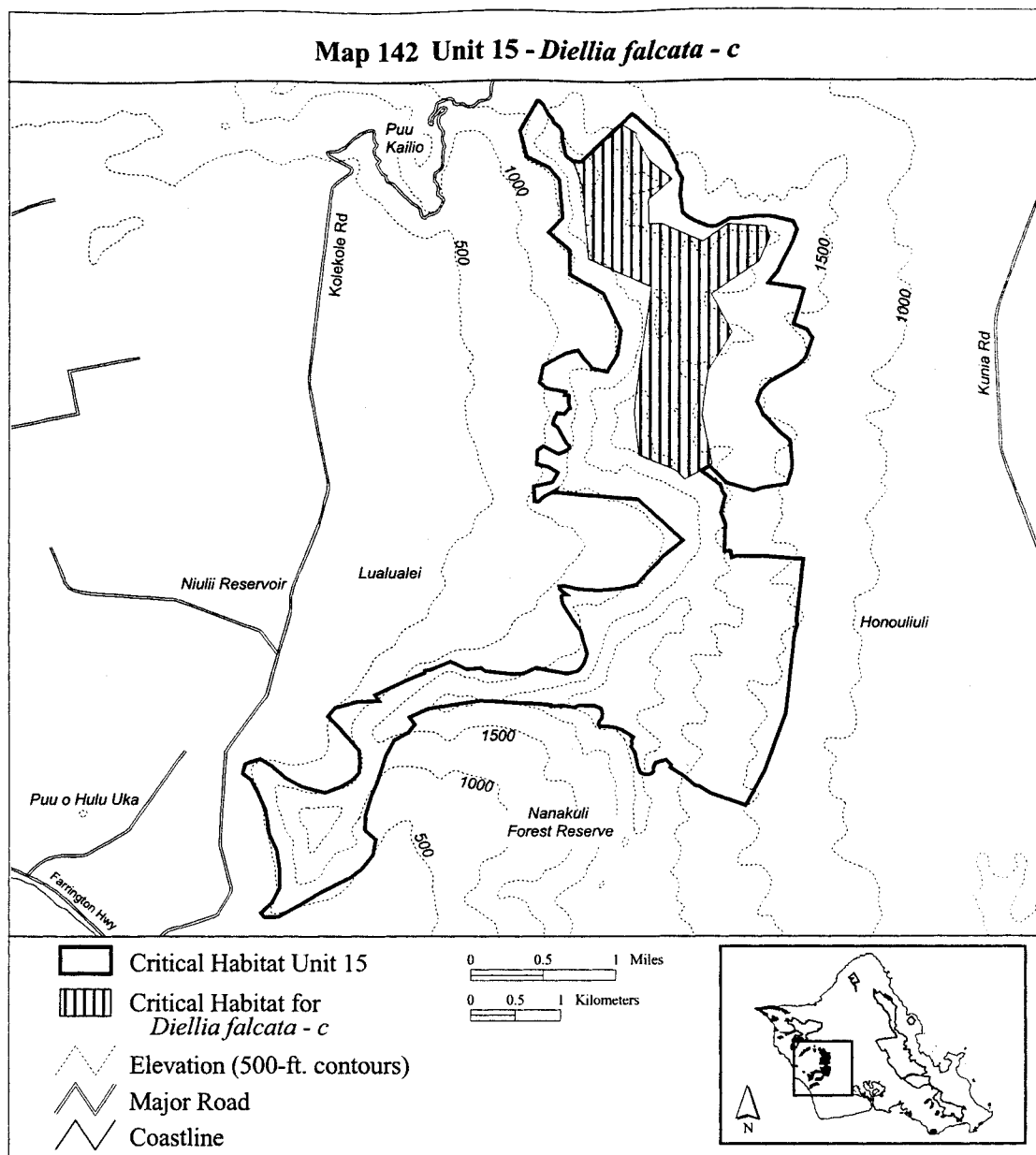
(142) Oahu 15—*Diellia falcata*—c (342 ha; 844 ac)

(i) Unit consists of the following 32 boundary points: Start at 593263, 2374599; 593436, 2374499; 593422, 2374474; 593572, 2374207; 593822, 2373998; 593561, 2373771; 593572,

2373507; 593715, 2373507; 594159, 2373305; 594437, 2373496; 594855, 2373462; 594892, 2373348; 594778, 2373081; 594254, 2372726; 594485, 2372300; 594221, 2371865; 594155, 2371391; 594272, 2370836; 593971, 2370676; 593868, 2370775; 593469, 2370939; 593411, 2371425; 593483,

2371995; 593604, 2372808; 592905, 2373115; 592834, 2373899; 592727, 2374190; 592765, 2374190; 592805, 2374172; 592806, 2374171; 592807, 2374171; 592807, 2374172; return to starting point.

(ii) **Note:** Map 142 follows:



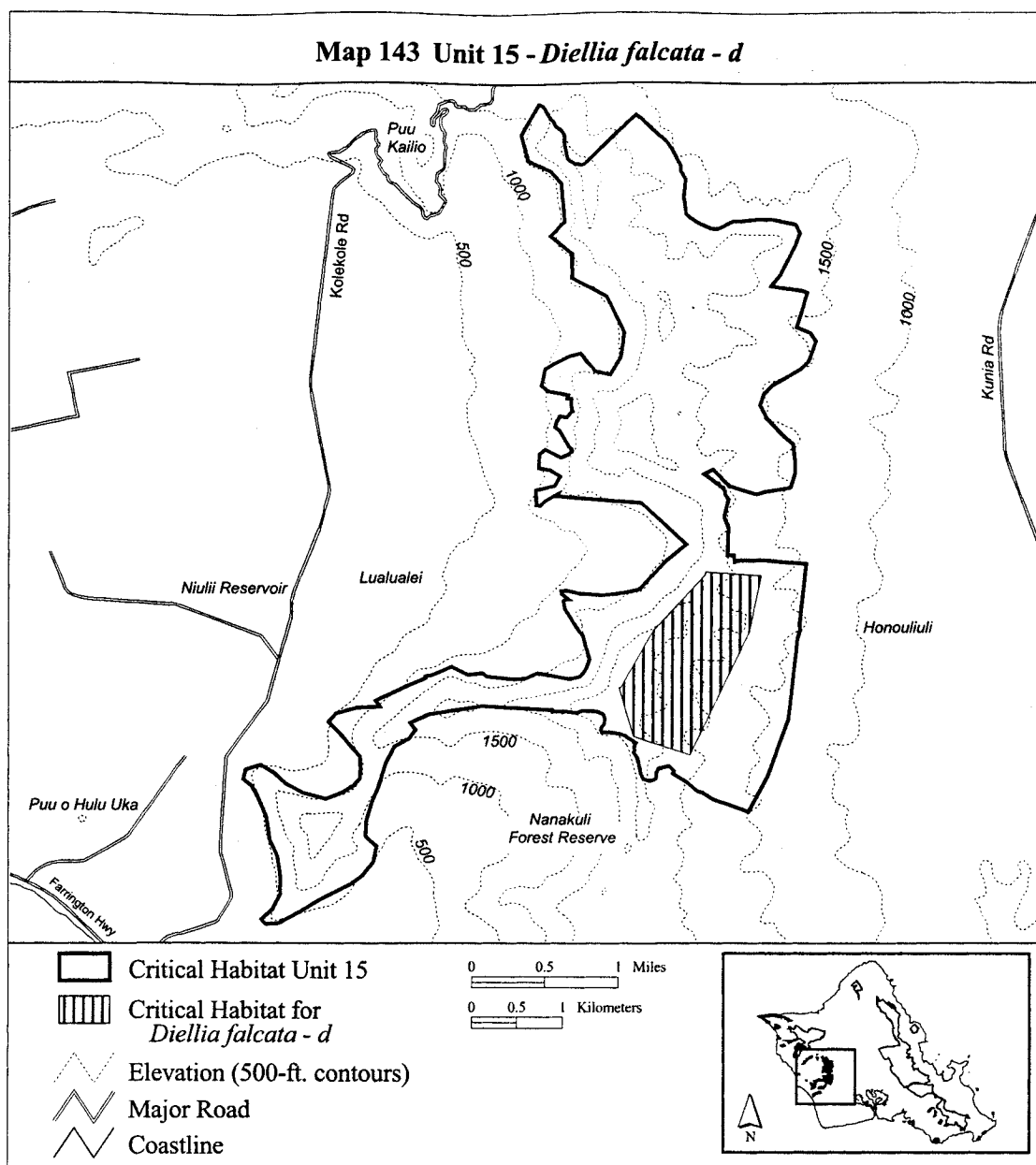
(143) Oahu 15—*Diellia falcata*—d (177 ha; 438 ac)

(i) Unit consists of the following 11 boundary points: Start at 594778,

2369648; 594642, 2369018; 594003, 2367683; 593587, 2367808; 593376, 2367886; 593222, 2368415; 593240, 2368417; 593589, 2369042; 594161,

2369659; 594168, 2369688; 594734, 2369651; return to starting point.

(ii) **Note:** Map 143 follows:



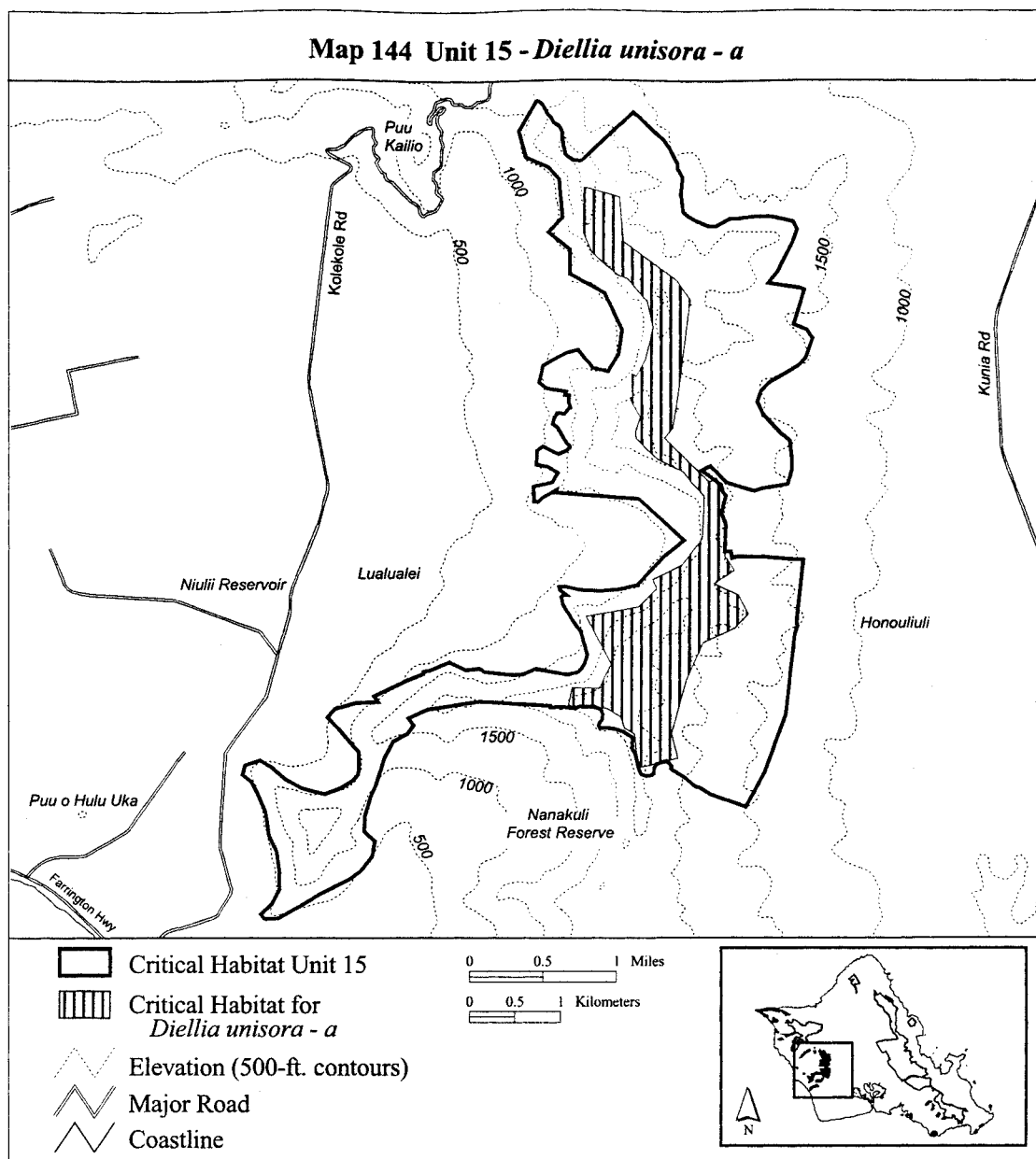
(144) Oahu 15—*Diellia unisora*—a (362 ha; 895 ac)

(i) Unit consists of the following 68 boundary points: Start at 592846, 2373892; 593232, 2373784; 593278, 2373295; 593871, 2372872; 594017, 2372653; 593879, 2371581; 593822, 2371230; 593736, 2371122; 594227, 2370646; 594300, 2370666; 594412, 2370491; 594362, 2370301; 594412, 2370171; 594402, 2369825; 594512, 2369665; 594287, 2369515; 594542, 2369395; 594552, 2369394; 594662,

2369179; 594517, 2369024; 594167, 2368864; 593976, 2368428; 593821, 2367853; 593827, 2367852; 593886, 2367592; 593462, 2367482; 593436, 2367597; 593426, 2367778; 593411, 2367858; 593300, 2367928; 593260, 2368053; 593105, 2368148; 592685, 2368173; 592723, 2368374; 592725, 2368368; 593025, 2368358; 593155, 2368629; 592880, 2369154; 593456, 2369254; 593651, 2369460; 593606, 2369554; 593611, 2369557; 593616, 2369563; 593761, 2369630; 593931, 2369720; 594152, 2370010; 594172,

2370481; 594041, 2370631; 593941, 2370756; 593671, 2370882; 593536, 2371002; 593421, 2371127; 593416, 2371197; 593466, 2371358; 593358, 2371548; 593381, 2371563; 593376, 2371839; 593421, 2371814; 593521, 2371984; 593611, 2372349; 593536, 2372645; 593325, 2372890; 593187, 2372944; 593188, 2372954; 593050, 2373067; 592928, 2373181; 592839, 2373384; 592839, 2373636; return to starting point.

(ii) **Note:** Map 144 follows:



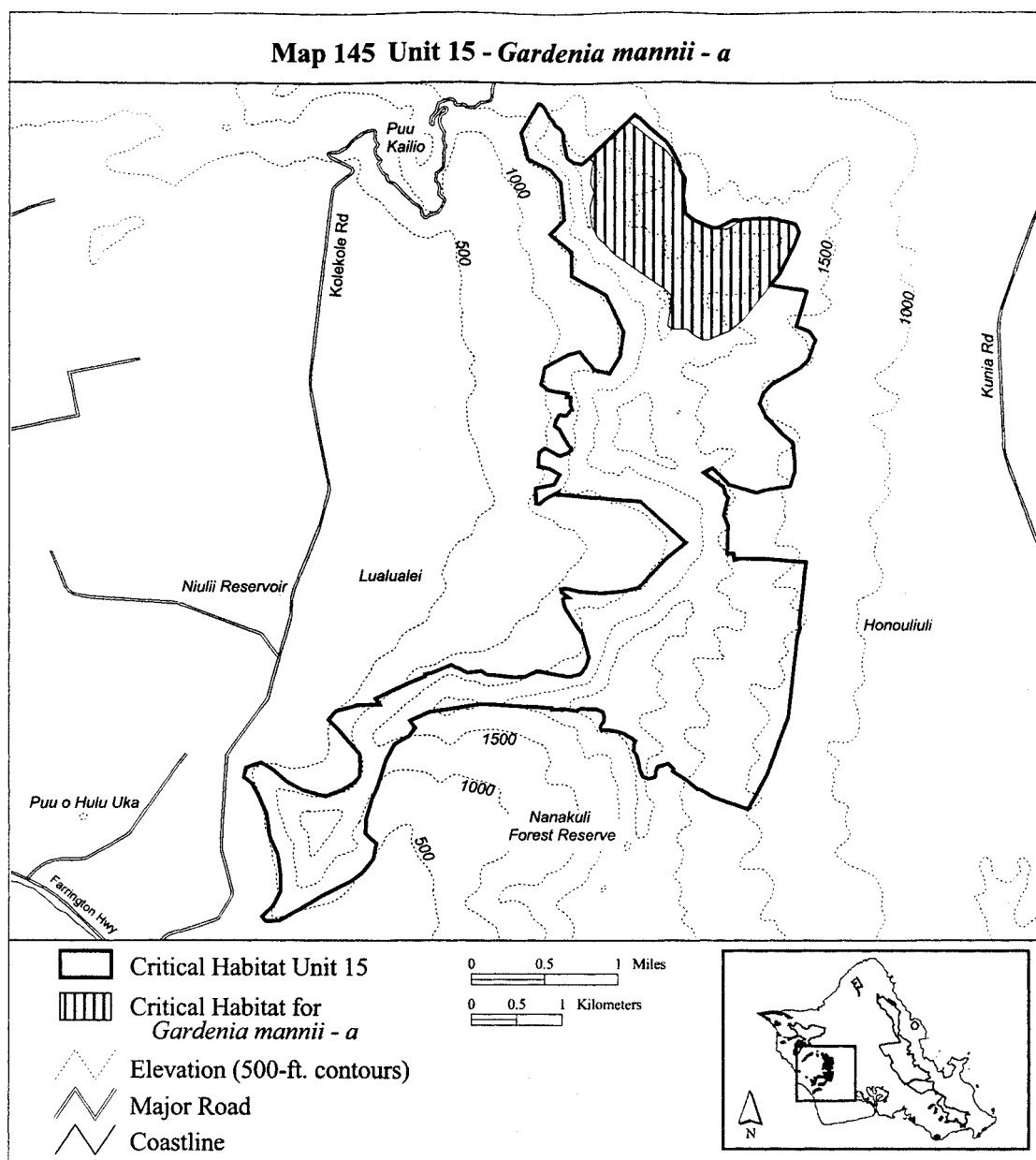
(145) Oahu 15—*Gardenia mannii*—a
(266 ha; 658 ac)

(i) Unit consists of the following 44 boundary points: Start at 593315, 2374647; 593329, 2374638; 593423, 2374563; 593533, 2374468; 593718, 2374328; 593801, 2374230; 593892, 2374075; 593930, 2374003; 593911, 2373814; 593941, 2373625; 594017,

2373557; 594228, 2373470; 594387, 2373451; 594572, 2373561; 594761, 2373579; 595011, 2373549; 595143, 2373522; 595188, 2373431; 595147, 2373303; 594973, 2372963; 594894, 2372861; 594735, 2372653; 594580, 2372460; 594421, 2372331; 594190, 2372238; 594130, 2372238; 594020, 2372298; 593967, 2372359; 593797, 2372359; 593748, 2372397; 593771,

2372589; 593778, 2372733; 593695, 2372809; 593457, 2372975; 593177, 2373179; 592981, 2373376; 592916, 2373508; 592894, 2373697; 592939, 2373863; 592901, 2373973; 592916, 2374109; 592935, 2374211; 592897, 2374256; 593303, 2374636; return to starting point.

(ii) **Note:** Map 145 follows:



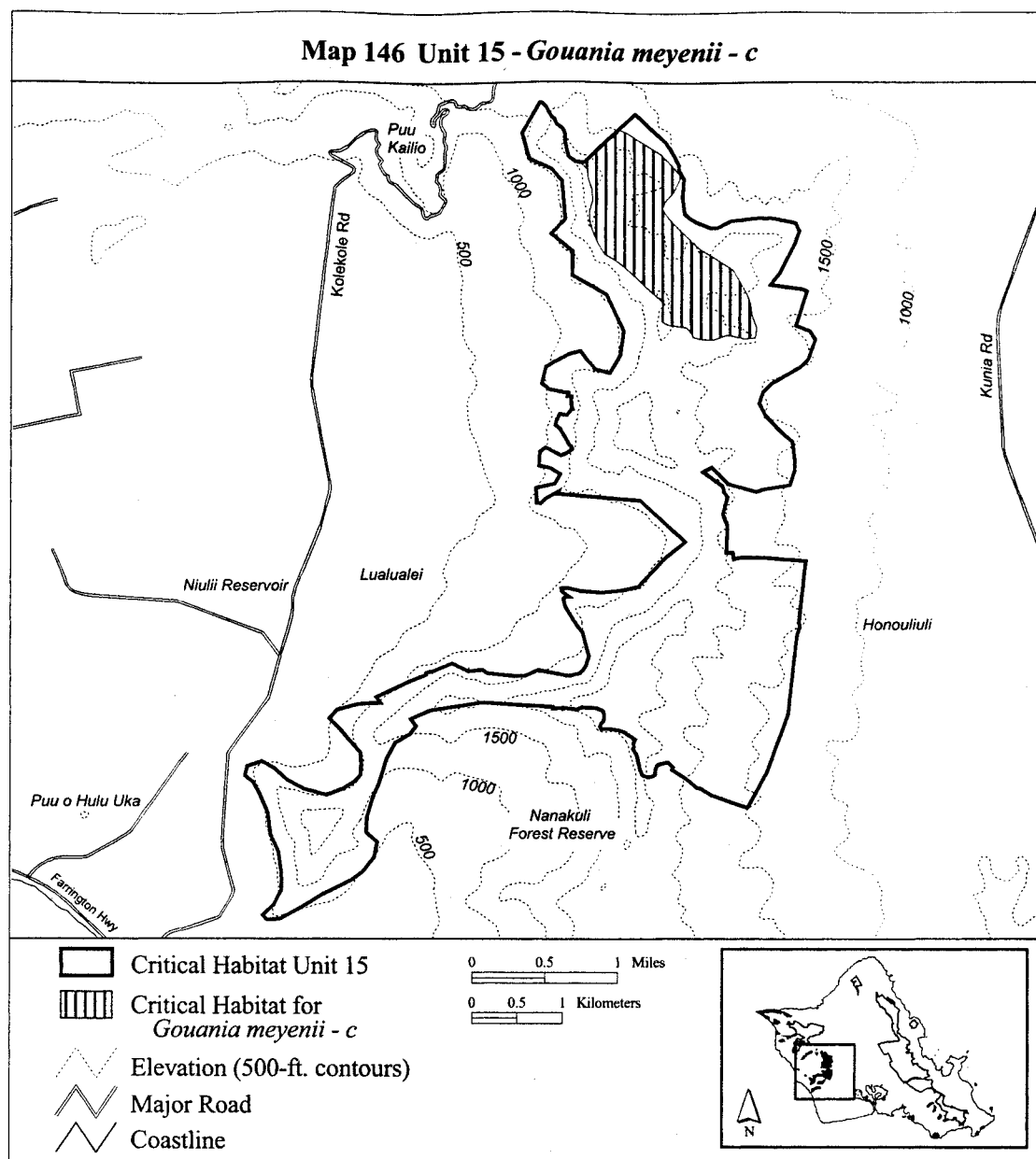
(146) Oahu 15—*Gouania meyenii*—c
(209 ha; 515 ac)

(i) Unit consists of the following 60 boundary points: Start at 593204, 2374544; 593306, 2374506; 593425, 2374431; 593681, 2374277; 593800, 2374154; 593879, 2374063; 593891, 2374004; 593816, 2373866; 593721, 2373755; 593693, 2373680; 593768, 2373569; 593867, 2373467; 593997, 2373340; 594112, 2373242; 594258, 2373147; 594475, 2373005; 594618,

2372747; 594665, 2372620; 594681, 2372494; 594728, 2372371; 594712, 2372257; 594606, 2372241; 594499, 2372269; 594416, 2372285; 594329, 2372254; 594250, 2372230; 594155, 2372234; 594096, 2372246; 594037, 2372266; 594013, 2372309; 593966, 2372372; 593875, 2372380; 593768, 2372396; 593689, 2372432; 593685, 2372495; 593689, 2372558; 593697, 2372617; 593685, 2372661; 593579, 2372760; 593425, 2372898; 593290,

2373016; 593199, 2373091; 593045, 2373182; 592958, 2373317; 592907, 2373447; 592887, 2373526; 592879, 2373648; 592915, 2373767; 592903, 2373897; 592868, 2374004; 592852, 2374107; 592808, 2374150; 592754, 2374182; 592760, 2374190; 592765, 2374190; 592805, 2374172; 592805, 2374171; 592806, 2374171; 592807, 2374171; 592807, 2374172; return to starting point.

(ii) **Note:** Map 146 follows:



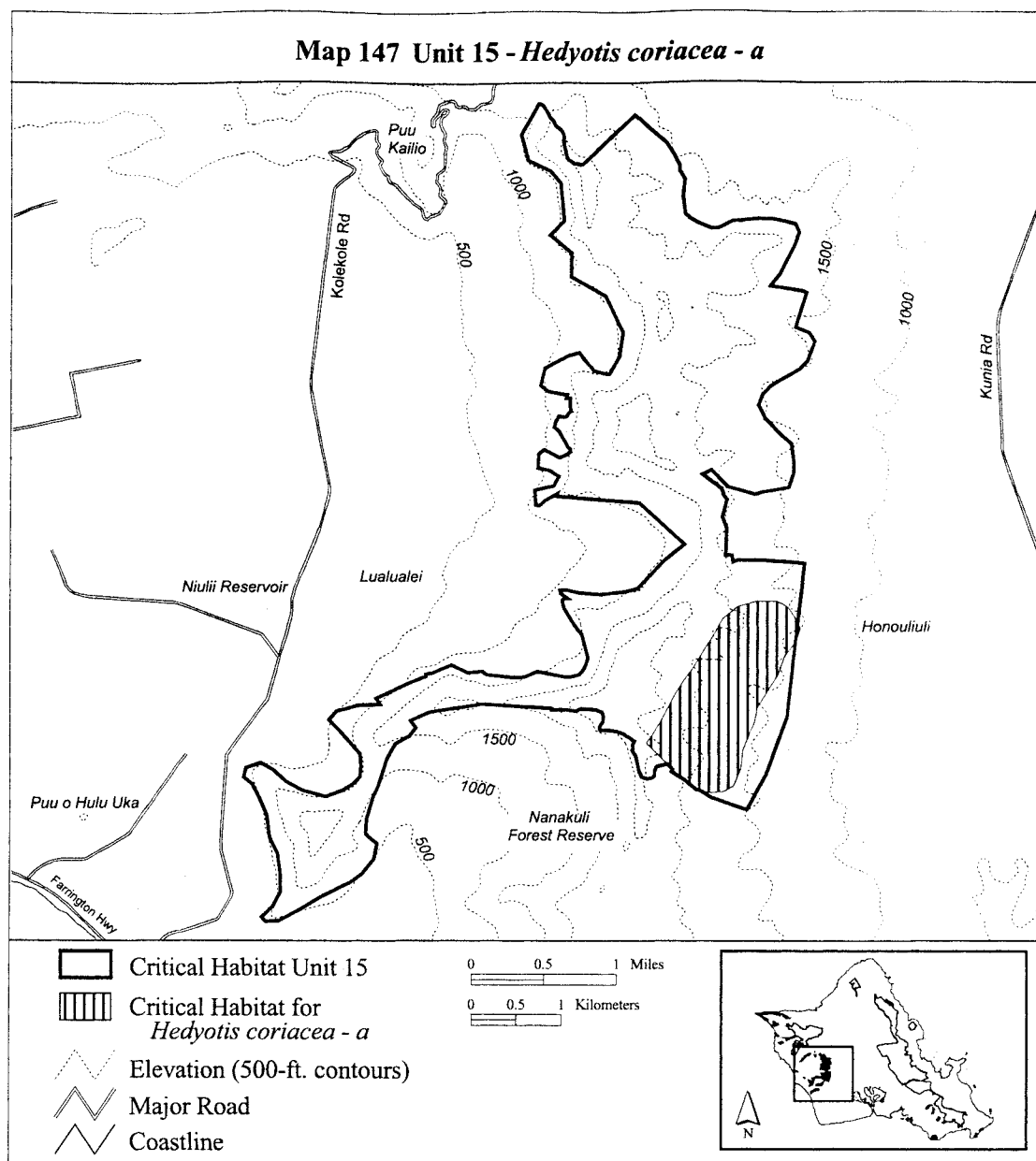
(147) Oahu 15—*Hedyotis coriacea*—a
(185 ha; 458 ac)

(i) Unit consists of the following 31 boundary points: Start at 593537, 2367790; 593626, 2367910; 593688, 2368026; 593778, 2368187; 593849, 2368320; 593942, 2368481; 594054,

2368619; 594201, 2368864; 594268, 2368976; 594375, 2369168; 594535, 2369301; 594745, 2369364; 594977, 2369364; 595097, 2369292; 595164, 2369185; 595209, 2369052; 595151, 2368882; 595053, 2368740; 594977, 2368526; 594923, 2368450; 594807,

2368263; 594749, 2368173; 594723, 2368008; 594669, 2367888; 594602, 2367710; 594576, 2367505; 594495, 2367322; 594397, 2367264; 594237, 2367242; 594085, 2367282; 593907, 2367424; return to starting point.

(ii) **Note:** Map 147 follows:



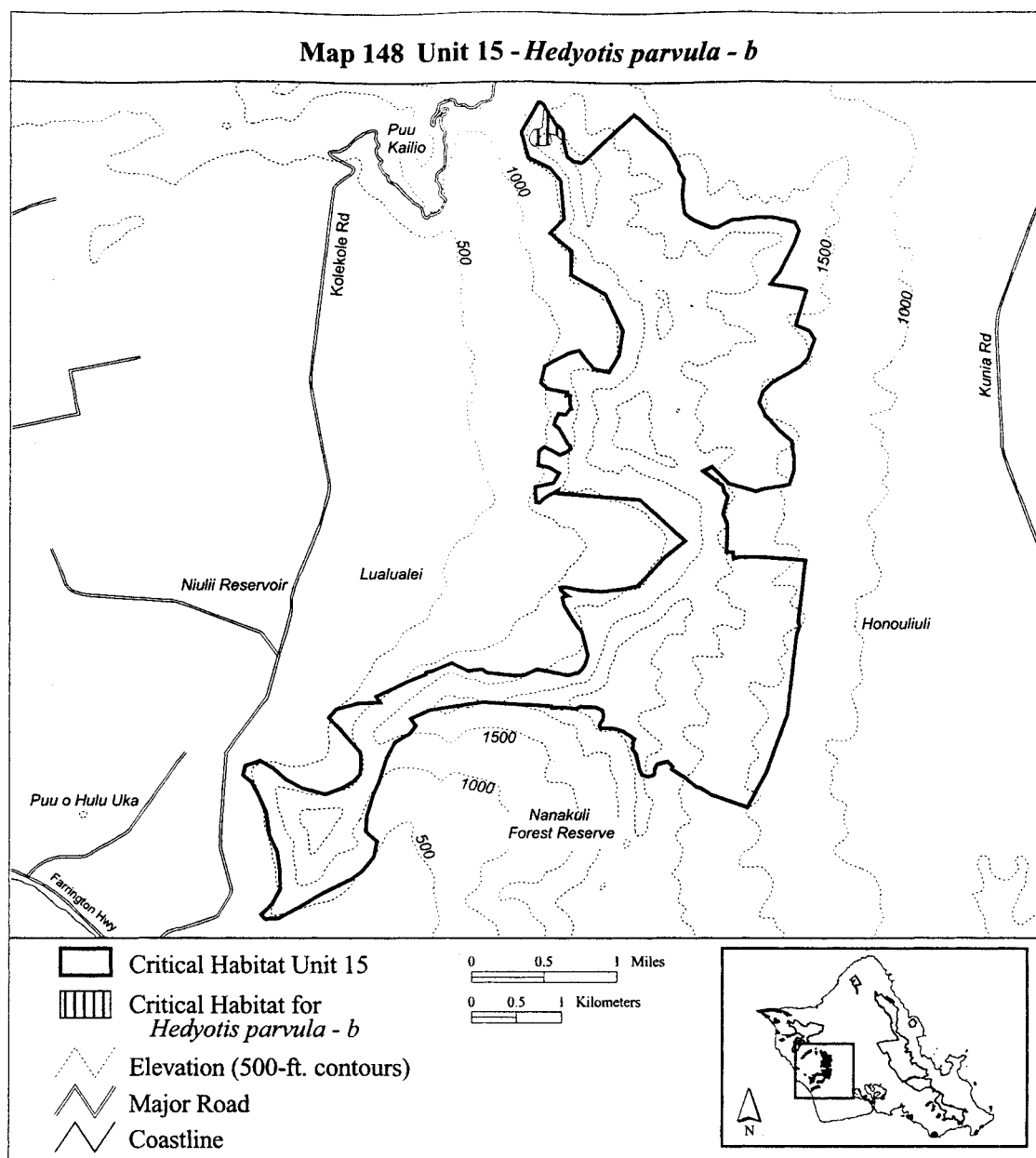
(148) Oahu 15—*Hedyotis parvula*—b (8 ha; 19 ac)

(i) Unit consists of the following 35 boundary points: Start at 592602, 2374407; 592530, 2374478; 592455, 2374495; 592457, 2374454; 592473, 2374402; 592457, 2374373; 592418,

2374363; 592384, 2374357; 592352, 2374359; 592313, 2374359; 592285, 2374349; 592248, 2374369; 592224, 2374406; 592224, 2374450; 592246, 2374499; 592277, 2374535; 592331, 2374545; 592370, 2374565; 592372, 2374594; 592362, 2374618; 592378, 2374653; 592378, 2374681; 592374,

2374701; 592374, 2374733; 592380, 2374756; 592404, 2374781; 592454, 2374691; 592484, 2374661; 592514, 2374601; 592514, 2374600; 592574, 2374561; 592594, 2374531; 592604, 2374492; 592604, 2374422; 592606, 2374409; return to starting point.

(ii) **Note:** Map 148 follows:



(149) Oahu 15—*Hedyotis parvula*—c (95 ha; 236 ac)

(i) Unit consists of the following 117 boundary points: Start at 593738,

2372184; 593738, 2372181; 593744, 2372130; 593648, 2371970; 593586, 2371810; 593572, 2371714; 593572, 2371678; 593603, 2371650; 593584, 2371594; 593581, 2371540; 593615, 2371521; 593654, 2371504; 593651, 2371487; 593575, 2371467; 593530, 2371442; 593508, 2371389; 593539, 2371344; 593612, 2371321; 593674, 2371300; 593733, 2371284; 593758, 2371258; 593738, 2371233; 593654, 2371210; 593564, 2371188; 593533, 2371146; 593542, 2371115; 593581, 2371070; 593645, 2371031; 593688,

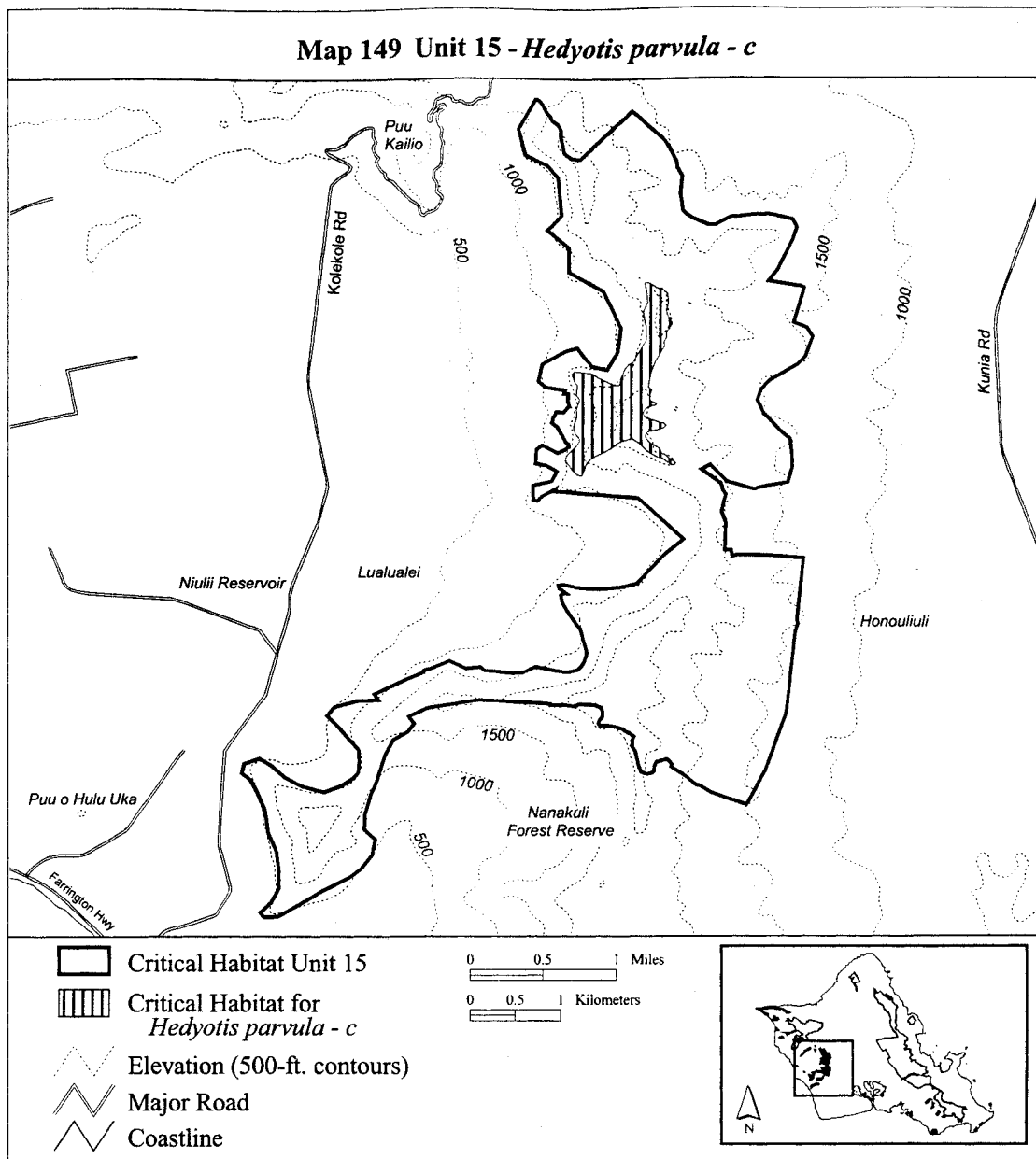
2371003; 593713, 2370946; 593744, 2370938; 593783, 2370904; 593837, 2370865; 593865, 2370845; 593856, 2370825; 593831, 2370823; 593786, 2370848; 593702, 2370901; 593665, 2370910; 593564, 2370966; 593502, 2371022; 593449, 2371073; 593401, 2371104; 593364, 2371106; 593291, 2371087; 593224, 2371053; 593182, 2371019; 593086, 2370960; 593055, 2370944; 593024, 2370932; 592935, 2370884; 592887, 2370823; 592864, 2370752; 592839, 2370702; 592797, 2370707; 592724, 2370772; 592698, 2370817; 592662, 2370854; 592662, 2370884; 592682, 2370927; 592727, 2370974; 592777, 2371025; 592808, 2371073; 592805, 2371121; 592777, 2371154; 592752, 2371208; 592749,

2371255; 592769, 2371306; 592783, 2371362; 592777, 2371438; 592791, 2371477; 592816, 2371522; 592816, 2371551; 592777, 2371593; 592783, 2371626; 592791, 2371697; 592757, 2371742; 592727, 2371817; 592760, 2371846; 592831, 2371843; 592946, 2371830; 593030, 2371774; 593137, 2371729; 593196, 2371700; 593249, 2371698; 593261, 2371729; 593261, 2371762; 593311, 2371872; 593348, 2371928; 593390, 2371953; 593401, 2371954; 593502, 2372130; 593539, 2372201; 593544, 2372274; 593542, 2372341; 593527, 2372400; 593505, 2372510; 593525, 2372546; 593558, 2372617; 593550, 2372712; 593533, 2372785; 593525, 2372825; 593556, 2372833; 593595, 2372813; 593651,

2372782; 593730, 2372751; 593772,
2372715; 593783, 2372653; 593778,
2372605; 593764, 2372535; 593769,

2372487; 593794, 2372445; 593825,
2372392; 593806, 2372338; 593764,

2372279; 593769, 2372234; 593741,
2372187; return to starting point.
(ii) **Note:** Map 149 follows:



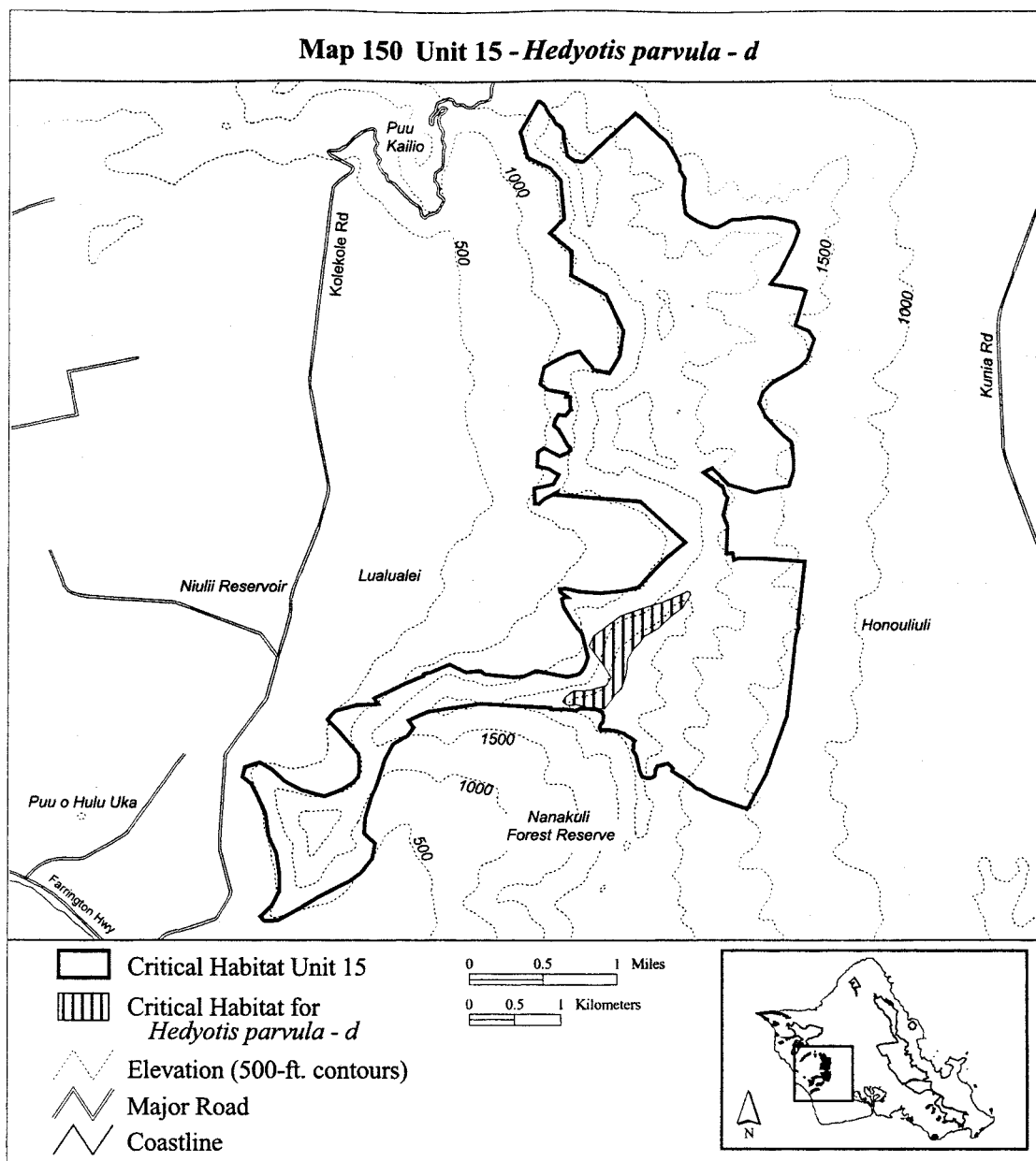
(150) Oahu 15—*Hedyotis parvula*—d
(49 ha; 122 ac)

(i) Unit consists of the following 40 boundary points: Start at 593983, 2369454; 594001, 2369444; 594008, 2369410; 593966, 2369334; 593929, 2369269; 593825, 2369200; 593753, 2369138; 593716, 2369097; 593667,

2369049; 593602, 2369011; 593509, 2368960; 593472, 2368908; 593403, 2368829; 593365, 2368781; 593320, 2368705; 593317, 2368592; 593296, 2368492; 593252, 2368376; 593197, 2368324; 593121, 2368218; 593080, 2368166; 593018, 2368163; 592915, 2368169; 592785, 2368200; 592716, 2368200; 592668, 2368200; 592616,

2368238; 592640, 2368286; 592740, 2368355; 592901, 2368362; 593094, 2368417; 593145, 2368499; 593087, 2368599; 593015, 2368695; 592901, 2368850; 592949, 2368960; 593125, 2369094; 593248, 2369179; 593461, 2369255; 593709, 2369334; return to starting point.

(ii) **Note:** Map 150 follows:



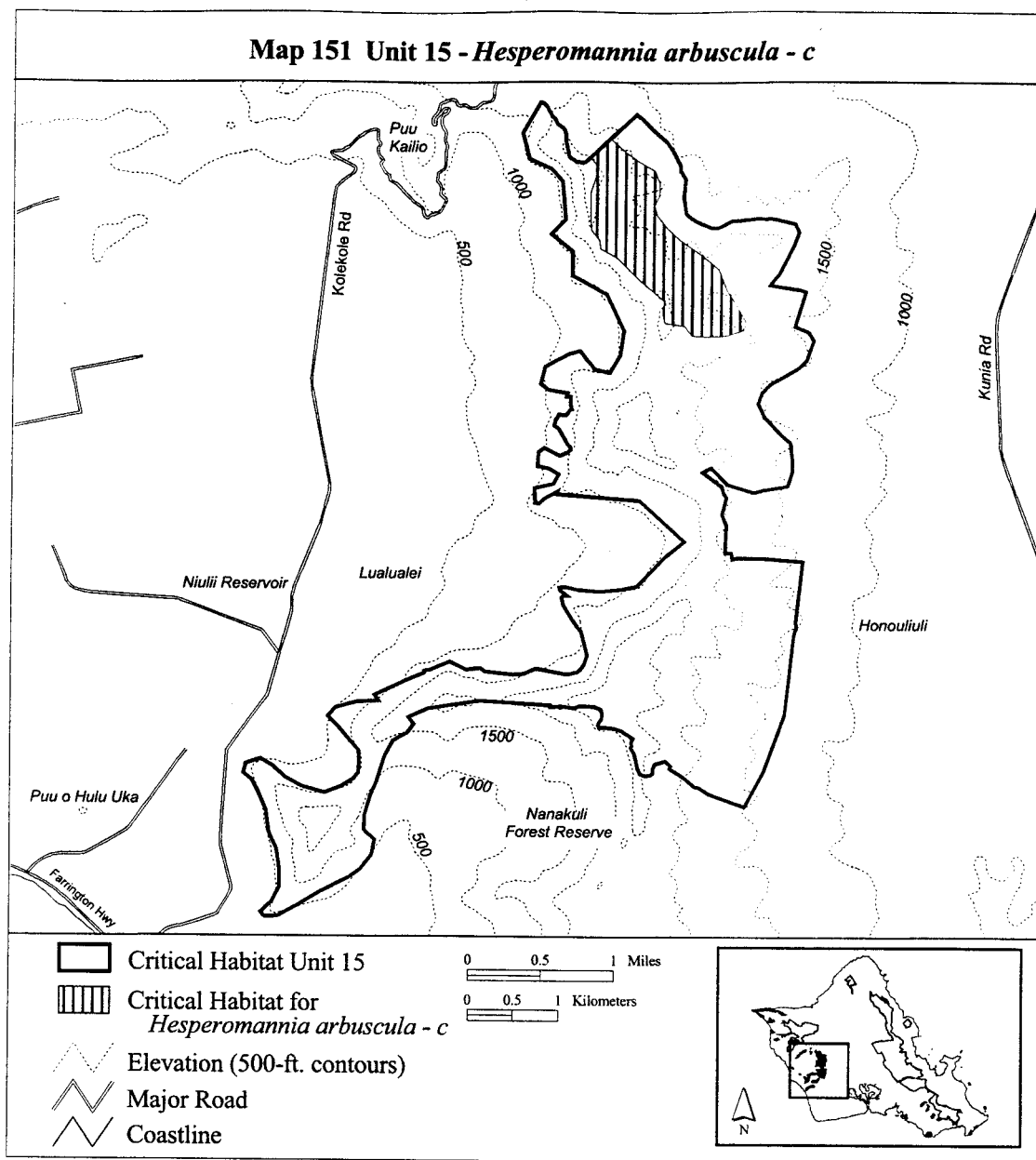
(151) Oahu 15—*Hesperomannia arbuscula*—c (163 ha; 402 ac)

(i) Unit consists of the following 39 boundary points: Start at 593101, 2374447; 593108, 2374441; 593272, 2374302; 593415, 2374202; 593591, 2374102; 593647, 2373974; 593647, 2373826; 593591, 2373719; 593619,

2373611; 593743, 2373463; 593879, 2373339; 594114, 2373168; 594302, 2373020; 594394, 2372784; 594521, 2372592; 594617, 2372420; 594581, 2372340; 594513, 2372316; 594370, 2372272; 594178, 2372269; 594014, 2372277; 593934, 2372381; 593715, 2372417; 593691, 2372501; 593691, 2372569; 593707, 2372657; 593595,

2372760; 593415, 2372904; 593240, 2373084; 593184, 2373140; 592996, 2373240; 592988, 2373339; 592900, 2373443; 592884, 2373603; 592884, 2373791; 592884, 2373854; 592940, 2374026; 592940, 2374170; 592880, 2374240; return to starting point.

(ii) **Note:** Map 151 follows:



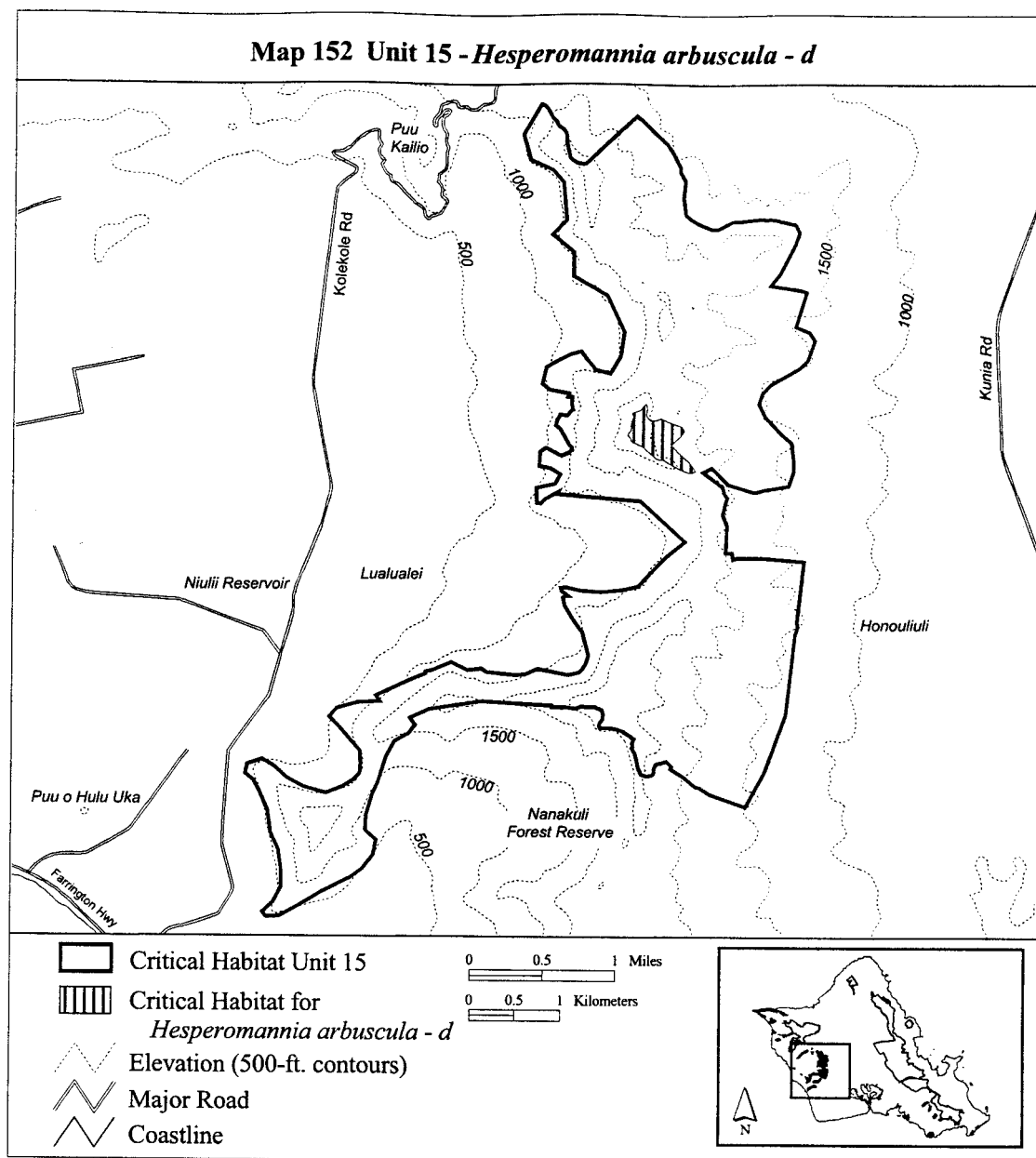
(152) Oahu 15—*Hesperomannia arbuscula*—d (24 ha; 60 ac)

(i) Unit consists of the following 49 boundary points: Start at 593515, 2371533; 593527, 2371465; 593511, 2371414; 593534, 2371371; 593567, 2371348; 593636, 2371350; 593679, 2371364; 593763, 2371328; 593851, 2371297; 593905, 2371278; 593926, 2371251; 593930, 2371221; 593909,

2371176; 593859, 2371140; 593821, 2371090; 593796, 2371077; 593849, 2371009; 593934, 2370936; 593992, 2370881; 594043, 2370821; 594063, 2370779; 594040, 2370766; 594011, 2370762; 593968, 2370769; 593896, 2370802; 593813, 2370844; 593769, 2370869; 593713, 2370906; 593671, 2370911; 593619, 2370927; 593575, 2370971; 593517, 2371015; 593479,

2371059; 593444, 2371077; 593402, 2371096; 593362, 2371103; 593350, 2371132; 593337, 2371165; 593314, 2371182; 593321, 2371205; 593350, 2371240; 593350, 2371271; 593350, 2371297; 593354, 2371332; 593366, 2371363; 593371, 2371391; 593360, 2371431; 593389, 2371439; 593448, 2371462; return to starting point.

(ii) **Note:** Map 152 follows:



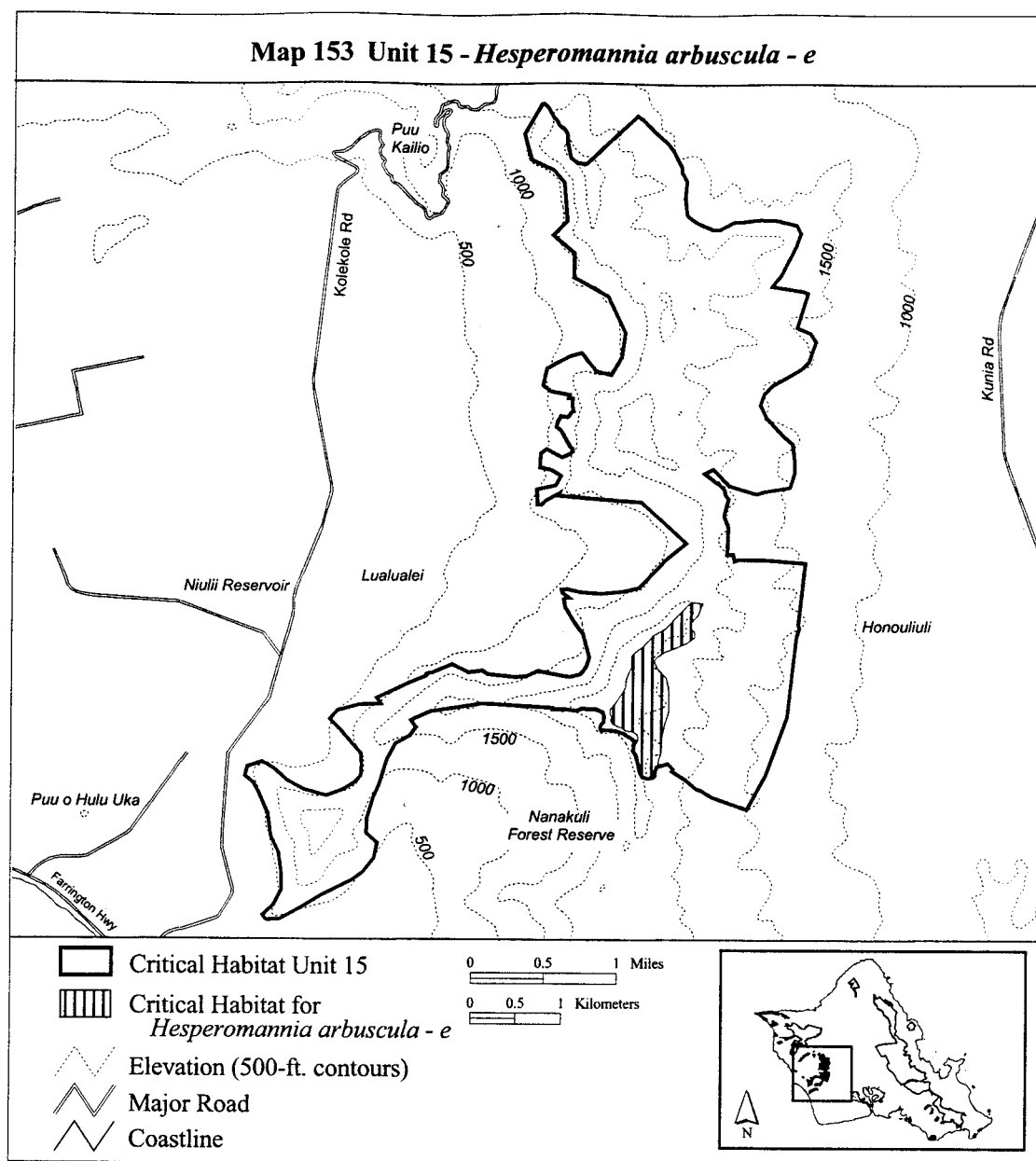
(153) Oahu 15—*Hesperomannia arbuscula*—e (70 ha; 172 ac)

(i) Unit consists of the following 61 boundary points: Start at 594011, 2369339; 594149, 2369329; 594118, 2369262; 594092, 2369198; 594045, 2369151; 594015, 2369114; 594015, 2369050; 594055, 2369007; 594051, 2368943; 593968, 2368886; 593834, 2368833; 593720, 2368786; 593649, 2368735; 593609, 2368682; 593639, 2368615; 593716, 2368531; 593740,

2368504; 593767, 2368400; 593773, 2368300; 593773, 2368136; 593736, 2368008; 593706, 2367881; 593700, 2367807; 593690, 2367677; 593666, 2367596; 593656, 2367533; 593626, 2367479; 593626, 2367429; 593606, 2367409; 593549, 2367395; 593489, 2367412; 593455, 2367482; 593442, 2367549; 593415, 2367647; 593381, 2367710; 593408, 2367754; 593435, 2367814; 593432, 2367878; 593375, 2367915; 593304, 2367921; 593271,

2367948; 593220, 2367968; 593157, 2368002; 593137, 2368029; 593153, 2368069; 593127, 2368112; 593127, 2368149; 593194, 2368233; 593271, 2368350; 593294, 2368400; 593301, 2368481; 593334, 2368565; 593358, 2368618; 593358, 2368746; 593432, 2368806; 593492, 2368849; 593556, 2368920; 593596, 2368970; 593733, 2369050; 593834, 2369164; 593921, 2369245; return to starting point.

(ii) **Note:** Map 153 follows:



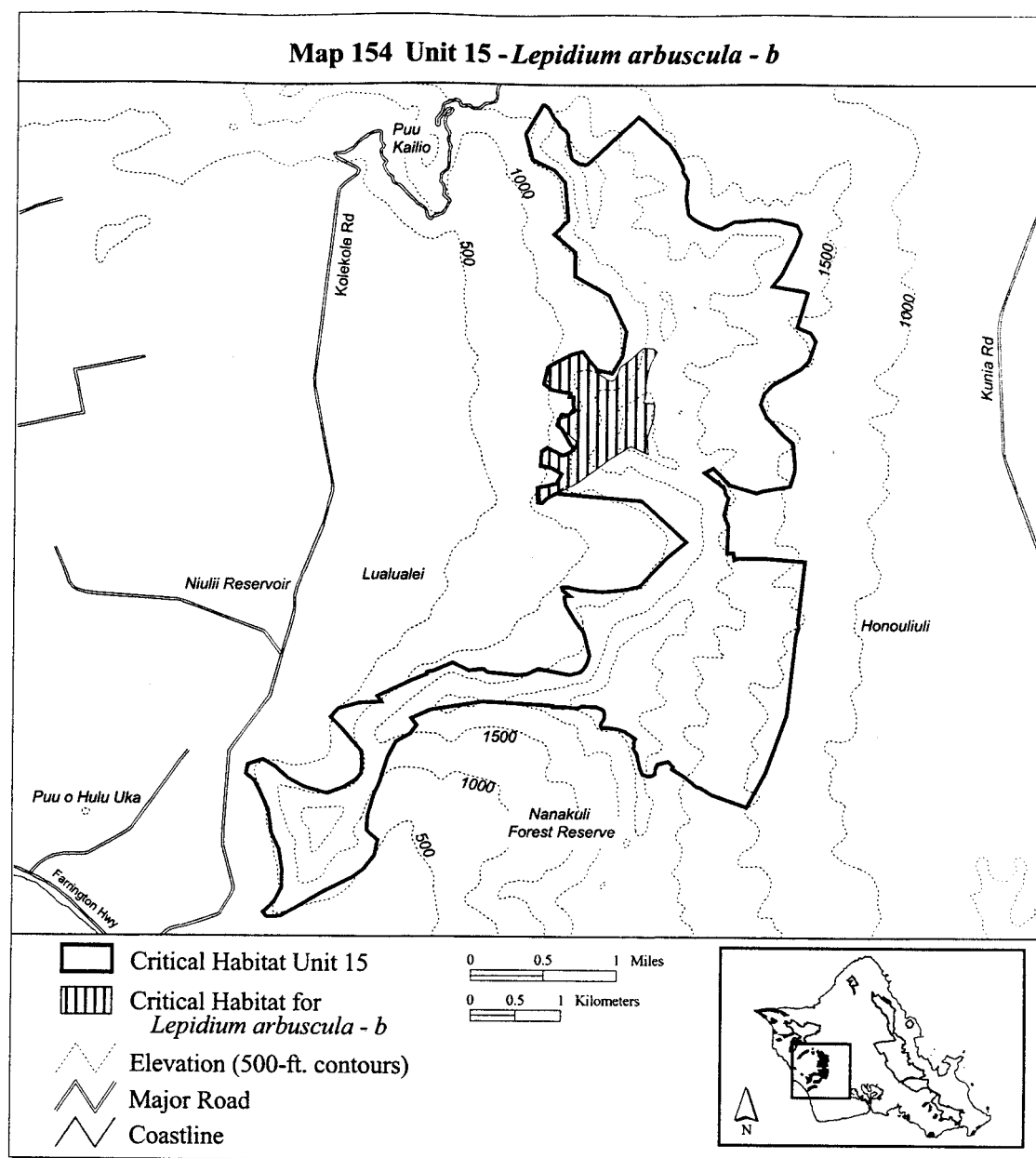
(154) Oahu 15—*Lepidium arbuscula*—b
(119 ha; 293 ac)

(i) Unit consists of the following 53 boundary points: Start at 593447, 2372148; 593565, 2372148; 593608, 2372112; 593544, 2371984; 593505, 2371876; 593490, 2371744; 593490, 2371637; 593465, 2371547; 593585, 2371534; 593574, 2371368; 593504, 2371156; 593519, 2370975; 593331,

2371064; 593112, 2370931; 592749, 2370654; 592401, 2370473; 592348, 2370422; 592303, 2370423; 592298, 2370588; 592511, 2370640; 592568, 2370749; 592458, 2370816; 592333, 2370839; 592335, 2370994; 592399, 2371045; 592573, 2370950; 592711, 2371012; 592721, 2371121; 592630, 2371197; 592507, 2371287; 592529, 2371358; 592597, 2371374; 592711, 2371436; 592687, 2371512; 592687,

2371607; 592645, 2371609; 592655, 2371643; 592439, 2371683; 592357, 2371749; 592404, 2371930; 592511, 2371994; 592670, 2372075; 592791, 2372111; 592861, 2372016; 592921, 2371946; 592946, 2371910; 592954, 2371866; 593033, 2371823; 593068, 2371794; 593140, 2371794; 593183, 2371880; 593203, 2371941; 593316, 2372023; return to starting point.

(ii) **Note:** Map 154 follows:



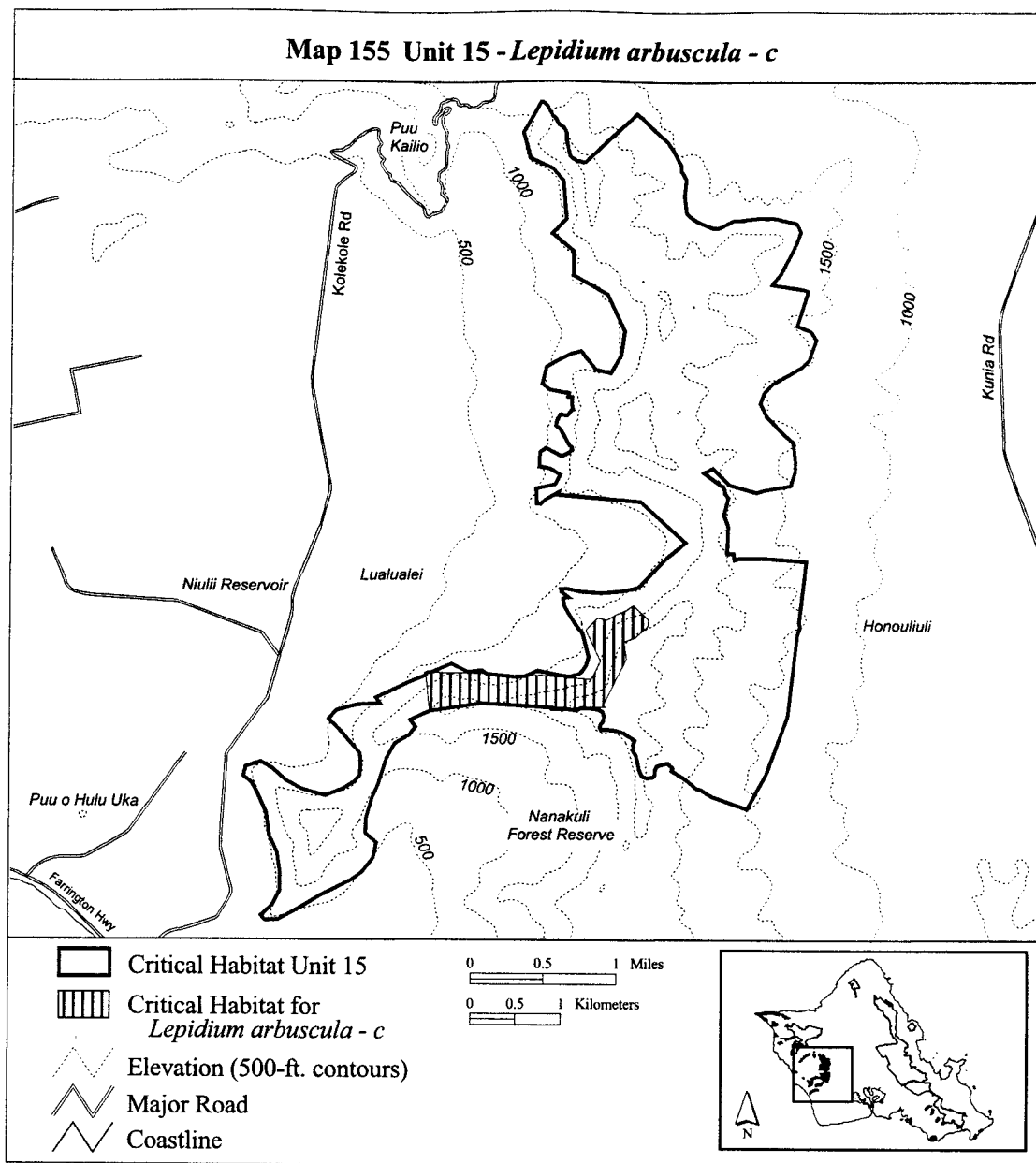
(155) Oahu 15—*Lepidium arbuscula*—c
(99 ha; 245 ac)

(i) Unit consists of the following 25 boundary points: Start at 591090, 2368536; 591131, 2368549; 591714, 2368544; 592077, 2368508; 592367,

2368526; 592921, 2368481; 593026, 2368679; 592857, 2369023; 592994, 2369159; 593086, 2369134; 593198, 2369200; 593307, 2369244; 593378, 2369303; 593550, 2369145; 593547, 2369063; 593406, 2368937; 593278,

2368892; 593310, 2368706; 593058, 2368199; 593078, 2368178; 592491, 2368152; 592490, 2368151; 592491, 2368168; 591718, 2368217; 591140, 2368128; return to starting point.

(ii) **Note:** Map 155 follows:



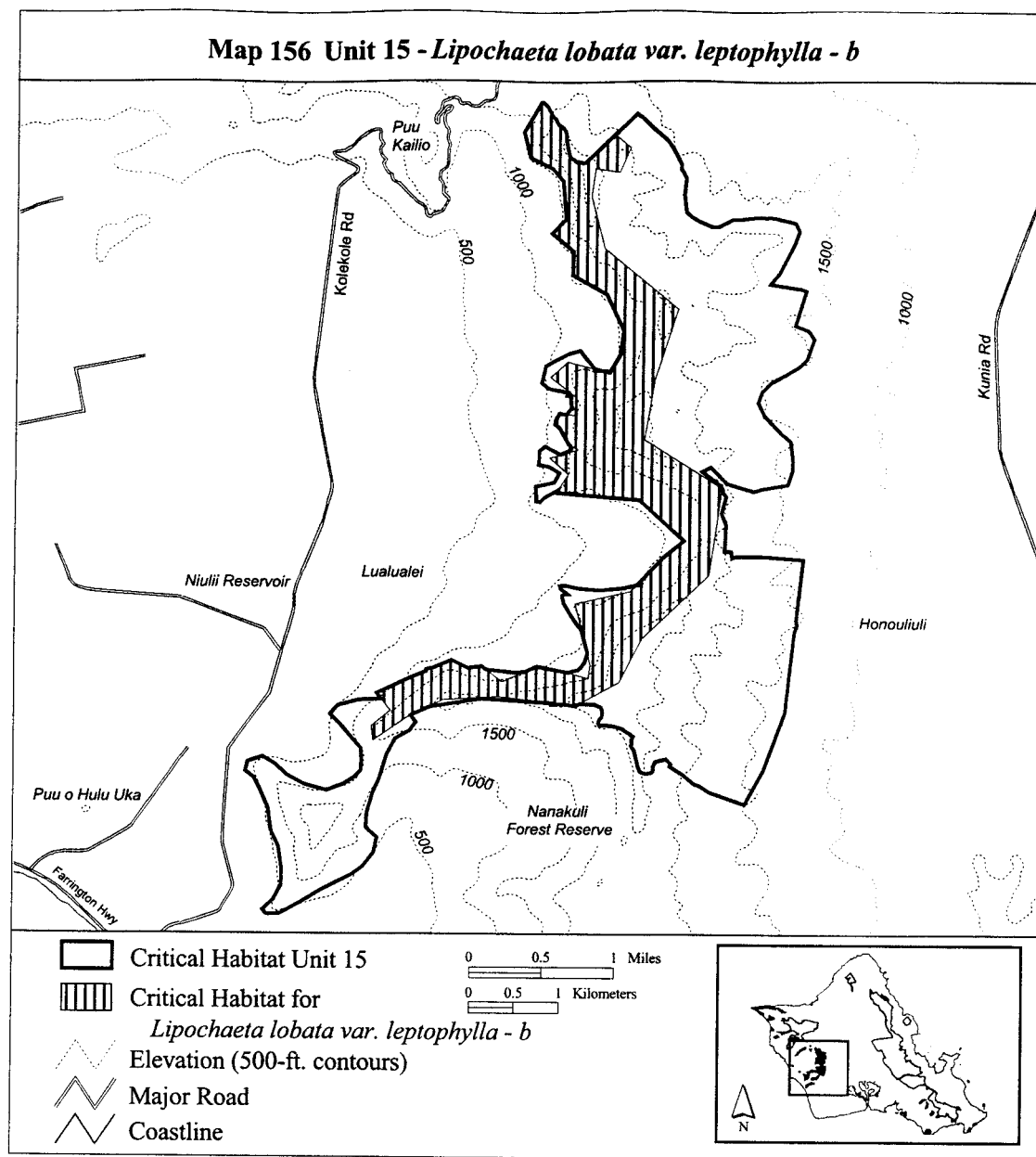
(156) Oahu 15—*Lipochaeta lobata* var. *leptophylla*—b (534 ha; 1,320 ac)

(i) Unit consists of the following 84 boundary points: Start at 593149, 2374492; 593322, 2374347; 593202, 2374077; 592932, 2374119; 592890, 2373813; 593040, 2373249; 593861, 2372568; 593616, 2371792; 593508, 2371124; 594371, 2370587; 594228, 2369606; 593493, 2368894; 593248, 2368404; 592759, 2368139; 591902, 2368241; 591290, 2368200; 590902, 2368016; 590508, 2367753; 590489, 2367907; 590699, 2368079; 590546, 2368270; 590910, 2368443; 591380, 2368646; 591561, 2368558; 591714,

2368577; 591944, 2368404; 592327, 2368577; 592633, 2368519; 592901, 2368443; 592920, 2368596; 592748, 2369285; 593361, 2369419; 593744, 2369821; 593954, 2369993; 593456, 2370453; 592537, 2370530; 592671, 2370740; 592461, 2370912; 592767, 2371008; 592671, 2371066; 592518, 2371315; 592557, 2371410; 592729, 2371391; 592729, 2371602; 592461, 2371812; 592652, 2371985; 593112, 2371871; 593227, 2372062; 593265, 2372330; 593073, 2372732; 592691, 2372943; 592691, 2373211; 592461, 2373402; 592614, 2373556; 592576, 2373977; 592461, 2374111; 592212,

2374226; 592135, 2374513; 592328, 2374840; 592345, 2374840; 592384, 2374811; 592404, 2374781; 592454, 2374691; 592484, 2374661; 592514, 2374601; 592514, 2374600; 592574, 2374561; 592594, 2374531; 592604, 2374492; 592604, 2374422; 592634, 2374282; 592634, 2374281; 592644, 2374251; 592664, 2374231; 592664, 2374230; 592724, 2374190; 592725, 2374190; 592726, 2374190; 592765, 2374190; 592805, 2374172; 592805, 2374171; 592806, 2374171; 592807, 2374171; 592807, 2374172; return to starting point.

(ii) **Note:** Map 156 follows:



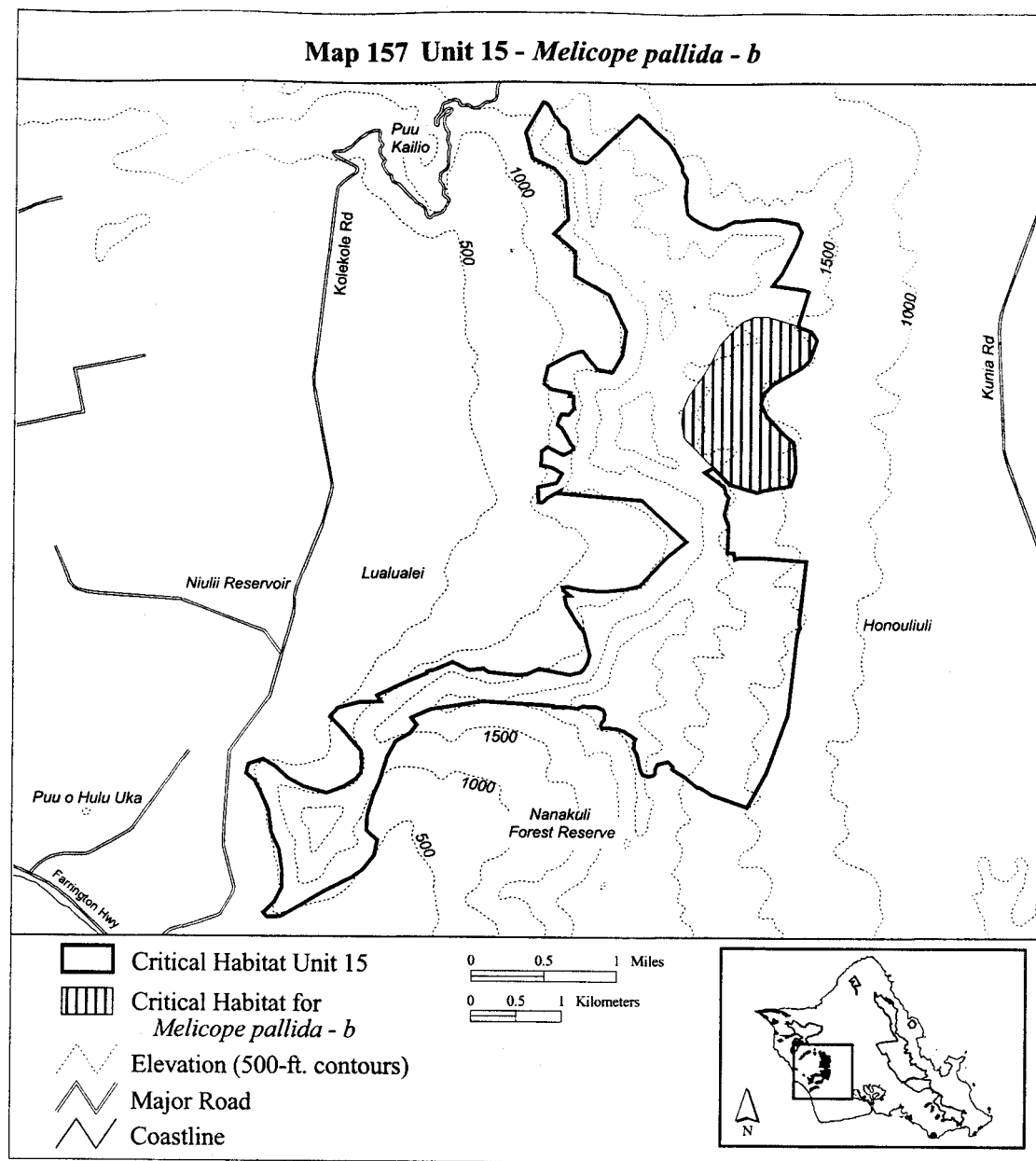
(157) Oahu 15—*Melicope pallida*—b
(174 ha; 431 ac)

(i) Unit consists of the following 30 boundary points: Start at 593915, 2371158; 593885, 2371316; 593902, 2371460; 593968, 2371623; 594112, 2371815; 594204, 2371968; 594309,

2372178; 594405, 2372290; 594540, 2372426; 594680, 2372491; 594833, 2372491; 595130, 2372404; 595305, 2372330; 595371, 2372238; 595318, 2372089; 595292, 2372015; 595209, 2371932; 595069, 2371849; 594894, 2371748; 594794, 2371648; 594759,

2371530; 594820, 2371399; 595008, 2371202; 595122, 2371106; 595148, 2370901; 595148, 2370783; 595095, 2370625; 594811, 2370573; 594724, 2370547; 594422, 2370634; return to starting point.

(ii) **Note:** Map 157 follows:



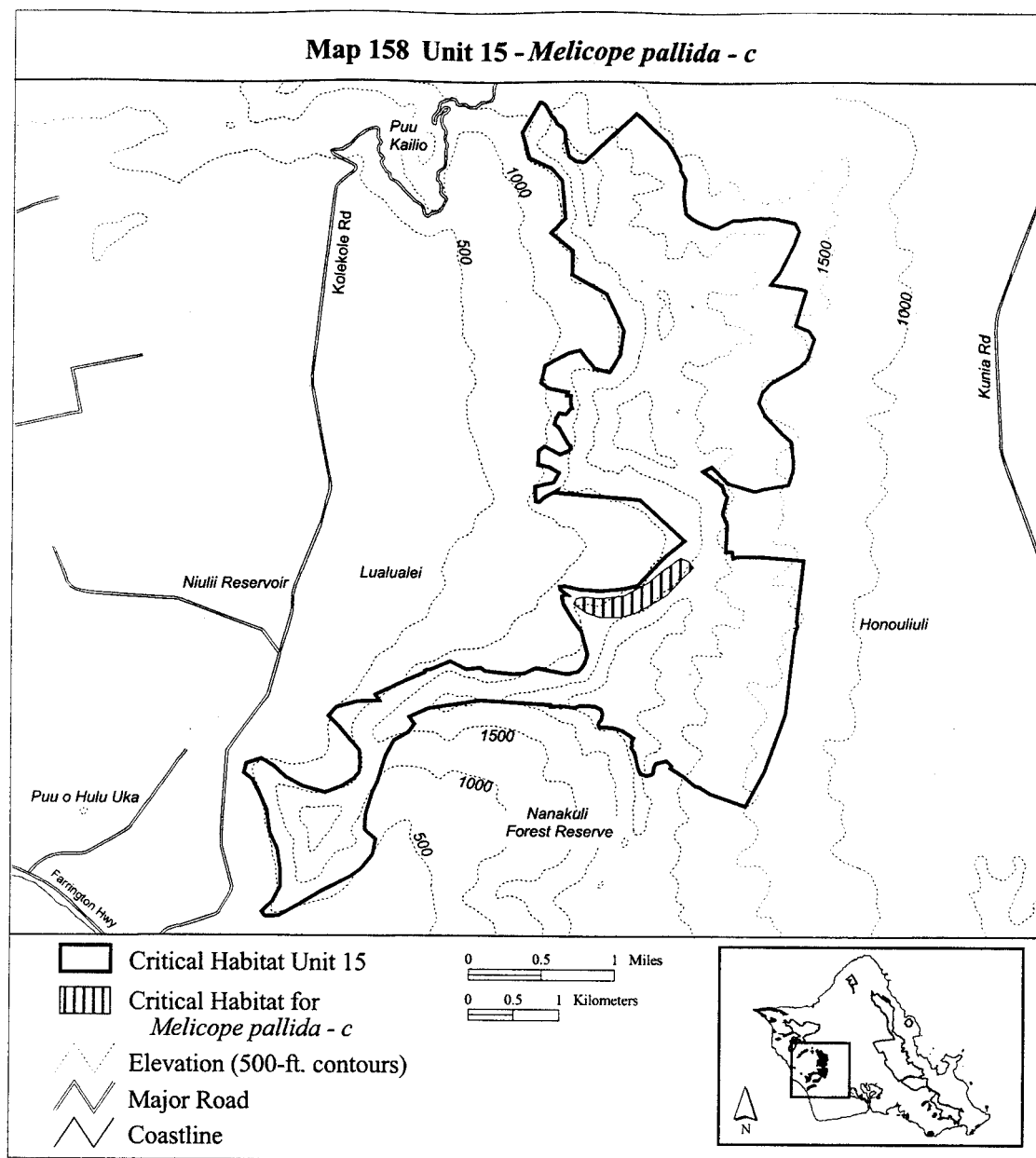
(158) Oahu 15—*Melicope pallida*—c (29 ha; 72 ac)

(i) Unit consists of the following 18 boundary points: Start at 592844, 2369370; 593026, 2369351; 593289,

2369381; 593556, 2369529; 593697, 2369648; 593797, 2369722; 593904, 2369803; 594001, 2369763; 594056, 2369696; 593934, 2369581; 593760, 2369392; 593604, 2369296; 593419,

2369192; 593245, 2369140; 593033, 2369140; 592885, 2369184; 592741, 2369288; 592763, 2369348; return to starting point.

(ii) **Note:** Map 158 follows:



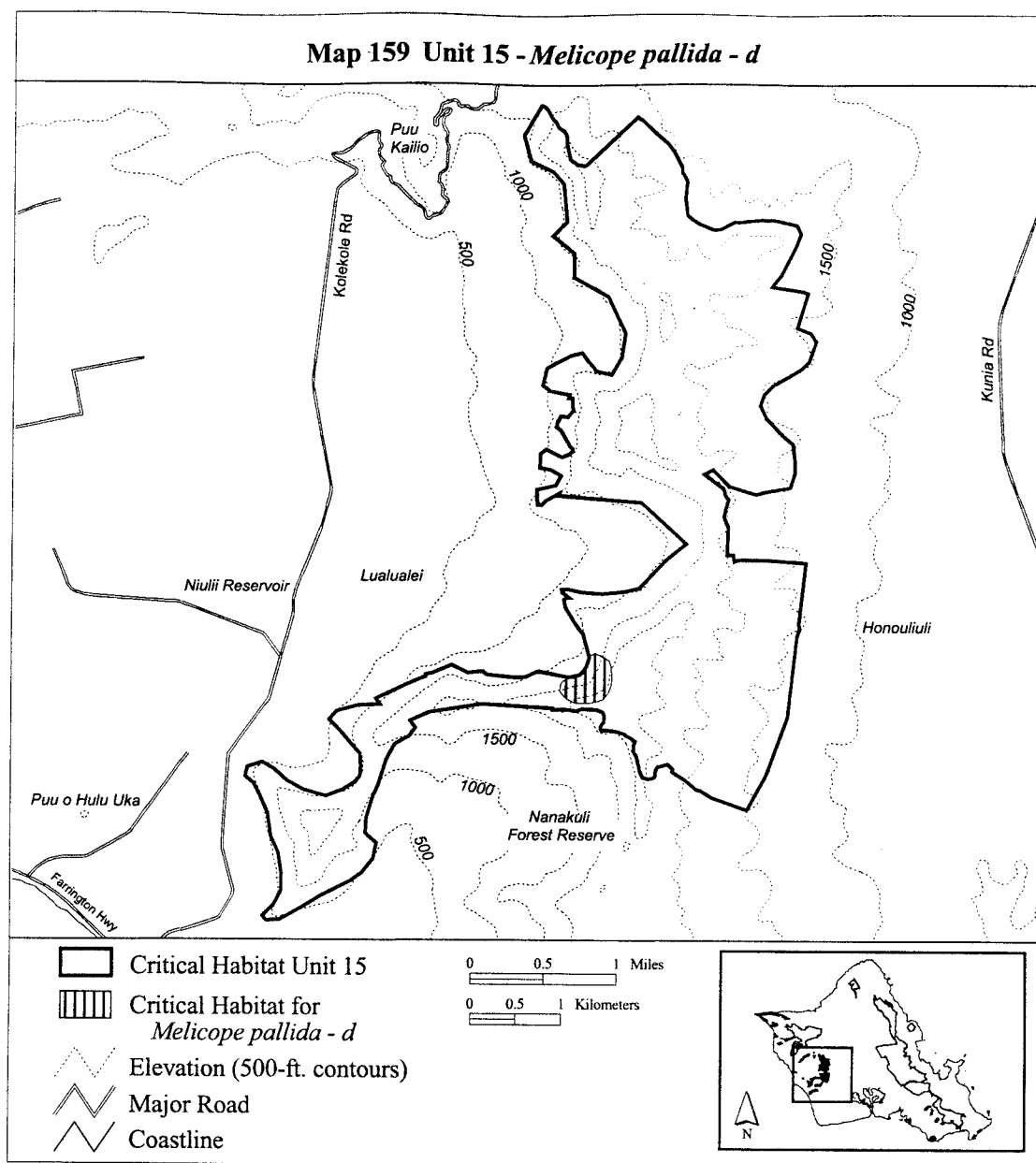
(159) Oahu 15—*Melicope pallida*—d (20 ha; 50 ac)

(i) Unit consists of the following 27 boundary points: Start at 593034, 2368745; 593076, 2368722; 593112, 2368689; 593130, 2368627; 593145,

2368522; 593138, 2368427; 593104, 2368340; 593057, 2368274; 592991, 2368244; 592892, 2368225; 592784, 2368227; 592748, 2368227; 592644, 2368269; 592602, 2368319; 592576, 2368352; 592576, 2368406; 592588, 2368448; 592611, 2368477; 592661,

2368503; 592732, 2368526; 592789, 2368540; 592829, 2368576; 592866, 2368639; 592881, 2368701; 592892, 2368745; 592932, 2368767; 592958, 2368772; return to starting point.

(ii) **Note:** Map 159 follows:



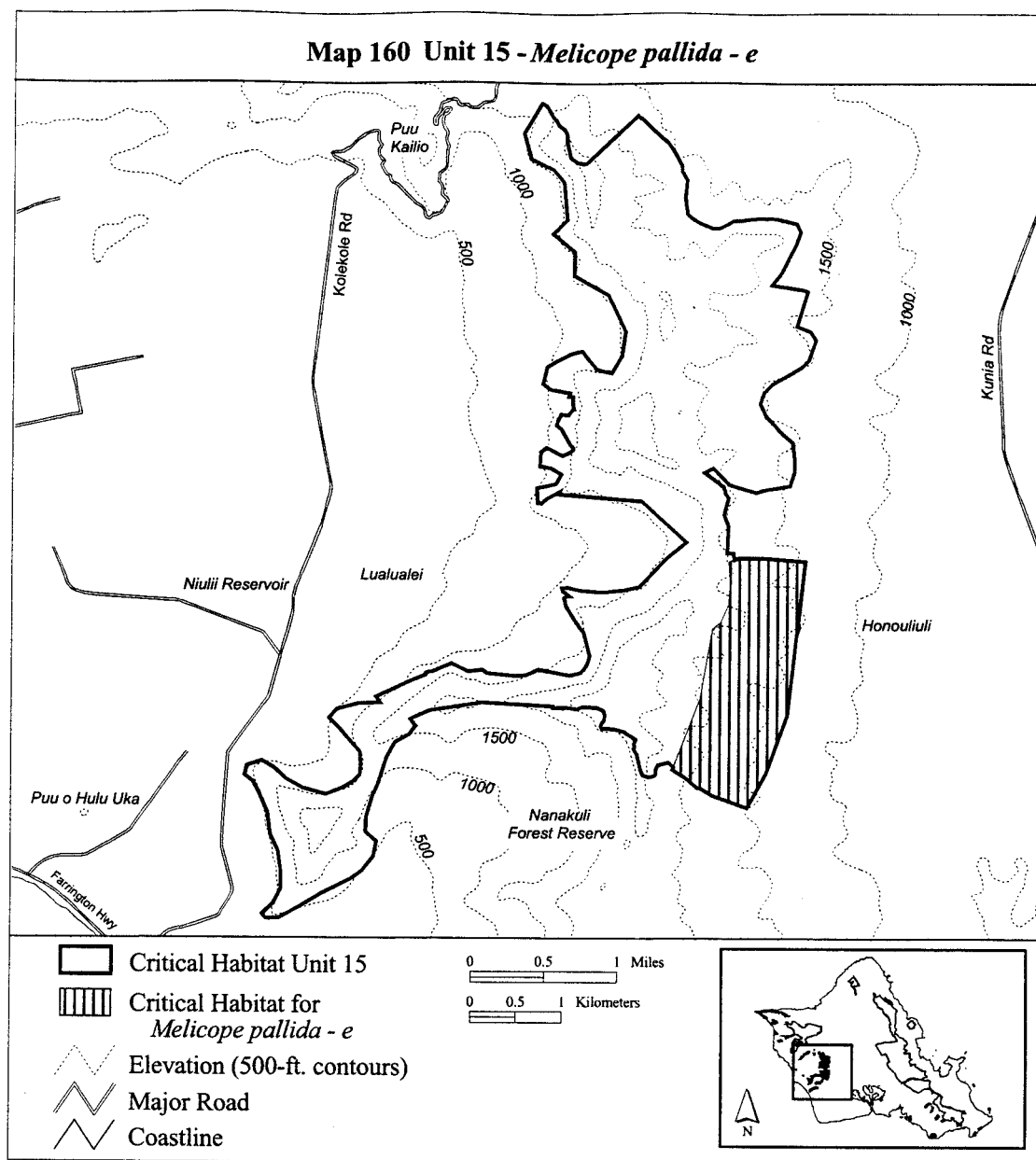
(160) Oahu 15—*Melicope pallida*—e
(243 ha; 602 ac)

(i) Unit consists of the following 16
boundary points: Start at 594423,

2369292; 594438, 2369540; 594423,
2369777; 594527, 2369815; 594820,
2369815; 595271, 2369781; 595080,
2368083; 594844, 2367434; 594641,
2367062; 594256, 2367191; 593830,

2367465; 593813, 2367480; 594115,
2368259; 594242, 2369020; 594245,
2369025; 594338, 2369107; return to
starting point.

(ii) **Note:** Map 160 follows:



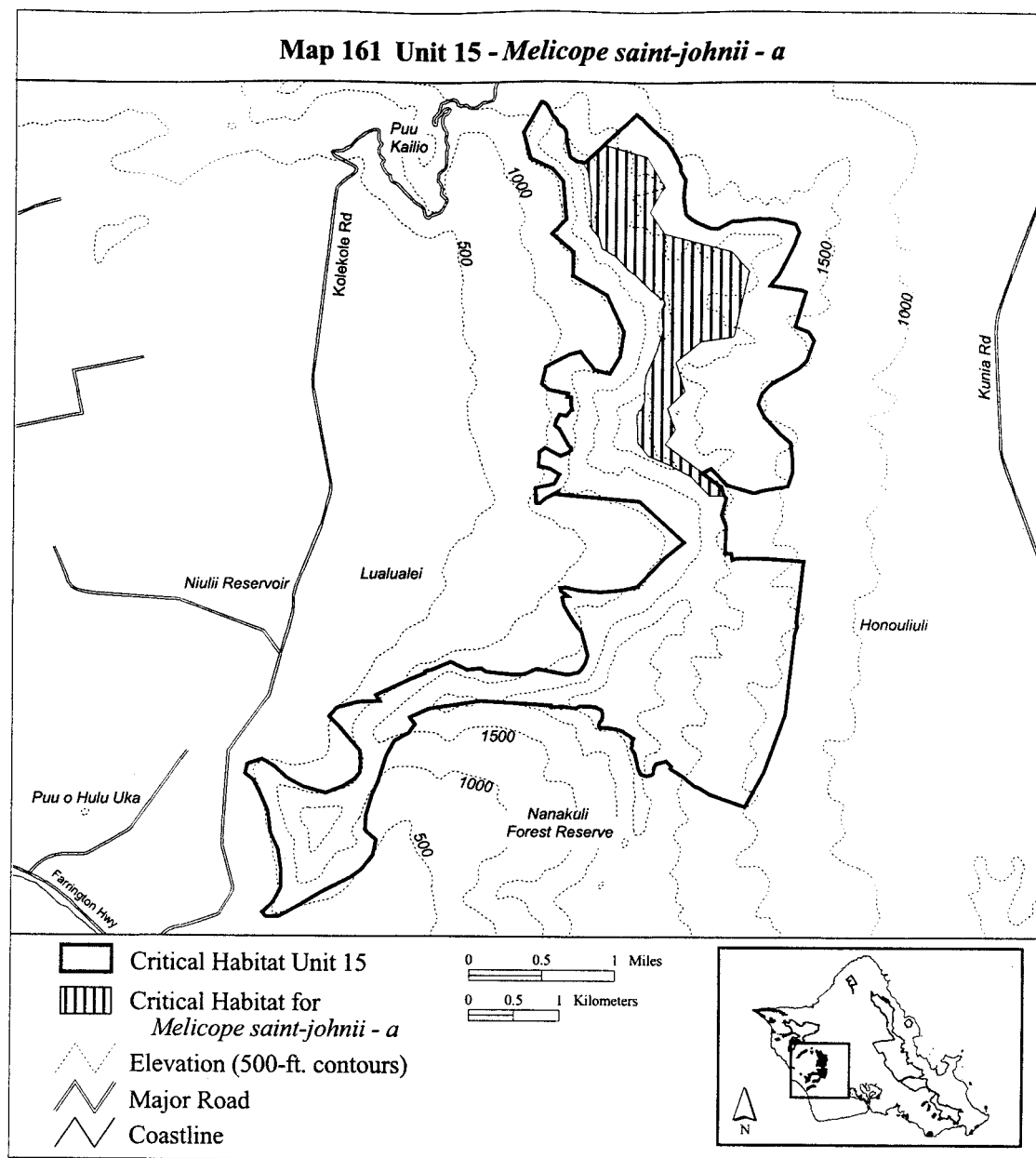
(161) Oahu 15—*Melicope saint-johnii*—a (244 ha; 604 ac)

(i) Unit consists of the following 59 boundary points: Start at 593044, 2374373; 593508, 2374248; 593702, 2373921; 593671, 2373883; 593545, 2373648; 593710, 2373413; 594455, 2373217; 594643, 2373004; 594488, 2372290; 594486, 2372290; 594478, 2372273; 594122, 2372225; 593844, 2371996; 593948, 2371674; 593953,

2371672; 593753, 2371488; 593844, 2371244; 593734, 2371085; 594352, 2370615; 594357, 2370618; 594377, 2370557; 594382, 2370517; 594227, 2370514; 594227, 2370520; 594022, 2370732; 593802, 2370850; 593548, 2370960; 593457, 2371077; 593432, 2371099; 593430, 2371115; 593416, 2371418; 593430, 2371418; 593434, 2371461; 593461, 2371469; 593499, 2371560; 593502, 2371727; 593510, 2371844; 593635, 2372121; 593696,

2372345; 593681, 2372557; 593719, 2372667; 593544, 2372800; 593400, 2372951; 593309, 2373012; 593173, 2373156; 593013, 2373247; 592972, 2373369; 592888, 2373460; 592884, 2373619; 592884, 2373824; 592847, 2374081; 592790, 2374178; 592805, 2374172; 592805, 2374171; 592806, 2374171; 592807, 2374171; 592807, 2374172; 593007, 2374359; 593038, 2374369; return to starting point.

(ii) **Note:** Map 161 follows:



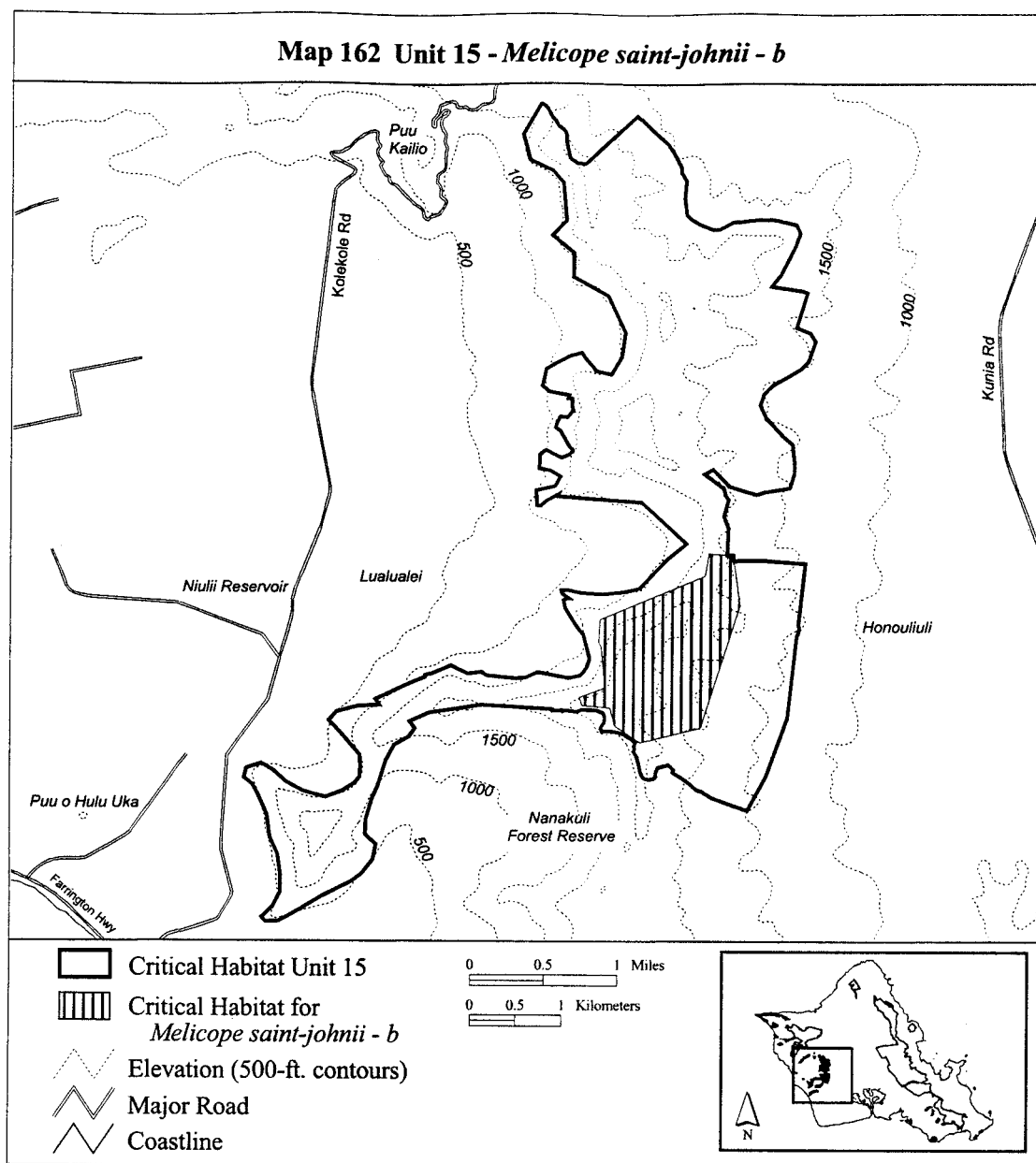
(162) Oahu 15—*Melicope saint-johnii*—
b (214 ha; 529 ac)

(i) Unit consists of the following 17
boundary points: Start at 593451,

2367805; 593168, 2367990; 593120,
2368182; 592816, 2368208; 592780,
2368300; 593052, 2368401; 593052,
2368518; 593019, 2368854; 592993,
2368899; 593007, 2369154; 594161,

2369636; 594203, 2369883; 594473,
2369871; 594549, 2369326; 594554,
2369325; 594126, 2367970; 593462,
2367802; return to starting point.

(ii) **Note:** Map 162 follows:



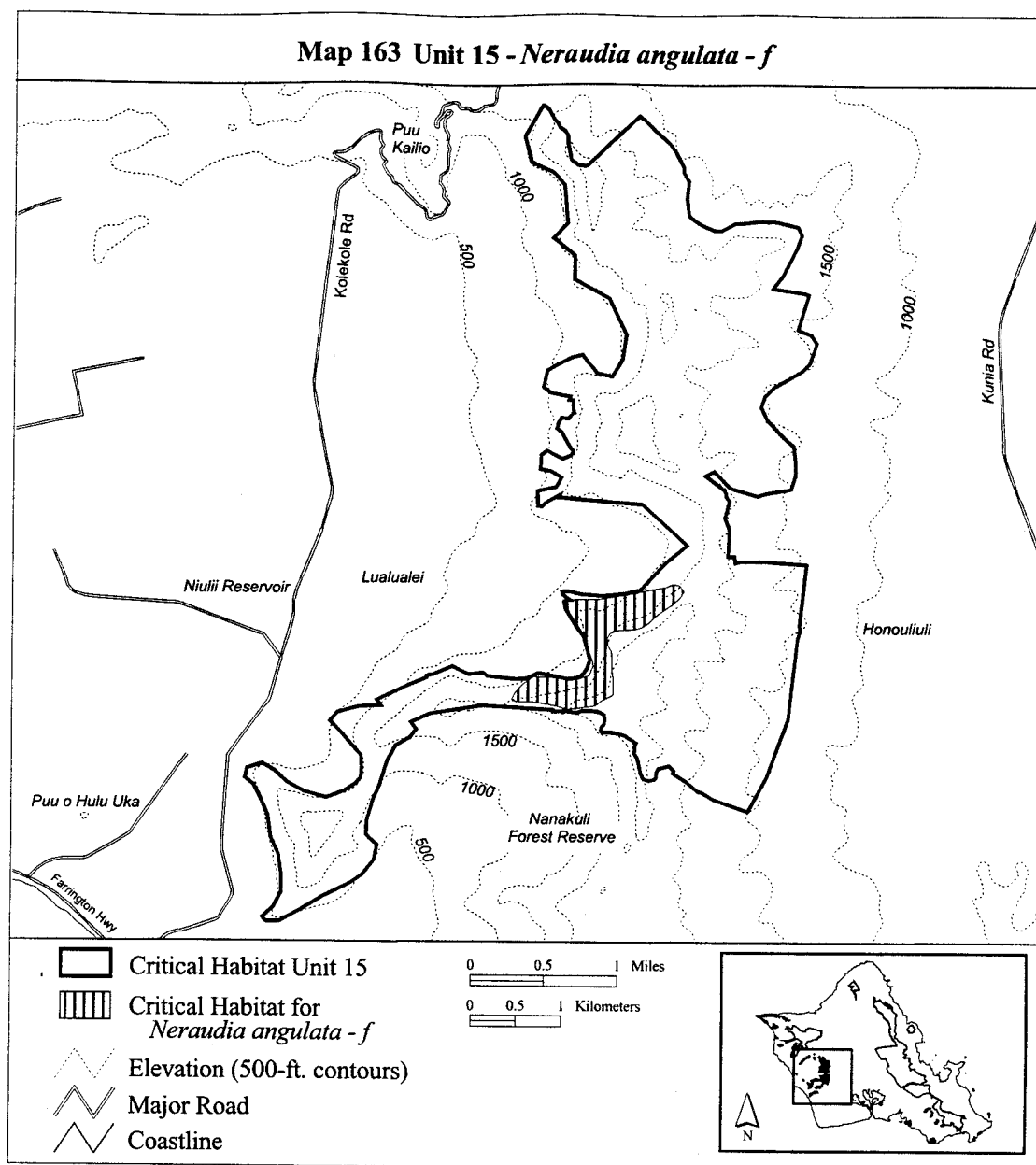
(163) Oahu 15—*Neraudia angulata*—f
(84 ha; 207 ac)

(i) Unit consists of the following 50 boundary points: Start at 592634, 2369389; 592987, 2369396; 593220, 2369432; 593560, 2369500; 593732, 2369531; 593797, 2369561; 593873, 2369552; 593922, 2369478; 593886, 2369420; 593784, 2369328; 593631, 2369227; 593530, 2369132; 593471,

2369083; 593389, 2369058; 593232, 2369055; 593180, 2369046; 593110, 2369018; 593079, 2368960; 593085, 2368886; 593125, 2368816; 593131, 2368733; 593134, 2368613; 593149, 2368509; 593149, 2368402; 593149, 2368337; 593021, 2368270; 592956, 2368218; 592763, 2368187; 592646, 2368178; 592515, 2368215; 592355, 2368245; 592303, 2368248; 592263, 2368261; 592082, 2368258; 592039,

2368282; 592073, 2368353; 592146, 2368445; 592266, 2368531; 592530, 2368525; 592751, 2368506; 592886, 2368552; 592926, 2368656; 592919, 2368733; 592883, 2368801; 592849, 2368920; 592830, 2368978; 592784, 2369034; 592723, 2369116; 592625, 2369282; 592603, 2369371; return to starting point.

(ii) **Note:** Map 163 follows:



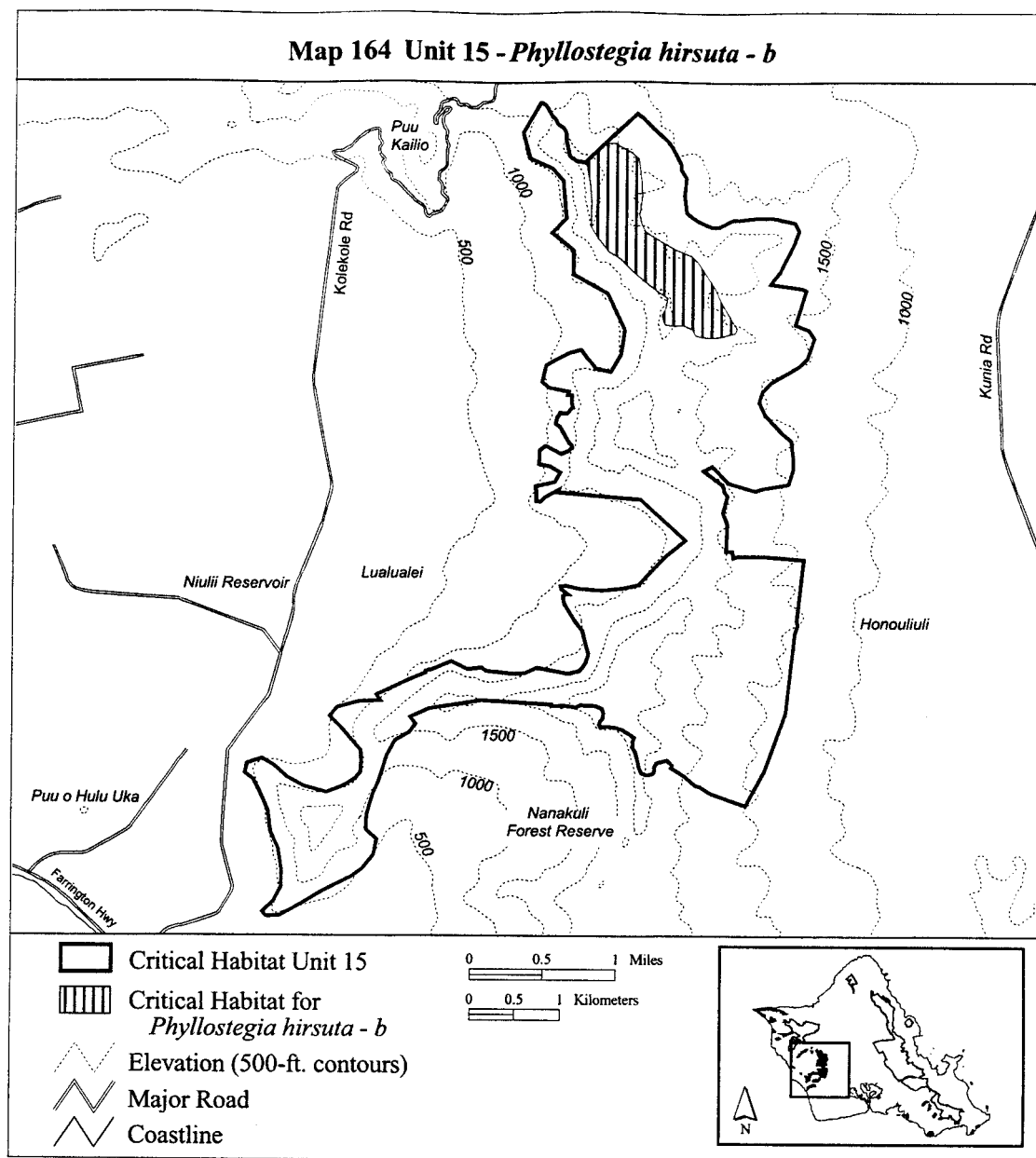
(164) Oahu 15—*Phyllostegia hirsuta*—b
(131 ha; 323 ac)

(i) Unit consists of the following 53 boundary points: Start at 593031, 2374382; 593173, 2374381; 593174, 2374368; 593177, 2374368; 593331, 2374283; 593403, 2374220; 593416, 2374135; 593438, 2373950; 593444, 2373802; 593419, 2373604; 593435, 2373513; 593466, 2373450; 593491,

2373409; 593658, 2373311; 593815, 2373220; 594004, 2373145; 594067, 2373085; 594152, 2372953; 594255, 2372805; 594334, 2372639; 594438, 2372459; 594504, 2372358; 594504, 2372323; 594482, 2372292; 594397, 2372273; 594353, 2372254; 594265, 2372243; 594174, 2372240; 594086, 2372255; 594048, 2372274; 594007, 2372337; 593910, 2372381; 593812, 2372378; 593711, 2372390; 593671,

2372488; 593715, 2372570; 593733, 2372686; 593633, 2372749; 593488, 2372868; 593350, 2372981; 593205, 2373120; 593083, 2373195; 592957, 2373352; 592885, 2373465; 592882, 2373585; 592885, 2373764; 592872, 2373928; 592834, 2374148; 592784, 2374181; 592805, 2374172; 592806, 2374171; 592807, 2374171; 592807, 2374172; return to starting point.

(ii) **Note:** Map 164 follows:



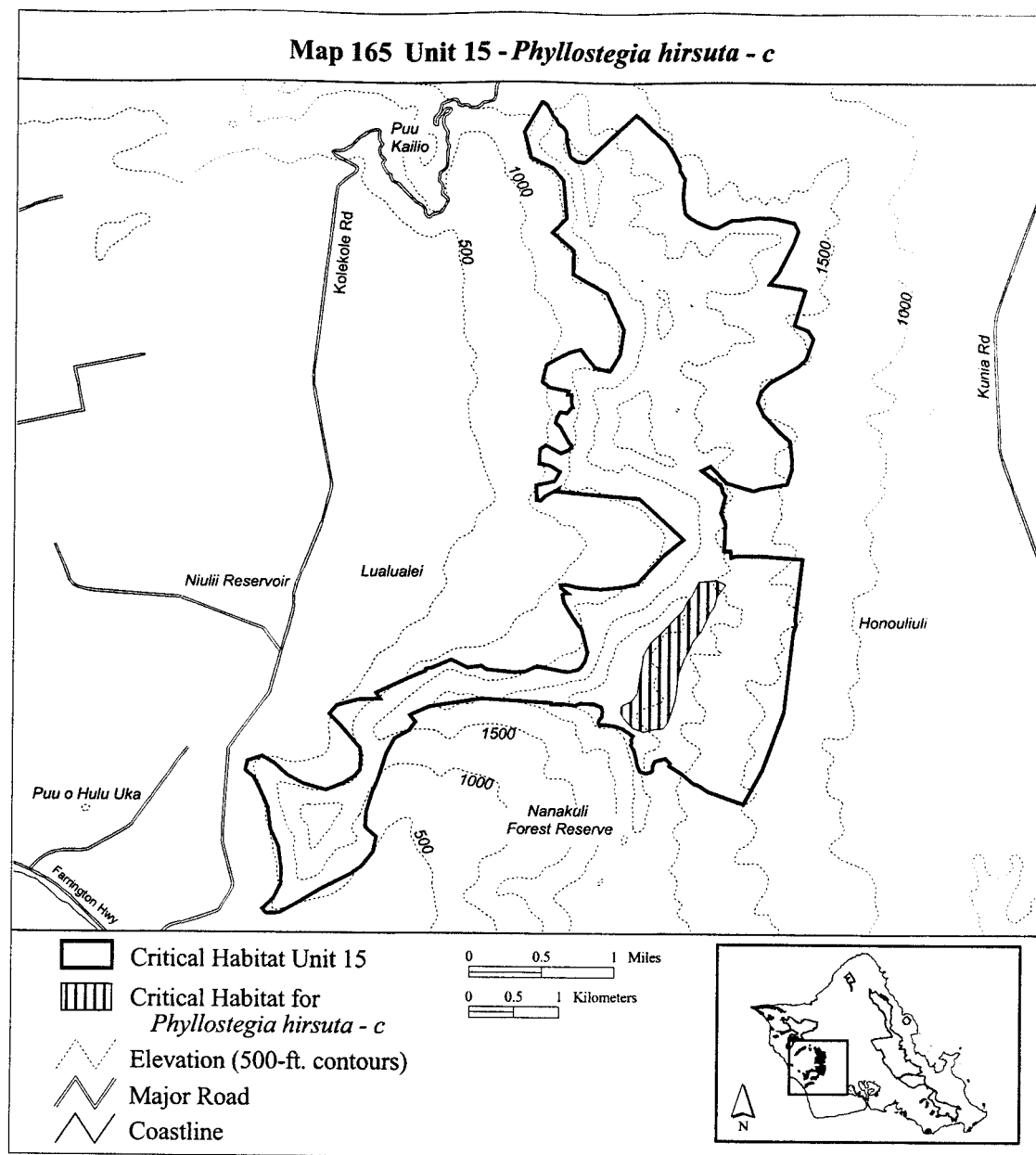
(165) Oahu 15—*Phyllostegia hirsuta*—c
(69 ha; 171 ac)

(i) Unit consists of the following 38 boundary points: Start at 594054, 2369371; 594132, 2369522; 594326, 2369540; 594429, 2369492; 594328, 2369361; 594298, 2369245; 594248, 2369165; 594210, 2369079; 594162,

2368974; 594062, 2368848; 594031, 2368765; 593969, 2368657; 593906, 2368493; 593891, 2368300; 593876, 2368204; 593825, 2368041; 593795, 2367953; 593750, 2367890; 593659, 2367882; 593521, 2367855; 593403, 2367895; 593368, 2367928; 593310, 2367996; 593267, 2368061; 593264, 2368121; 593300, 2368149; 593368,

2368184; 593413, 2368219; 593448, 2368280; 593478, 2368461; 593501, 2368599; 593511, 2368692; 593591, 2368830; 593647, 2368886; 593732, 2368966; 593850, 2369097; 593956, 2369208; 593994, 2369293; return to starting point.

(ii) **Note:** Map 165 follows:



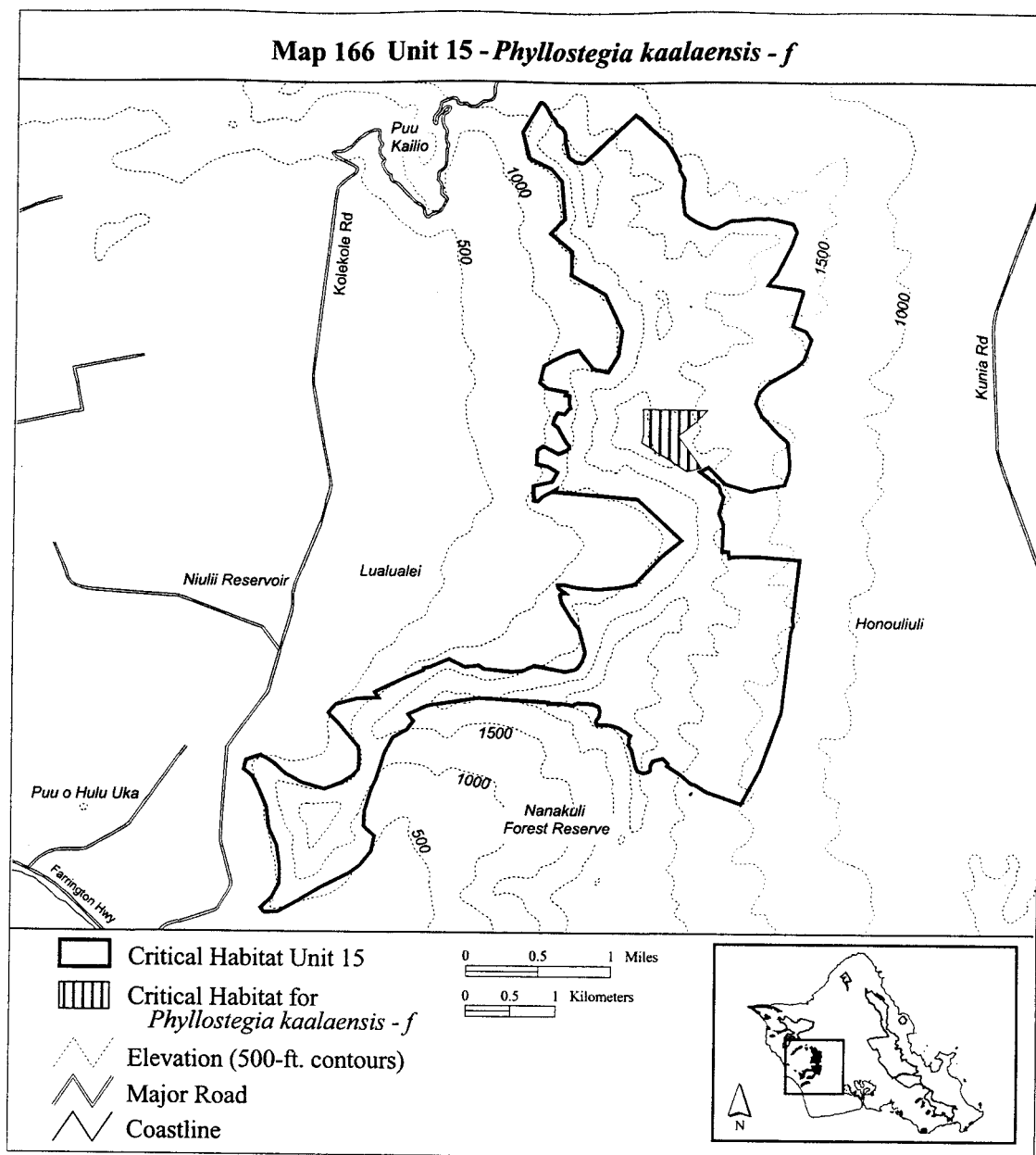
(166) Oahu 15—*Phyllostegia kaalaensis*—f (30 ha; 74 ac)

(i) Unit consists of the following 21 boundary points: Start at 593699, 2370957; 593696, 2370958; 593649,

2370988; 593650, 2370989; 593495, 2371087; 593508, 2371143; 593507, 2371145; 593509, 2371151; 593513, 2371169; 593510, 2371364; 593505, 2371383; 593510, 2371387; 593509, 2371460; 594222, 2371452; 594169,

2371394; 594166, 2371388; 594157, 2371381; 594109, 2371327; 593903, 2371160; 594159, 2370816; 594000, 2370766; return to starting point.

(ii) **Note:** Map 166 follows:



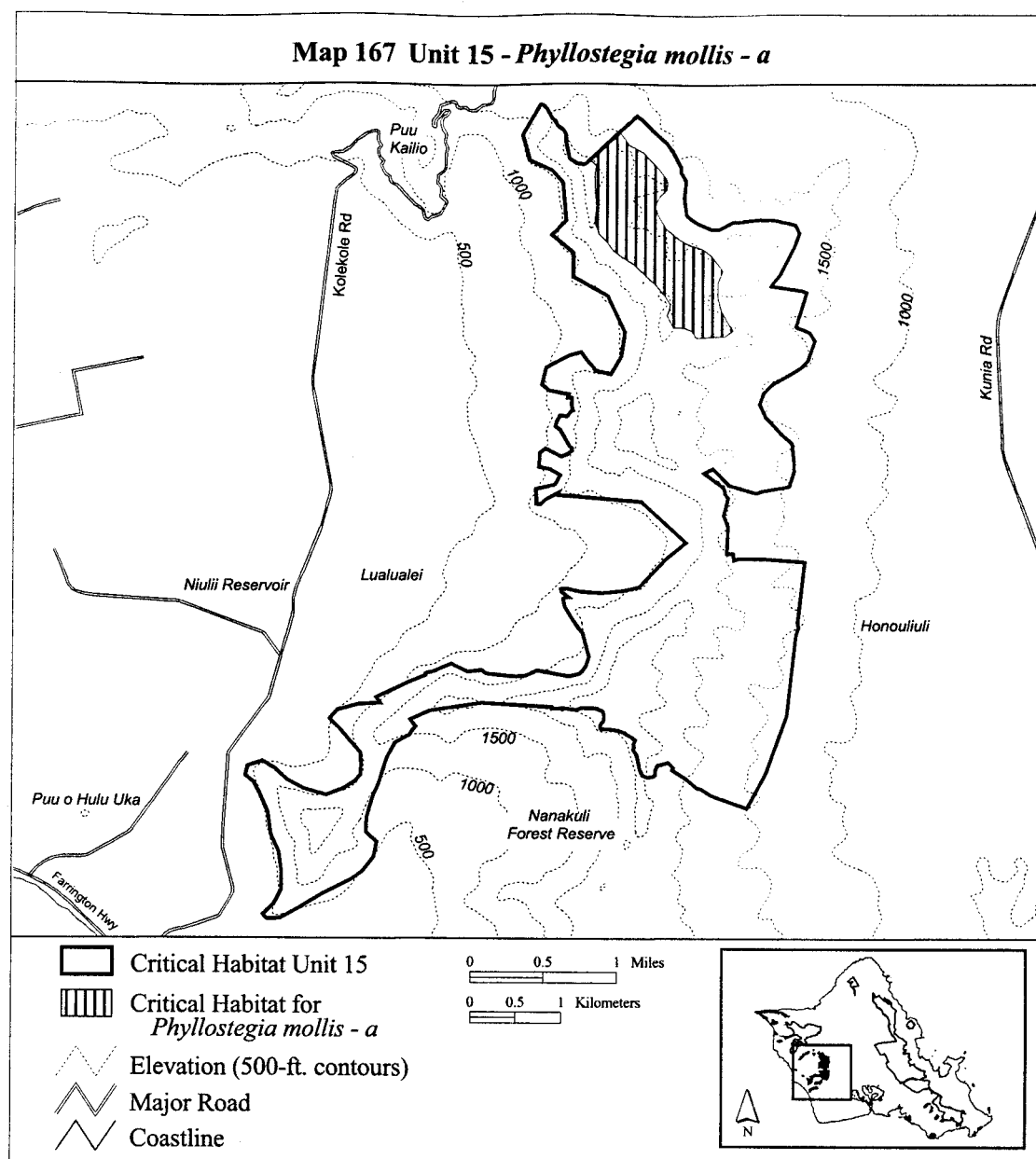
(167) Oahu 15—*Phyllostegia mollis*—a
(152 ha; 376 ac)

(i) Unit consists of the following 56 boundary points: Start at 593194, 2374534; 593221, 2374505; 593297, 2374397; 593462, 2374312; 593547, 2374228; 593615, 2374156; 593711, 2374035; 593727, 2373975; 593719, 2373903; 593655, 2373842; 593603, 2373758; 593587, 2373718; 593615, 2373649; 593643, 2373601; 593711,

2373485; 593772, 2373432; 593872, 2373352; 593972, 2373300; 594125, 2373252; 594210, 2373183; 594290, 2373091; 594342, 2373011; 594286, 2372870; 594286, 2372713; 594322, 2372581; 594410, 2372419; 594459, 2372342; 594362, 2372278; 594262, 2372279; 594069, 2372271; 594045, 2372275; 594025, 2372307; 593997, 2372348; 593952, 2372372; 593896, 2372380; 593800, 2372384; 593772, 2372432; 593727, 2372520; 593755,

2372589; 593763, 2372645; 593703, 2372733; 593603, 2372858; 593514, 2372938; 593446, 2373007; 593354, 2373087; 593225, 2373167; 593125, 2373240; 593048, 2373340; 592976, 2373412; 592928, 2373529; 592928, 2373593; 592944, 2373714; 592928, 2373862; 592920, 2374063; 592936, 2374168; 592871, 2374232; return to starting point.

(ii) **Note:** Map 167 follows:



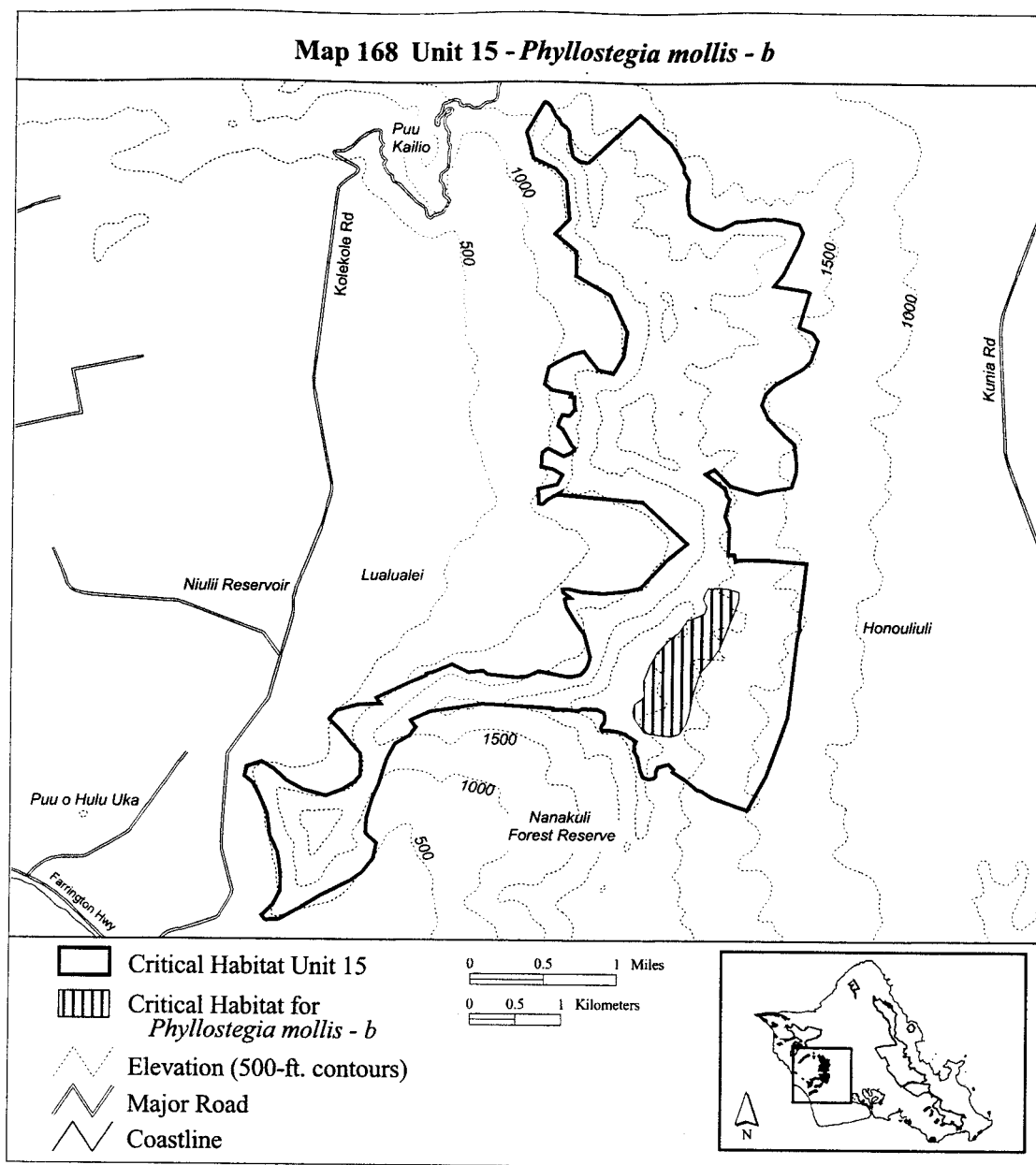
(168) Oahu 15—*Phyllostegia mollis*—b
(85 ha; 210 ac)

(i) Unit consists of the following 42 boundary points: Start at 594134, 2369384; 594148, 2369422; 594165, 2369458; 594187, 2369496; 594246, 2369500; 594313, 2369503; 594422, 2369489; 594528, 2369461; 594528, 2369419; 594524, 2369345; 594482,

2369250; 594415, 2369071; 594366, 2368940; 594320, 2368831; 594229, 2368701; 594127, 2368592; 594084, 2368497; 594035, 2368328; 593993, 2368127; 593958, 2367997; 593887, 2367899; 593799, 2367867; 593662, 2367881; 593497, 2367913; 593440, 2367972; 593381, 2368067; 593370, 2368141; 593388, 2368215; 593458,

2368265; 593497, 2368303; 593483, 2368472; 593511, 2368550; 593553, 2368638; 593623, 2368771; 593701, 2368863; 593789, 2368947; 593870, 2369000; 593916, 2369071; 593965, 2369144; 594053, 2369176; 594148, 2369218; 594172, 2369292; return to starting point.

(ii) **Note:** Map 168 follows:



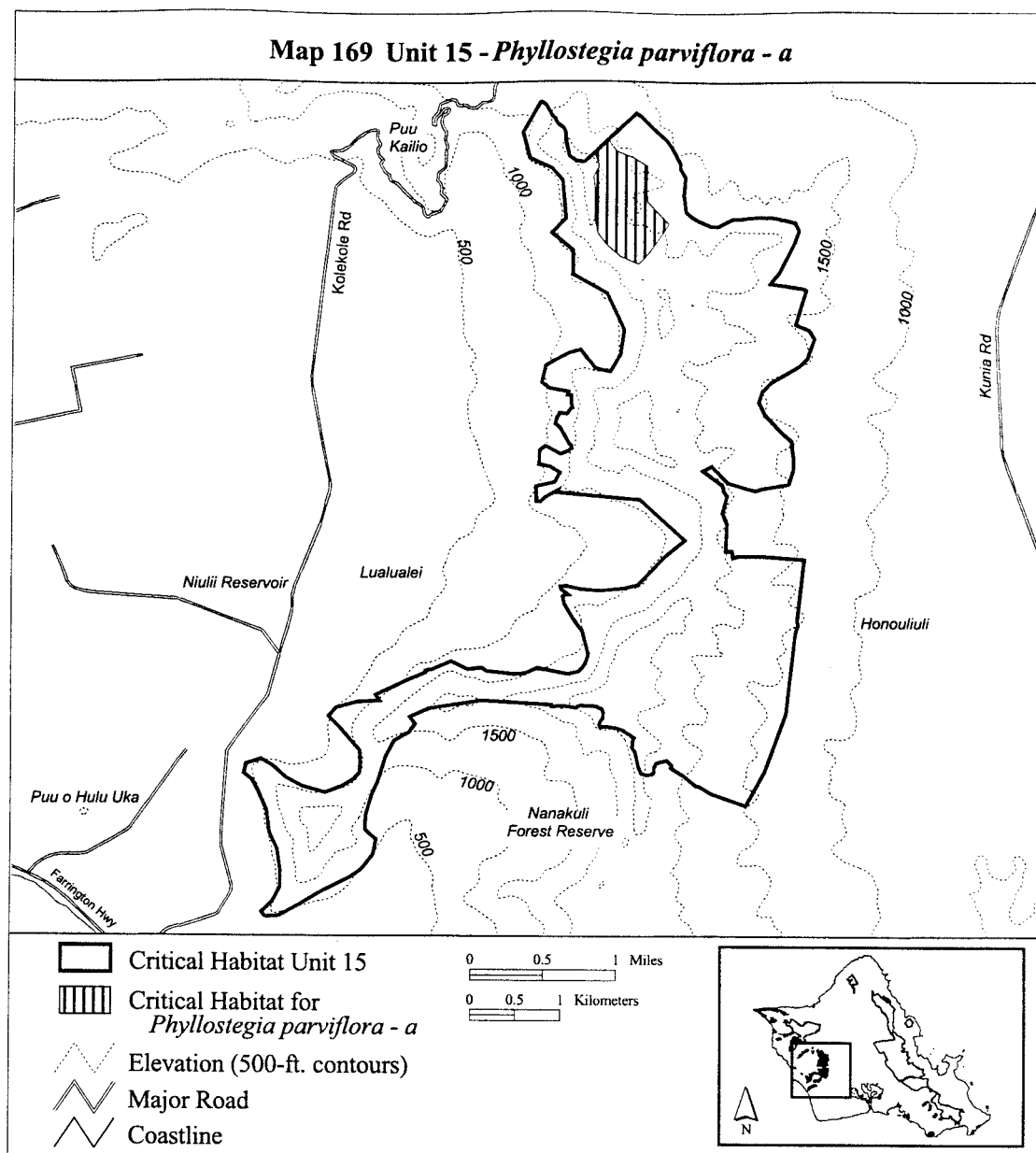
(169) Oahu 15—*Phyllostegia parviflora*—a (70 ha; 173 ac)

(i) Unit consists of the following 24 boundary points: Start at 593084, 2374431; 593099, 2374381; 593167, 2374293; 593344, 2374229; 593504,

2374137; 593508, 2374017; 593500, 2373876; 593512, 2373740; 593600, 2373640; 593752, 2373496; 593652, 2373340; 593564, 2373216; 593480, 2373112; 593420, 2373056; 593224, 2373140; 593067, 2373268; 592963,

2373400; 592927, 2373556; 592927, 2373744; 592927, 2373880; 592919, 2374013; 592971, 2374133; 592931, 2374261; 592909, 2374268; return to starting point.

(ii) **Note:** Map 169 follows:



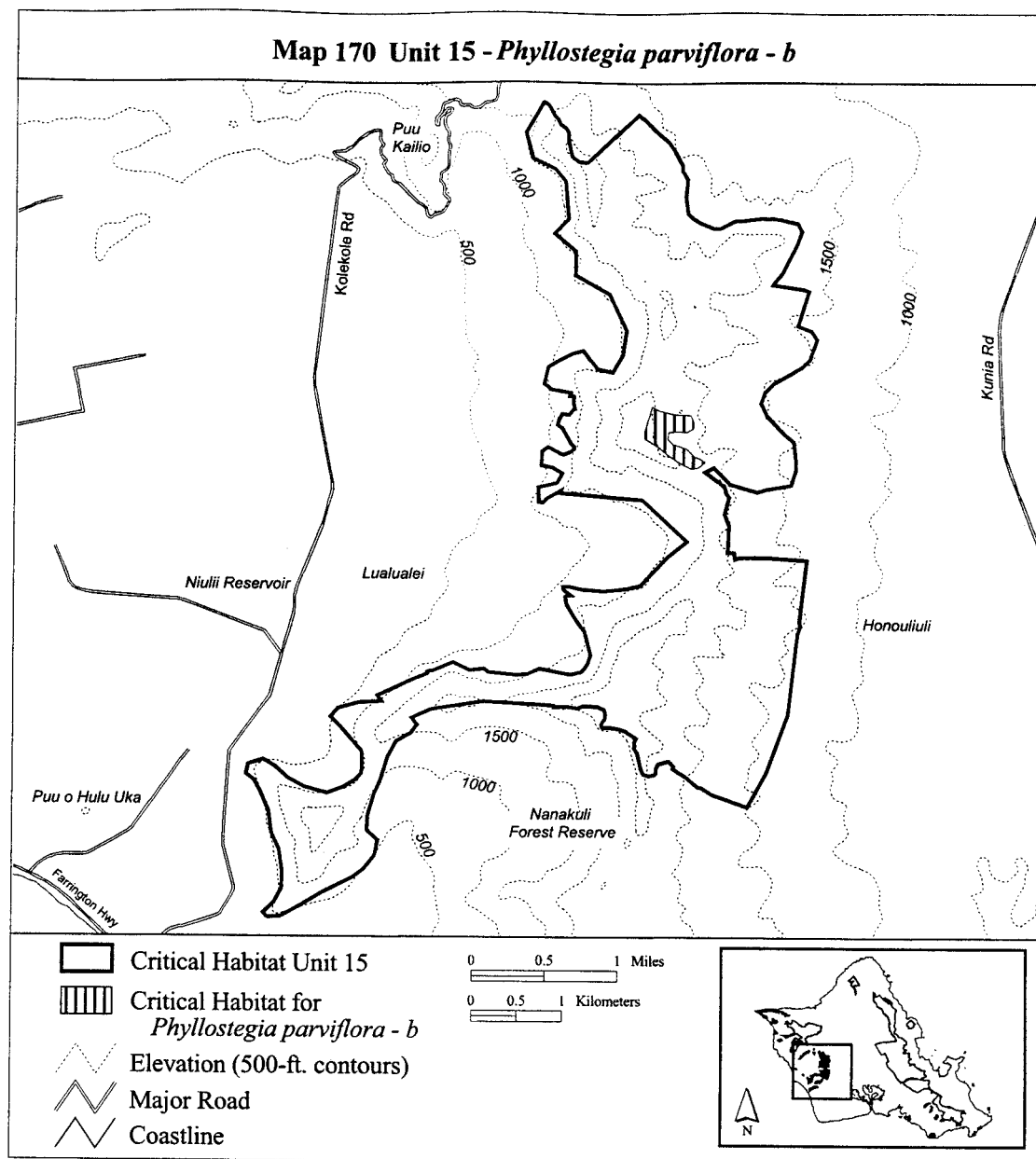
(170) Oahu 15—*Phyllostegia parviflora*—b (21 ha; 51 ac)

(i) Unit consists of the following 23 boundary points: Start at 593556, 2371486; 593640, 2371442; 593808,

2371405; 593984, 2371397; 594016, 2371325; 594016, 2371253; 593948, 2371209; 593860, 2371213; 593740, 2371209; 593728, 2371133; 593792, 2371077; 593944, 2371021; 594032, 2370932; 594092, 2370916; 594148,

2370880; 594124, 2370856; 594072, 2370820; 594000, 2370800; 593880, 2370856; 593740, 2370944; 593628, 2371041; 593472, 2371137; 593476, 2371209; return to starting point.

(ii) **Note:** Map 170 follows:



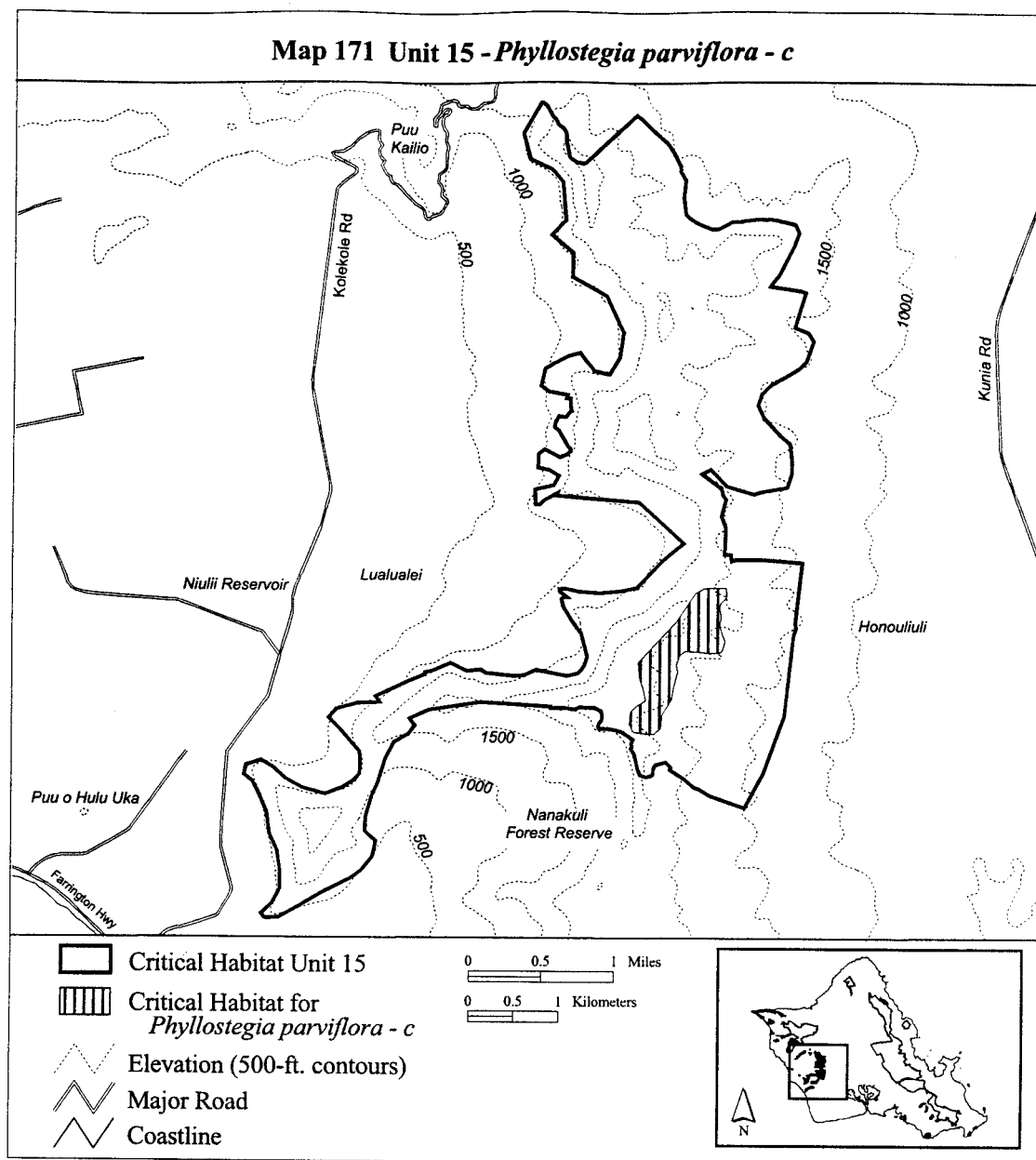
(171) Oahu 15—*Phyllostegia parviflora*—c (69 ha; 171 ac)

(i) Unit consists of the following 38 boundary points: Start at 594092, 2369443; 594192, 2369491; 594309, 2369499; 594421, 2369495; 594433, 2369443; 594429, 2369383; 594365, 2369319; 594357, 2369251; 594369,

2369199; 594369, 2369151; 594349, 2369087; 594377, 2369007; 594393, 2368946; 594413, 2368898; 594381, 2368790; 594349, 2368774; 594241, 2368770; 594108, 2368786; 593976, 2368790; 593912, 2368742; 593884, 2368642; 593892, 2368558; 593848, 2368394; 593824, 2368242; 593752, 2368138; 593720, 2368078; 593712,

2367937; 593640, 2367869; 593540, 2367869; 593408, 2367893; 593360, 2367981; 593376, 2368114; 593448, 2368182; 593540, 2368242; 593512, 2368370; 593472, 2368482; 593456, 2368662; 593880, 2369123; return to starting point.

(ii) **Note:** Map 171 follows:



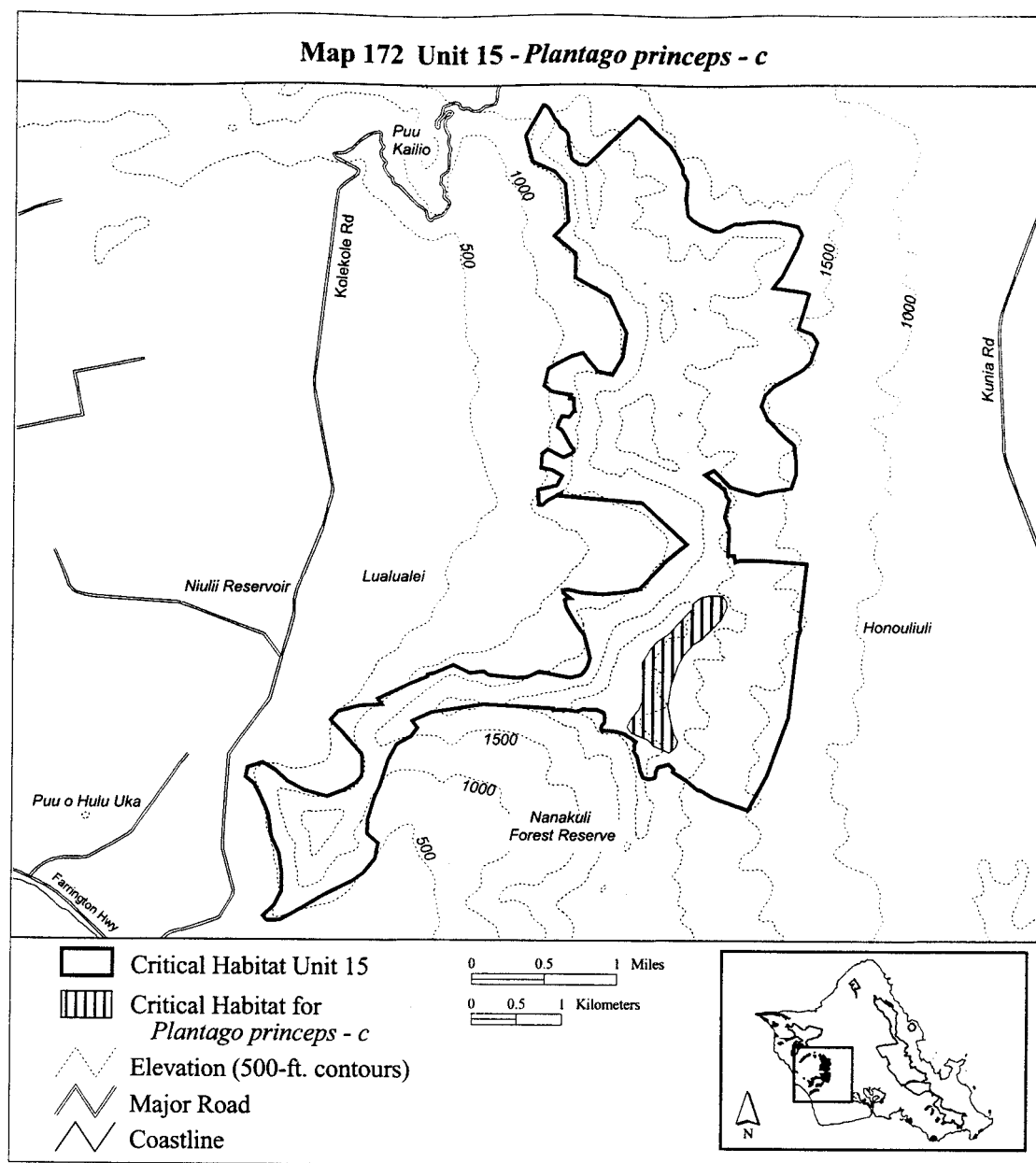
(172) Oahu 15—*Plantago princeps*—c
(63 ha; 157 ac)

(i) Unit consists of the following 38 boundary points: Start at 594016, 2369273; 594037, 2369341; 594118, 2369400; 594198, 2369424; 594279, 2369424; 594344, 2369421; 594387, 2369363; 594393, 2369291; 594341,

2369162; 594232, 2369044; 594118, 2368933; 594025, 2368883; 593929, 2368763; 593861, 2368648; 593784, 2368419; 593756, 2368200; 593784, 2368036; 593818, 2367912; 593867, 2367816; 593846, 2367745; 593775, 2367689; 593682, 2367723; 593598, 2367764; 593543, 2367829; 593431, 2367872; 593354, 2367906; 593308,

2367968; 593351, 2368057; 593434, 2368166; 593478, 2368262; 593478, 2368364; 593475, 2368583; 593471, 2368673; 593533, 2368775; 593567, 2368828; 593642, 2368914; 593759, 2368995; 593858, 2369106; return to starting point.

(ii) **Note:** Map 172 follows:



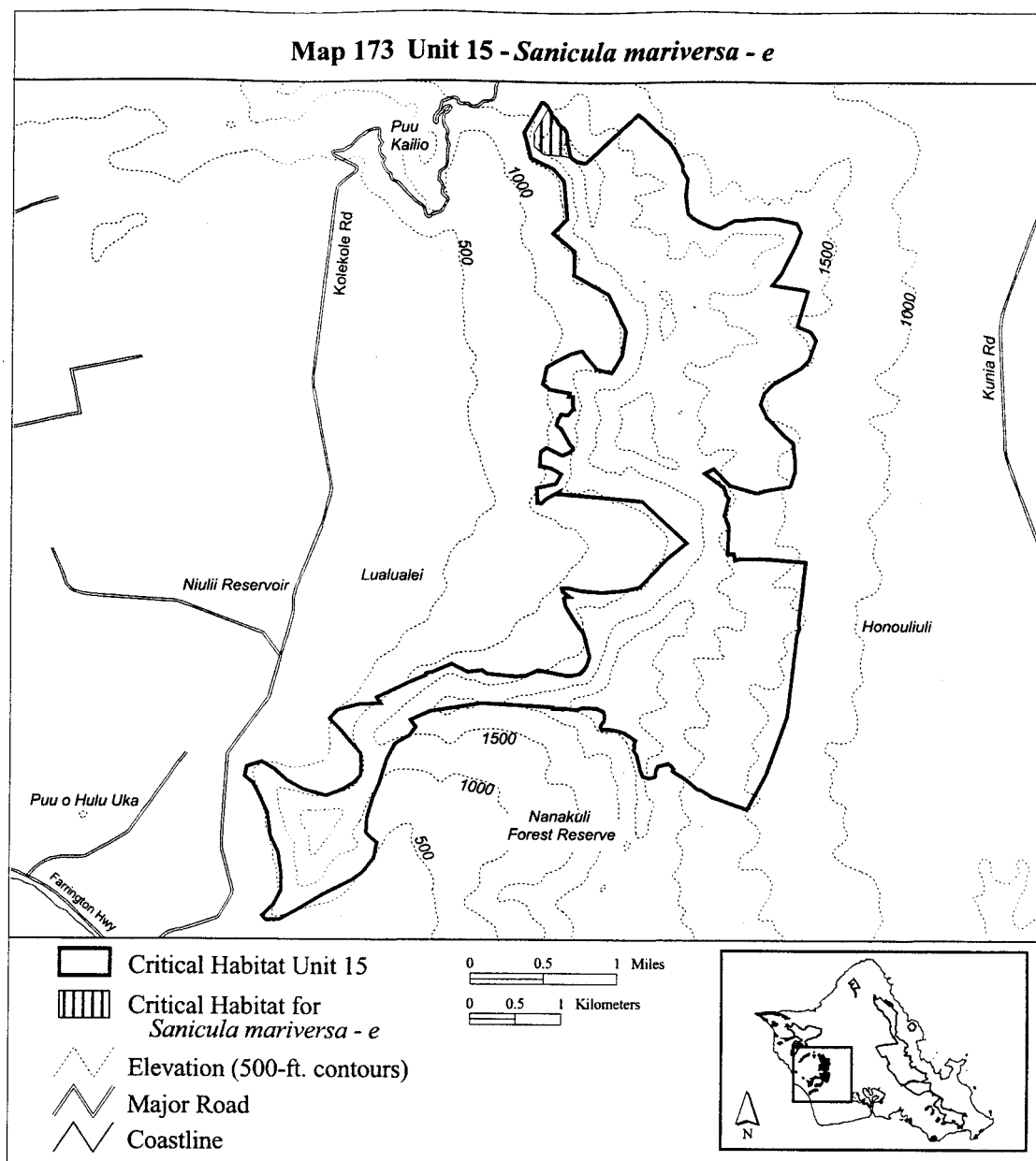
(173) Oahu 15—*Sanicula mariversa*—e
(14 ha; 34 ac)

(i) Unit consists of the following 20
boundary points: Start at 592695,
2374210; 592604, 2374252; 592349,

2374270; 592240, 2374361; 592240,
2374507; 592403, 2374783; 592404,
2374781; 592454, 2374691; 592484,
2374661; 592514, 2374601; 592514,
2374600; 592574, 2374561; 592594,
2374531; 592604, 2374492; 592604,

2374422; 592634, 2374282; 592634,
2374281; 592644, 2374251; 592664,
2374231; 592664, 2374230; return to
starting point.

(ii) **Note:** Map 173 follows:



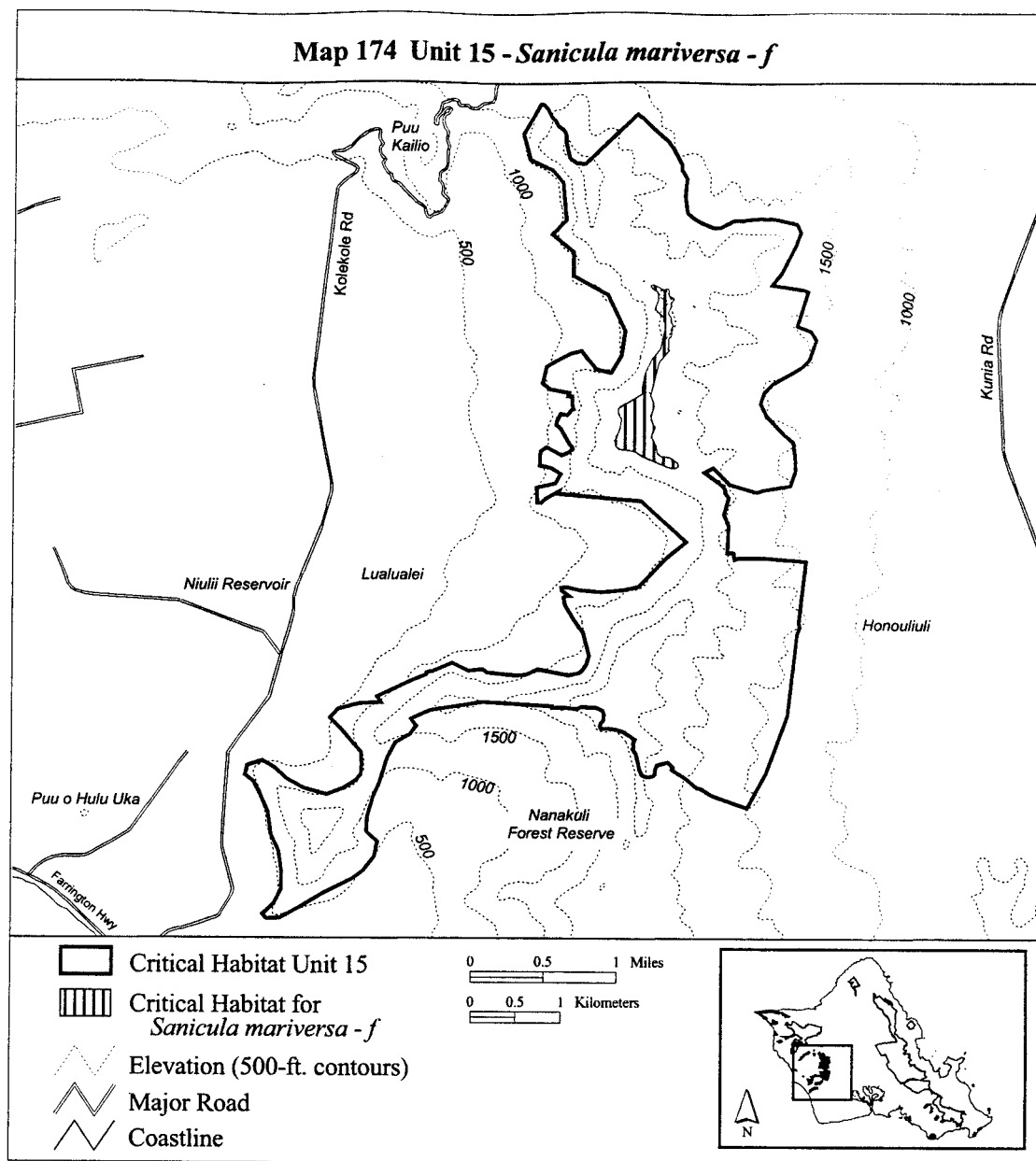
(174) Oahu 15—*Sanicula mariversa*—f
(39 ha; 95 ac)

(i) Unit consists of the following 88 boundary points: Start at 593546, 2372831; 593574, 2372838; 593601, 2372826; 593637, 2372808; 593661, 2372788; 593706, 2372786; 593716, 2372799; 593736, 2372799; 593741, 2372781; 593743, 2372754; 593736, 2372736; 593745, 2372714; 593797, 2372686; 593797, 2372677; 593788, 2372657; 593770, 2372624; 593765, 2372606; 593754, 2372567; 593738, 2372527; 593752, 2372490; 593770, 2372472; 593770, 2372448; 593765, 2372430; 593788, 2372409; 593788,

2372385; 593779, 2372367; 593768, 2372346; 593774, 2372305; 593770, 2372269; 593741, 2372252; 593743, 2372202; 593743, 2372145; 593736, 2372130; 593757, 2372124; 593637, 2371983; 593551, 2371623; 593569, 2371575; 593587, 2371509; 593557, 2371388; 593569, 2371329; 593599, 2371272; 593563, 2371168; 593575, 2371141; 593608, 2371065; 593626, 2370993; 593664, 2370949; 593753, 2370940; 593818, 2370905; 593848, 2370875; 593859, 2370834; 593845, 2370819; 593771, 2370819; 593658, 2370866; 593478, 2370940; 593392, 2370996; 593297, 2371014; 593214, 2371020; 593179, 2371056; 593161,

2371121; 593188, 2371186; 593217, 2371260; 593235, 2371363; 593196, 2371426; 593193, 2371473; 593253, 2371515; 593380, 2371589; 593462, 2371639; 593465, 2371731; 593487, 2371858; 593561, 2372024; 593659, 2372143; 593661, 2372157; 593680, 2372252; 593706, 2372360; 593697, 2372385; 593697, 2372411; 593695, 2372429; 593686, 2372439; 593686, 2372477; 593655, 2372508; 593600, 2372556; 593587, 2372565; 593601, 2372610; 593628, 2372677; 593628, 2372702; 593616, 2372761; 593556, 2372804; 593546, 2372820; return to starting point.

(ii) **Note:** Map 174 follows:



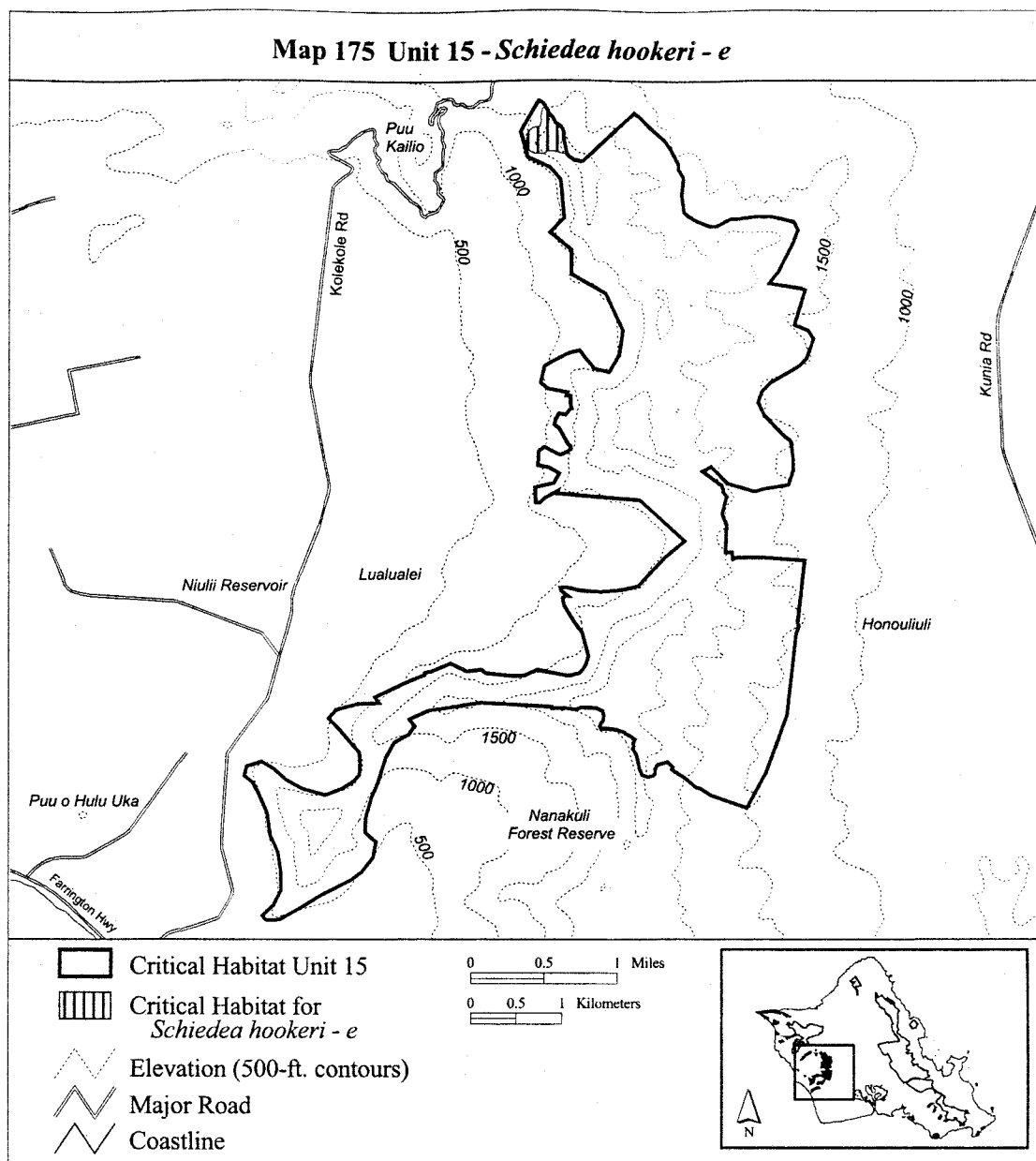
(175) Oahu 15—*Schiedea hookeri*—e (14 ha; 34 ac)

(i) Unit consists of the following 29 boundary points: Start at 592636, 2374256; 592600, 2374263; 592497, 2374291; 592427, 2374291; 592390,

2374263; 592295, 2374263; 592237, 2374288; 592207, 2374313; 592190, 2374366; 592195, 2374413; 592217, 2374505; 592265, 2374548; 592347, 2374563; 592357, 2374613; 592360, 2374690; 592367, 2374755; 592401, 2374785; 592404, 2374781; 592454,

2374691; 592484, 2374661; 592514, 2374601; 592514, 2374600; 592574, 2374561; 592594, 2374531; 592604, 2374492; 592604, 2374422; 592634, 2374282; 592634, 2374281; 592641, 2374259; return to starting point.

(ii) **Note:** Map 175 follows:



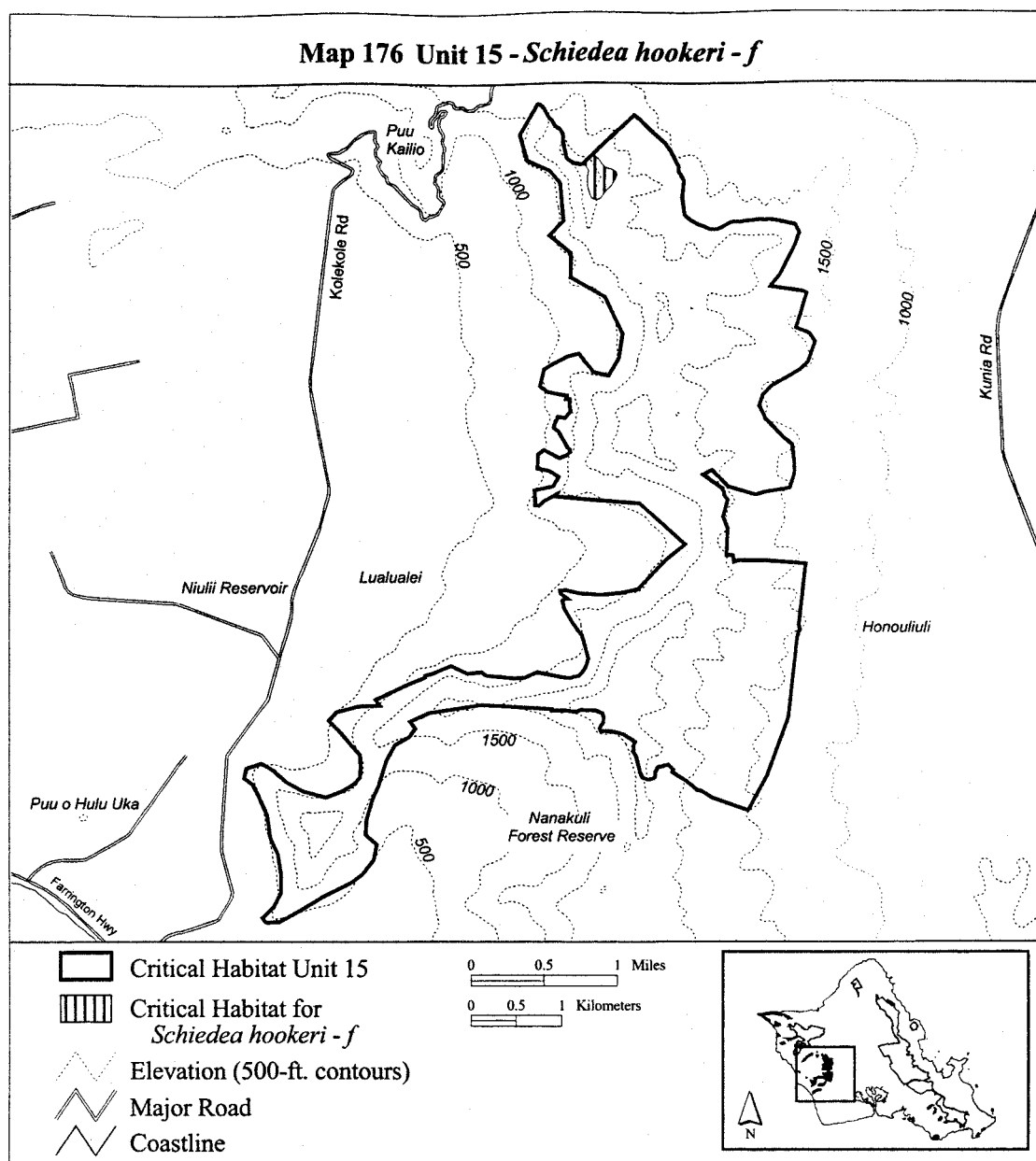
(176) Oahu 15—*Schiedea hookeri*—f (10 ha; 25 ac)

(i) Unit consists of the following 21 boundary points: Start at 592828, 2374186; 592930, 2374282; 592941,

2374283; 592999, 2374237; 593025, 2374195; 593073, 2374142; 593143, 2374125; 593188, 2374093; 593193, 2374058; 593169, 2373997; 593144, 2373950; 593081, 2373888; 593023, 2373812; 592974, 2373787; 592923,

2373813; 592896, 2373863; 592877, 2373923; 592870, 2374005; 592876, 2374066; 592887, 2374114; 592868, 2374150; return to starting point.

(ii) **Note:** Map 176 follows:



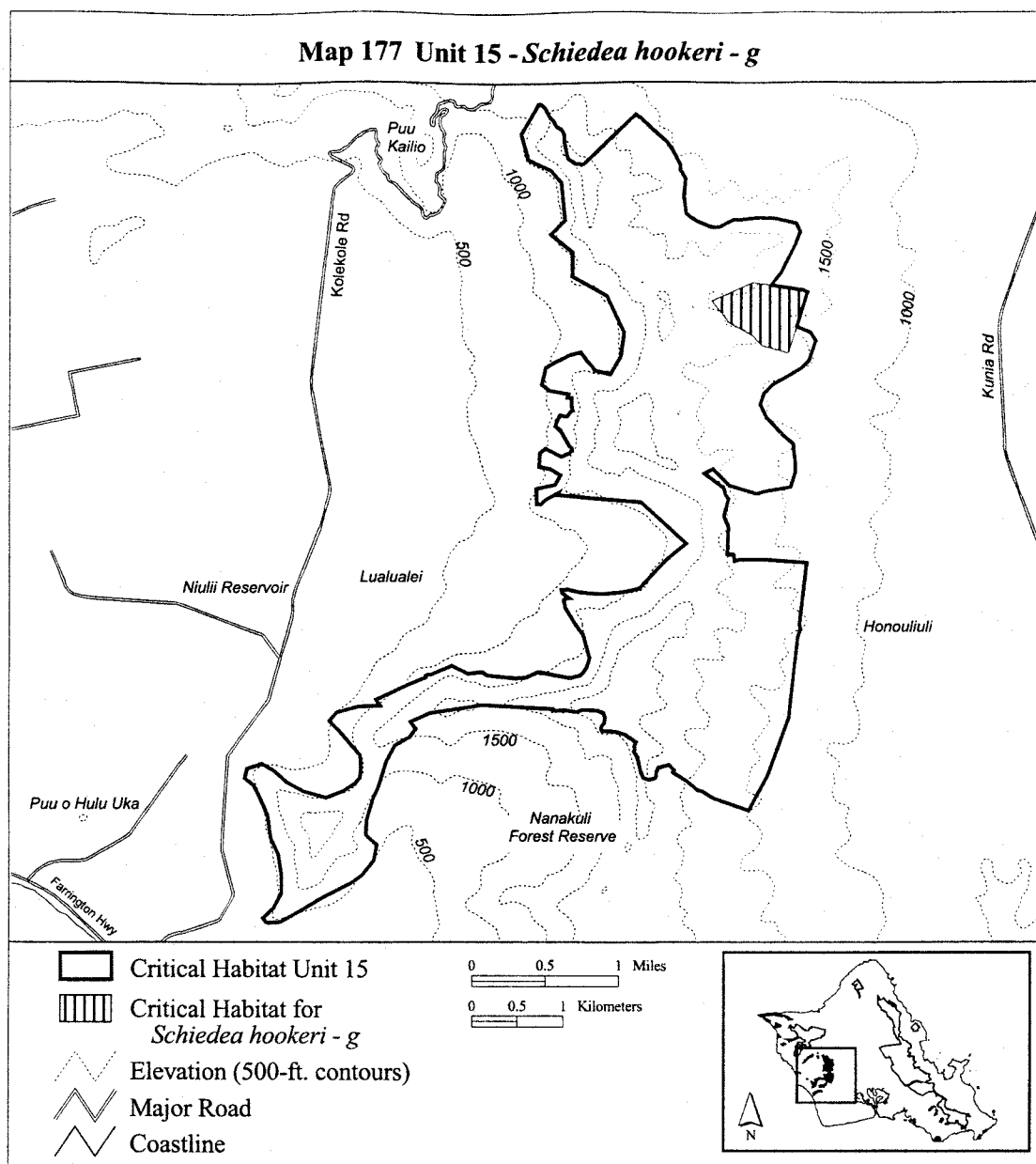
(177) Oahu 15—*Schiedea hookeri*—g (83 ha; 204 ac)

(i) Unit consists of the following 50 boundary points: Start at 593392, 2372040; 593458, 2372066; 593544, 2372037; 593584, 2372015; 593538, 2371923; 593524, 2371826; 593515, 2371729; 593510, 2371589; 593492, 2371512; 593430, 2371452; 593375, 2371426; 593367, 2371340; 593338,

2371257; 593295, 2371143; 593255, 2371034; 593161, 2370968; 593035, 2370917; 592927, 2370846; 592876, 2370774; 592830, 2370717; 592747, 2370663; 592721, 2370689; 592684, 2370757; 592607, 2370806; 592527, 2370848; 592530, 2370888; 592584, 2370934; 592661, 2370988; 592707, 2371048; 592681, 2371117; 592616, 2371214; 592573, 2371308; 592656, 2371348; 592687, 2371391; 592713,

2371460; 592764, 2371511; 592793, 2371560; 592756, 2371608; 592627, 2371654; 592570, 2371725; 592453, 2371805; 592530, 2371908; 592607, 2371959; 592684, 2371994; 592770, 2371939; 592910, 2371815; 593064, 2371778; 593121, 2371798; 593224, 2371883; 593287, 2371980; return to starting point.

(ii) **Note:** Map 177 follows:



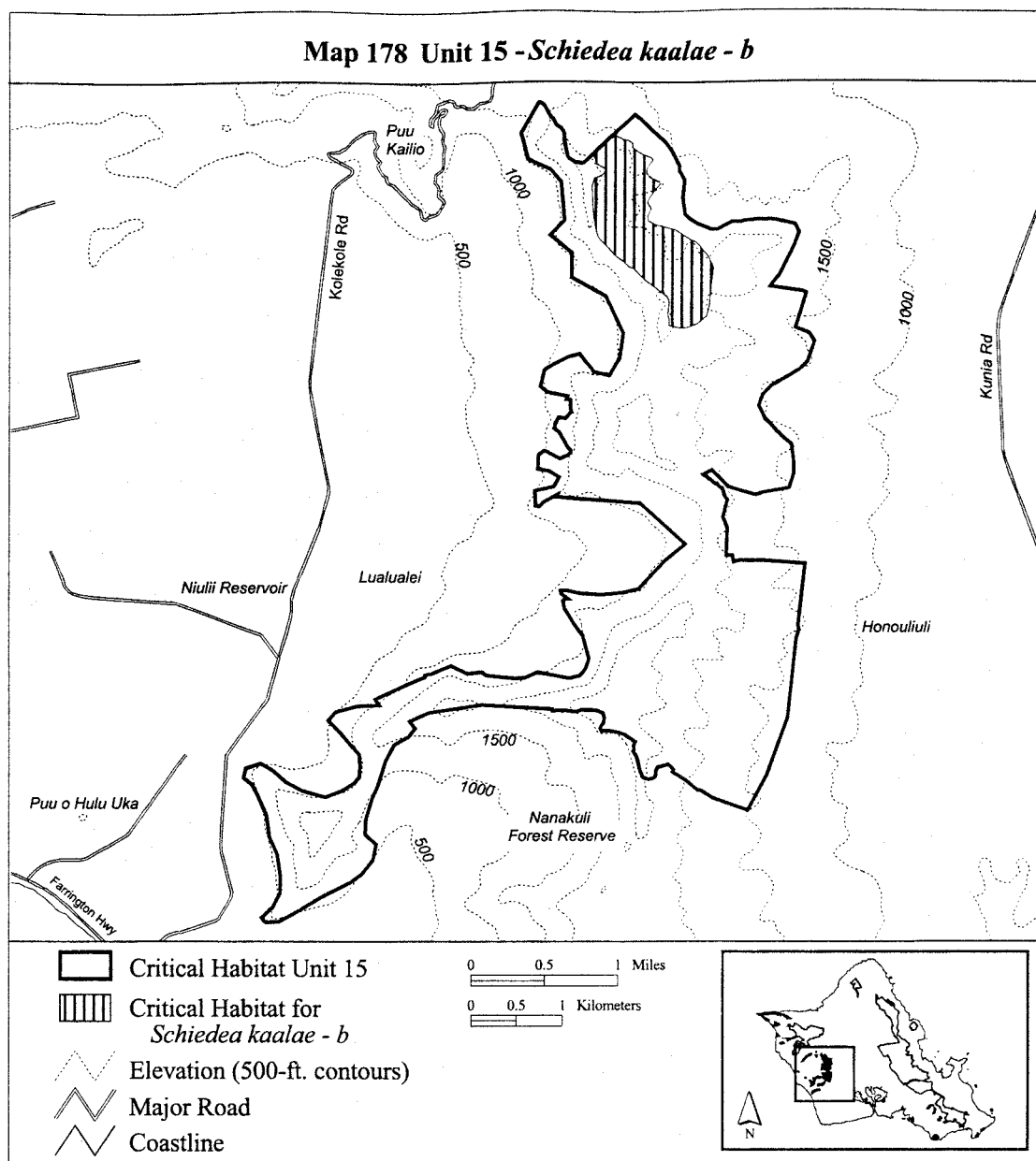
(178) Oahu 15—*Schiedea kaalae*—b
(134 ha; 331 ac)

(i) Unit consists of the following 92 boundary points: Start at 593155, 2374498; 593197, 2374469; 593237, 2374448; 593260, 2374433; 593298, 2374434; 593349, 2374409; 593359, 2374380; 593356, 2374354; 593410, 2374316; 593474, 2374276; 593566, 2374246; 593587, 2374226; 593564, 2374188; 593532, 2374147; 593515, 2374109; 593514, 2374080; 593538, 2374043; 593550, 2374022; 593552, 2374019; 593553, 2374019; 593558, 2374019; 593580, 2374010; 593631, 2373992; 593621, 2373992; 593651, 2373980; 593667, 2373955; 593643,

2373929; 593588, 2373864; 593537, 2373789; 593523, 2373764; 593524, 2373745; 593549, 2373710; 593562, 2373680; 593552, 2373651; 593527, 2373602; 593531, 2373564; 593534, 2373551; 593593, 2373522; 593617, 2373497; 593618, 2373497; 593606, 2373516; 593837, 2373458; 593992, 2373364; 594073, 2373324; 594201, 2373169; 594259, 2373053; 594228, 2372875; 594210, 2372644; 594179, 2372515; 594081, 2372431; 593988, 2372395; 593908, 2372382; 593766, 2372408; 593766, 2372471; 593757, 2372542; 593761, 2372604; 593770, 2372657; 593761, 2372706; 593721, 2372742; 593592, 2372849; 593494, 2372915; 593383, 2373022; 593393,

2373030; 593327, 2373053; 593260, 2373115; 593172, 2373178; 593097, 2373261; 593010, 2373344; 592980, 2373386; 592951, 2373464; 592930, 2373616; 592925, 2373718; 592916, 2373835; 592916, 2373861; 592910, 2373919; 592931, 2373982; 592927, 2373982; 592933, 2374009; 592939, 2374018; 592983, 2374030; 592987, 2374030; 593030, 2374053; 593051, 2374081; 593053, 2374113; 593025, 2374136; 593001, 2374151; 592962, 2374170; 592949, 2374200; 592943, 2374227; 592931, 2374250; 592930, 2374262; 592918, 2374276; return to starting point.

(ii) **Note:** Map 178 follows:



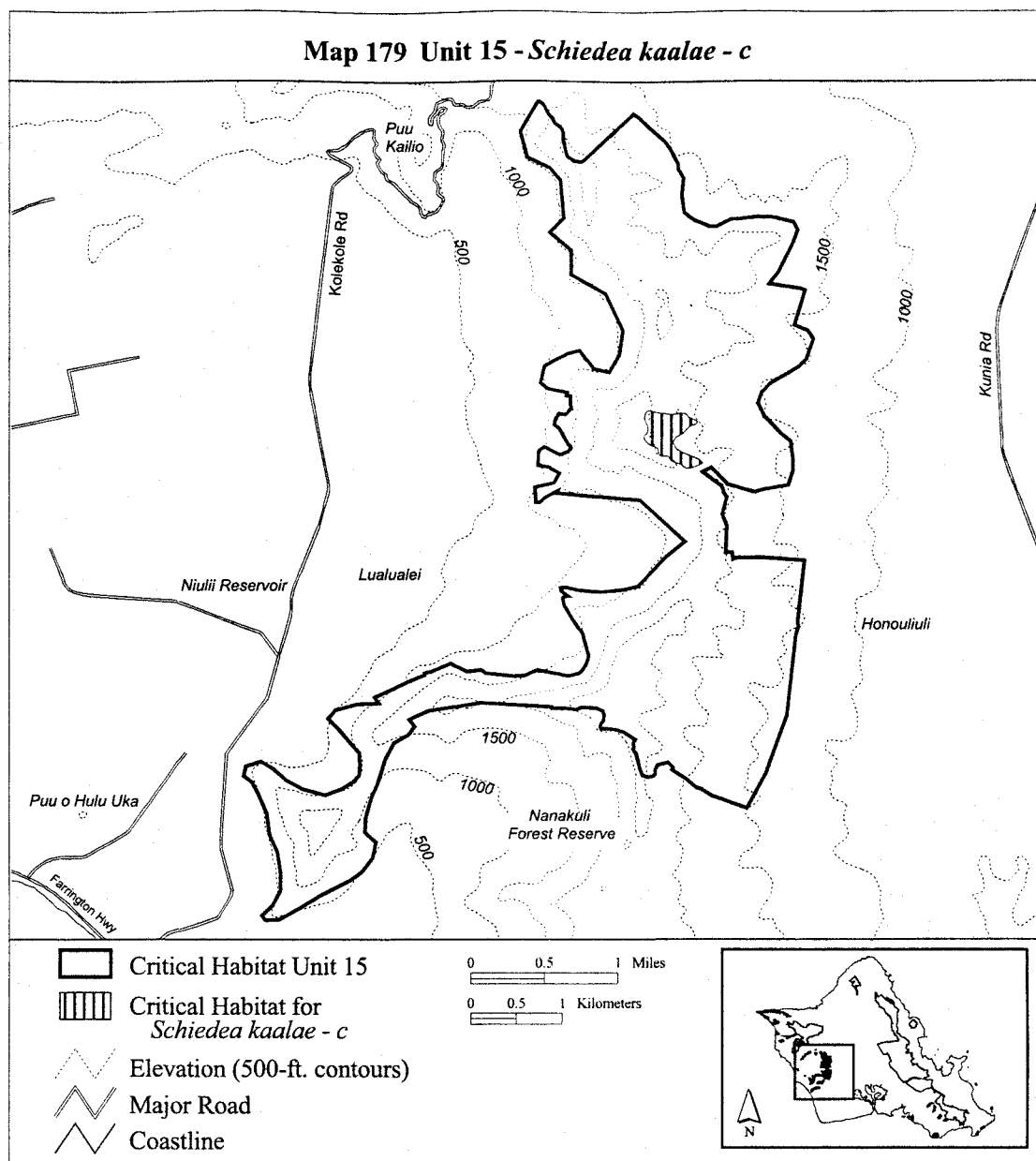
(179) Oahu 15—*Schiedea kaalae*—c (22 ha; 53 ac)

(i) Unit consists of the following 58 boundary points: Start at 594140, 2370857; 594018, 2370809; 593969, 2370810; 593929, 2370835; 593909, 2370861; 593885, 2370861; 593843, 2370873; 593800, 2370893; 593783, 2370921; 593765, 2370938; 593724, 2370940; 593672, 2370956; 593660, 2370978; 593658, 2370997; 593656,

2371025; 593641, 2371037; 593598, 2371051; 593549, 2371080; 593515, 2371111; 593501, 2371135; 593499, 2371158; 593516, 2371180; 593535, 2371190; 593543, 2371242; 593534, 2371288; 593499, 2371363; 593504, 2371360; 593504, 2371387; 593520, 2371421; 593542, 2371444; 593561, 2371442; 593592, 2371435; 593663, 2371418; 593696, 2371415; 593739, 2371413; 593779, 2371407; 593838, 2371407; 593904, 2371415; 593945,

2371417; 593976, 2371396; 593988, 2371370; 594016, 2371357; 594059, 2371348; 594087, 2371331; 594083, 2371312; 594066, 2371294; 594024, 2371277; 593984, 2371251; 593935, 2371193; 593855, 2371158; 593823, 2371100; 593823, 2371087; 593857, 2371024; 593926, 2370988; 593995, 2370954; 594080, 2370919; 594128, 2370899; 594149, 2370867; return to starting point.

(ii) **Note:** Map 179 follows:



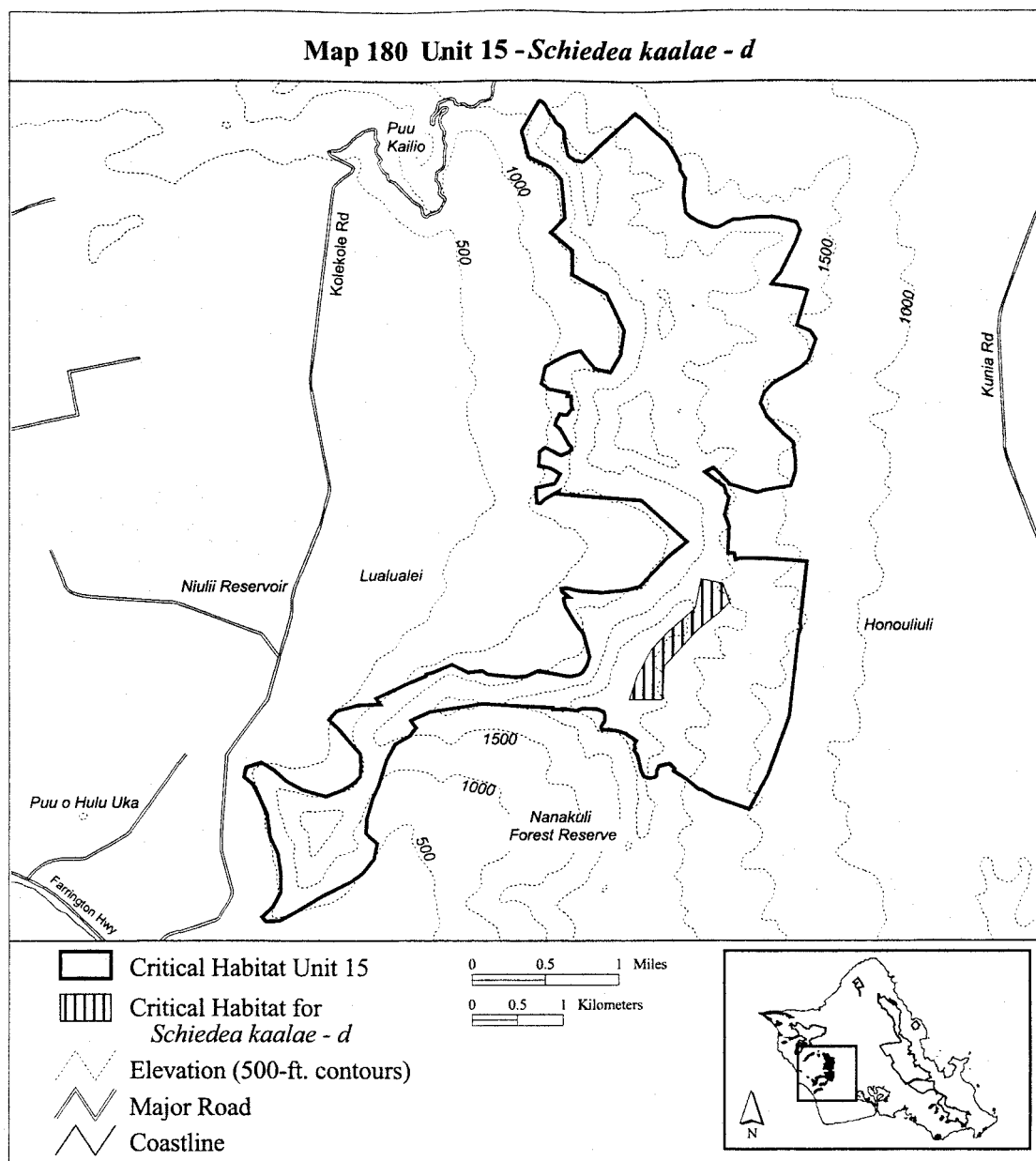
(180) Oahu 15—*Schiedea kaalae*—d (39 ha; 97 ac)

(i) Unit consists of the following 12 boundary points: Start at 594112,

2369585; 594345, 2369544; 594420, 2369336; 594320, 2369227; 594079, 2369036; 593713, 2368628; 593688, 2368262; 593330, 2368262; 593413,

2368512; 593571, 2368811; 593746, 2369003; 594045, 2369261; return to starting point.

(ii) **Note:** Map 180 follows:



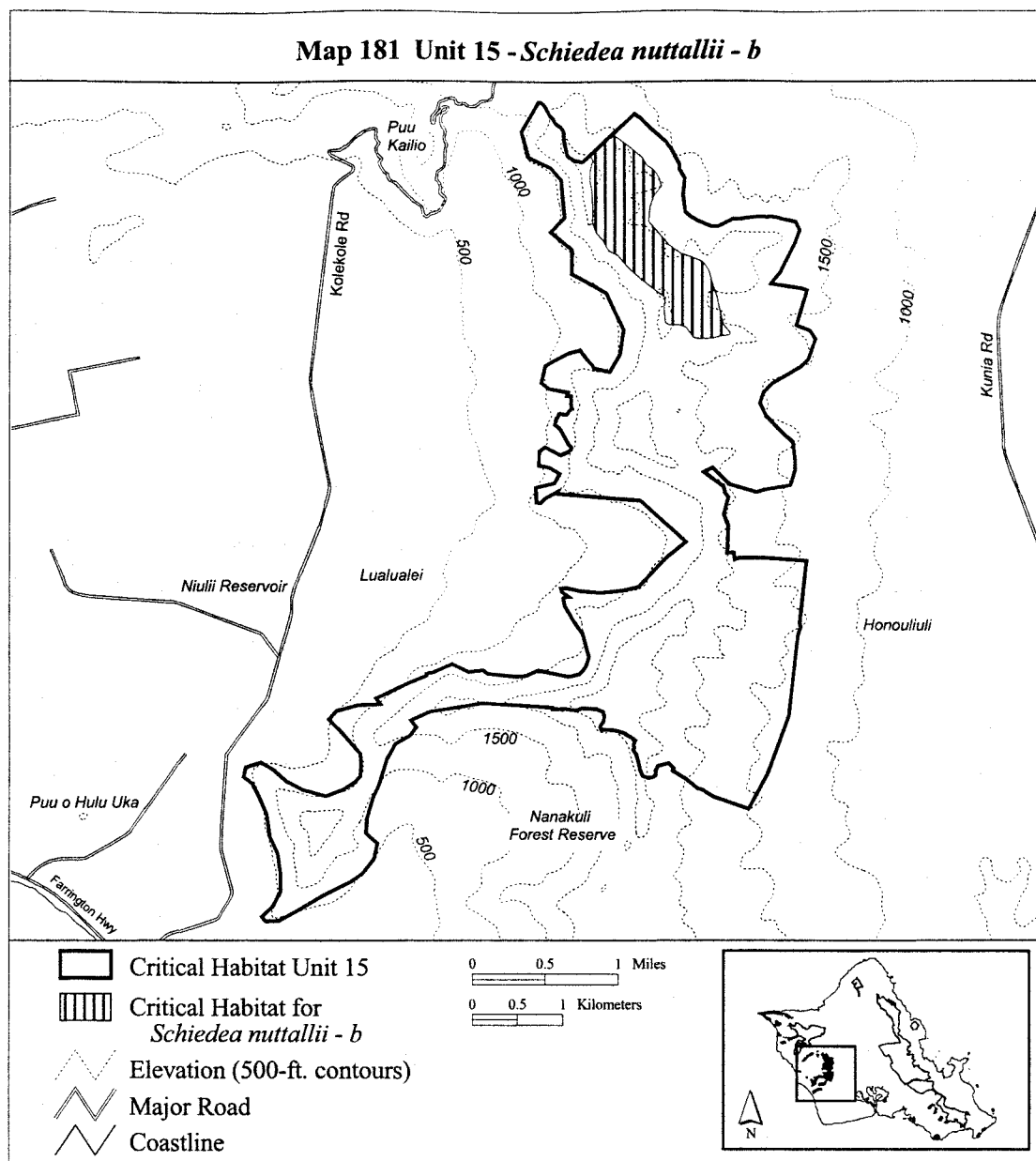
(181) Oahu 15—*Schiedea nuttallii*—b
(141 ha; 347 ac)

(i) Unit consists of the following 53 boundary points: Start at 593145, 2374489; 593357, 2374332; 593477, 2374233; 593520, 2374152; 593601, 2374092; 593648, 2374020; 593678, 2373913; 593588, 2373793; 593554, 2373673; 593537, 2373519; 593610, 2373442; 593763, 2373267; 593896,

2373169; 594003, 2373135; 594131, 2373083; 594191, 2372994; 594229, 2372861; 594285, 2372694; 594306, 2372596; 594353, 2372399; 594392, 2372356; 594435, 2372304; 594422, 2372279; 594345, 2372275; 594242, 2372246; 594088, 2372237; 594037, 2372250; 593981, 2372314; 593947, 2372361; 593883, 2372391; 593763, 2372387; 593725, 2372412; 593716, 2372476; 593712, 2372545; 593708,

2372592; 593721, 2372690; 593639, 2372746; 593468, 2372878; 593336, 2372994; 593268, 2373071; 593199, 2373143; 593101, 2373199; 593028, 2373314; 592960, 2373395; 592921, 2373498; 592921, 2373673; 592917, 2373853; 592900, 2373960; 592900, 2374071; 592908, 2374144; 592926, 2374191; 592904, 2374246; 592904, 2374263; return to starting point.

(ii) \Note: Map 181 follows:



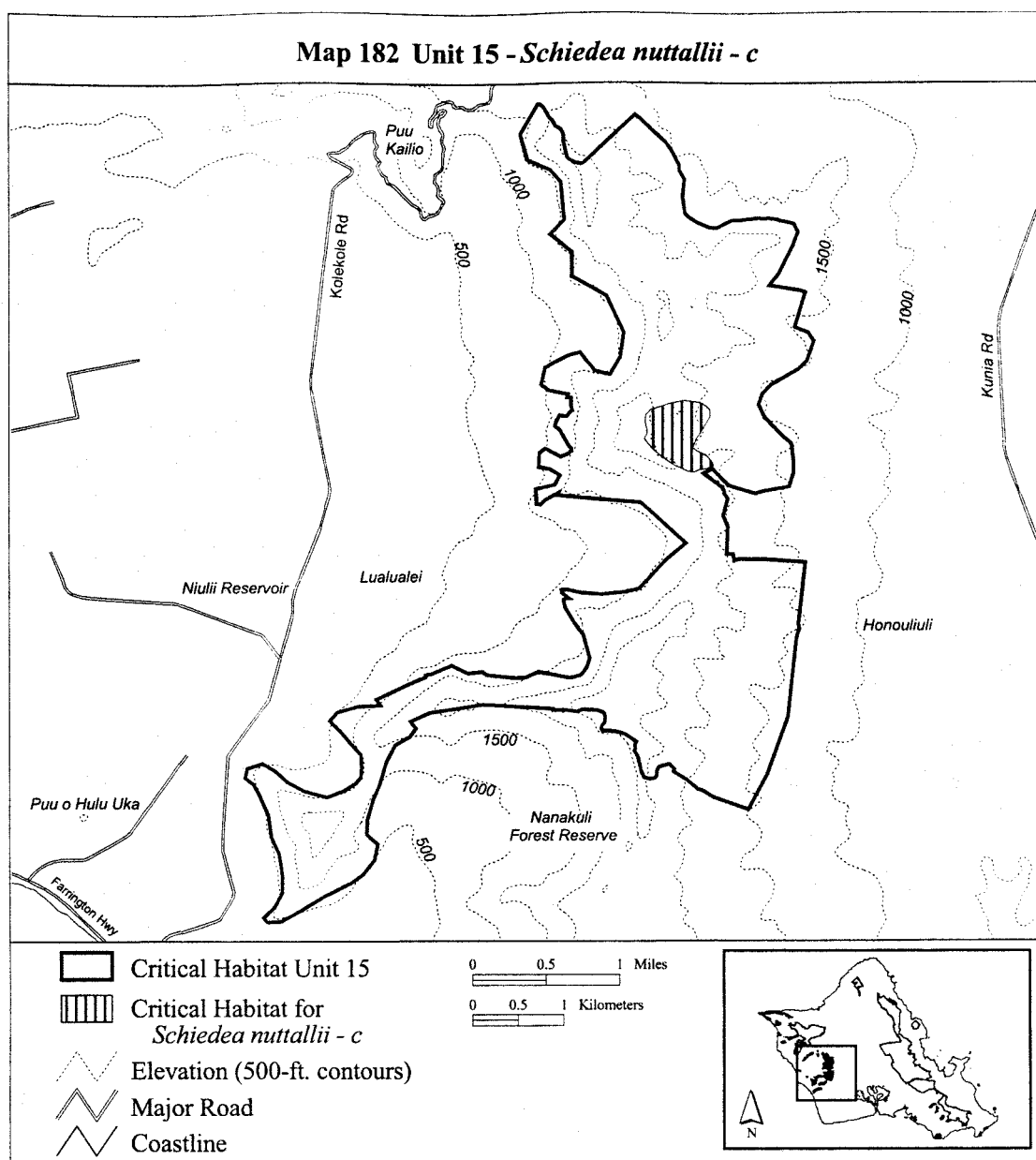
(182) Oahu 15—*Schiedea nuttallii*—c
(41 ha; 102 ac)

(i) Unit consists of the following 30 boundary points: Start at 593505, 2371417; 593569, 2371478; 593661, 2371509; 593771, 2371547; 593929, 2371573; 594044, 2371566; 594137,

2371543; 594180, 2371508; 594217, 2371474; 594220, 2371393; 594174, 2371315; 594119, 2371211; 594067, 2371148; 594030, 2371056; 594076, 2371015; 594177, 2370963; 594235, 2370900; 594255, 2370854; 594223, 2370837; 594180, 2370822; 594111,

2370814; 594047, 2370779; 593987, 2370791; 593805, 2370871; 593710, 2370940; 593589, 2371033; 593491, 2371154; 593520, 2371200; 593520, 2371257; 593502, 2371339; return to starting point.

(ii) **Note:** Map 182 follows:



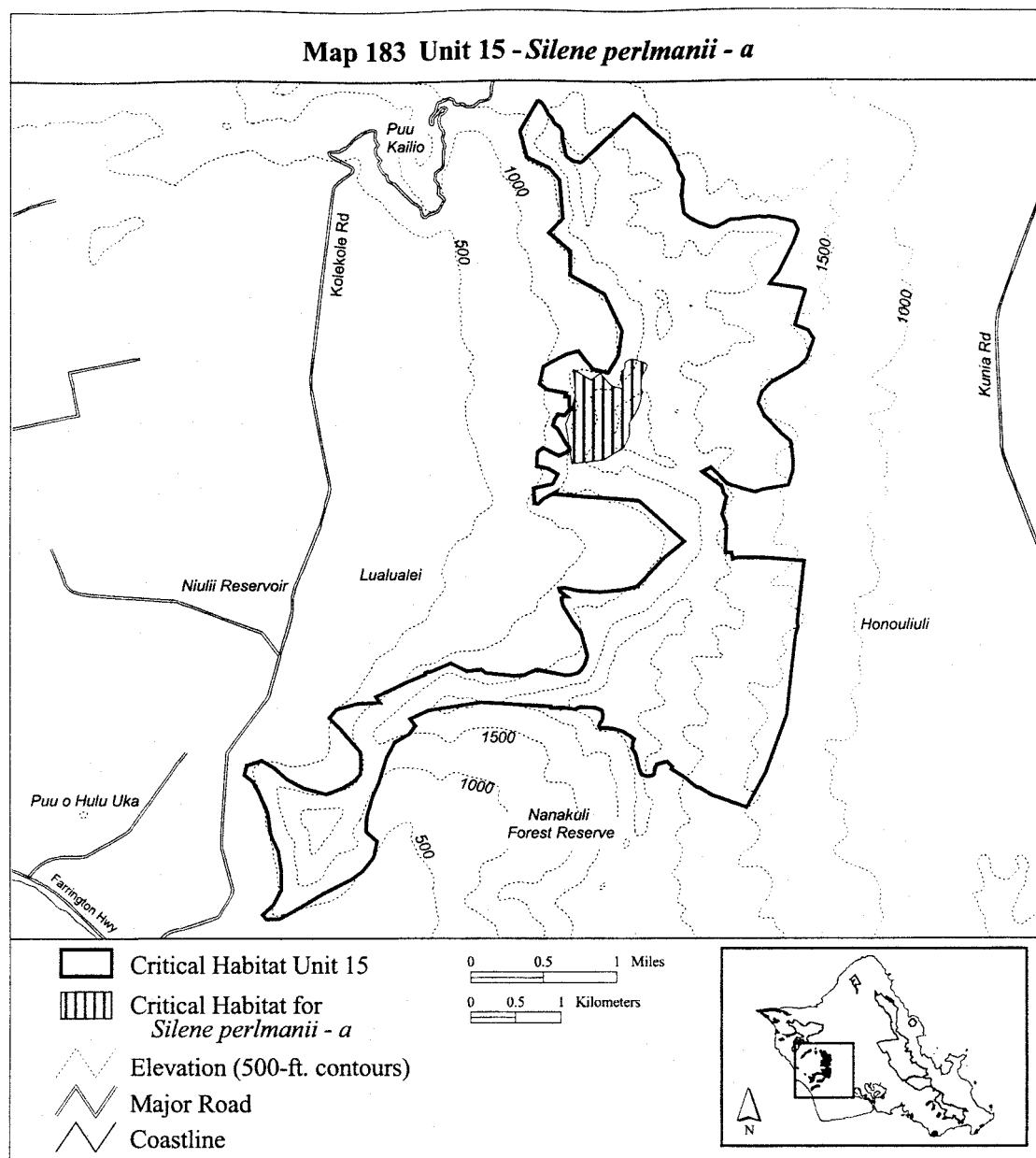
(183) Oahu 15—*Silene perlmannii*—a (65 ha; 162 ac)

(i) Unit consists of the following 50 boundary points: Start at 593271, 2371708; 593264, 2371736; 593259, 2371770; 593249, 2371796; 593252, 2371828; 593261, 2371847; 593266, 2371861; 593256, 2371887; 593283, 2371902; 593300, 2371921; 593299, 2371940; 593299, 2371979; 593324,

2372000; 593386, 2372020; 593443, 2372000; 593496, 2371990; 593534, 2371971; 593542, 2371950; 593542, 2371936; 593532, 2371924; 593527, 2371907; 593518, 2371887; 593506, 2371863; 593496, 2371844; 593487, 2371828; 593474, 2371784; 593472, 2371737; 593475, 2371694; 593489, 2371660; 593489, 2371639; 593477, 2371603; 593472, 2371572; 593460, 2371521; 593451, 2371492; 593436,

2371461; 593427, 2371444; 593419, 2371416; 593351, 2371318; 593347, 2371171; 593289, 2371041; 593074, 2370911; 592716, 2370866; 592649, 2371300; 592716, 2371488; 592760, 2371627; 592734, 2371905; 592926, 2371794; 593029, 2371861; 593153, 2371727; 593274, 2371691; return to starting point.

(ii) **Note:** Map 183 follows:



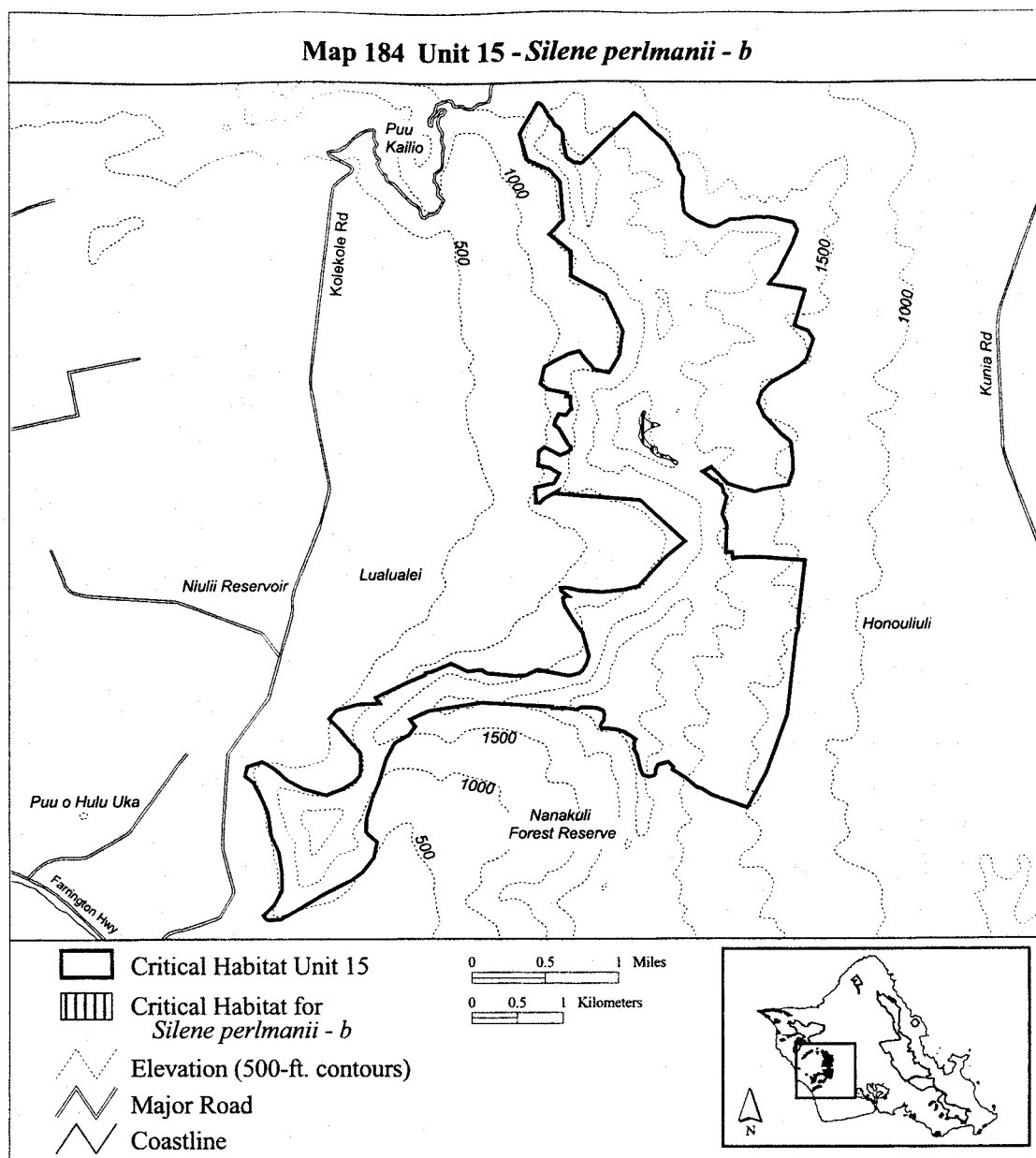
(184) Oahu 15—*Silene perlmanii*—b (5 ha; 12 ac)

(i) Unit consists of the following 53 boundary points: Start at 593517, 2371427; 593498, 2371382; 593504, 2371358; 593525, 2371344; 593570, 2371318; 593621, 2371309; 593669, 2371283; 593669, 2371271; 593649, 2371269; 593609, 2371257; 593559, 2371240; 593518, 2371216; 593494,

2371168; 593511, 2371122; 593544, 2371086; 593592, 2371048; 593644, 2371038; 593645, 2371017; 593649, 2370990; 593669, 2370967; 593705, 2370954; 593745, 2370947; 593772, 2370947; 593788, 2370926; 593824, 2370905; 593874, 2370871; 593872, 2370854; 593850, 2370837; 593832, 2370851; 593810, 2370868; 593791, 2370888; 593771, 2370902; 593726, 2370914; 593692, 2370923; 593647,

2370936; 593601, 2370964; 593578, 2370983; 593570, 2371005; 593565, 2371026; 593515, 2371051; 593474, 2371086; 593460, 2371118; 593438, 2371165; 593451, 2371206; 593463, 2371237; 593463, 2371259; 593463, 2371280; 593444, 2371297; 593441, 2371316; 593443, 2371348; 593460, 2371387; 593472, 2371418; 593496, 2371440; return to starting point.

(ii) **Note:** Map 184 follows:



(185) Oahu 15—*Silene perlmanii*—c (50 ha; 124 ac)

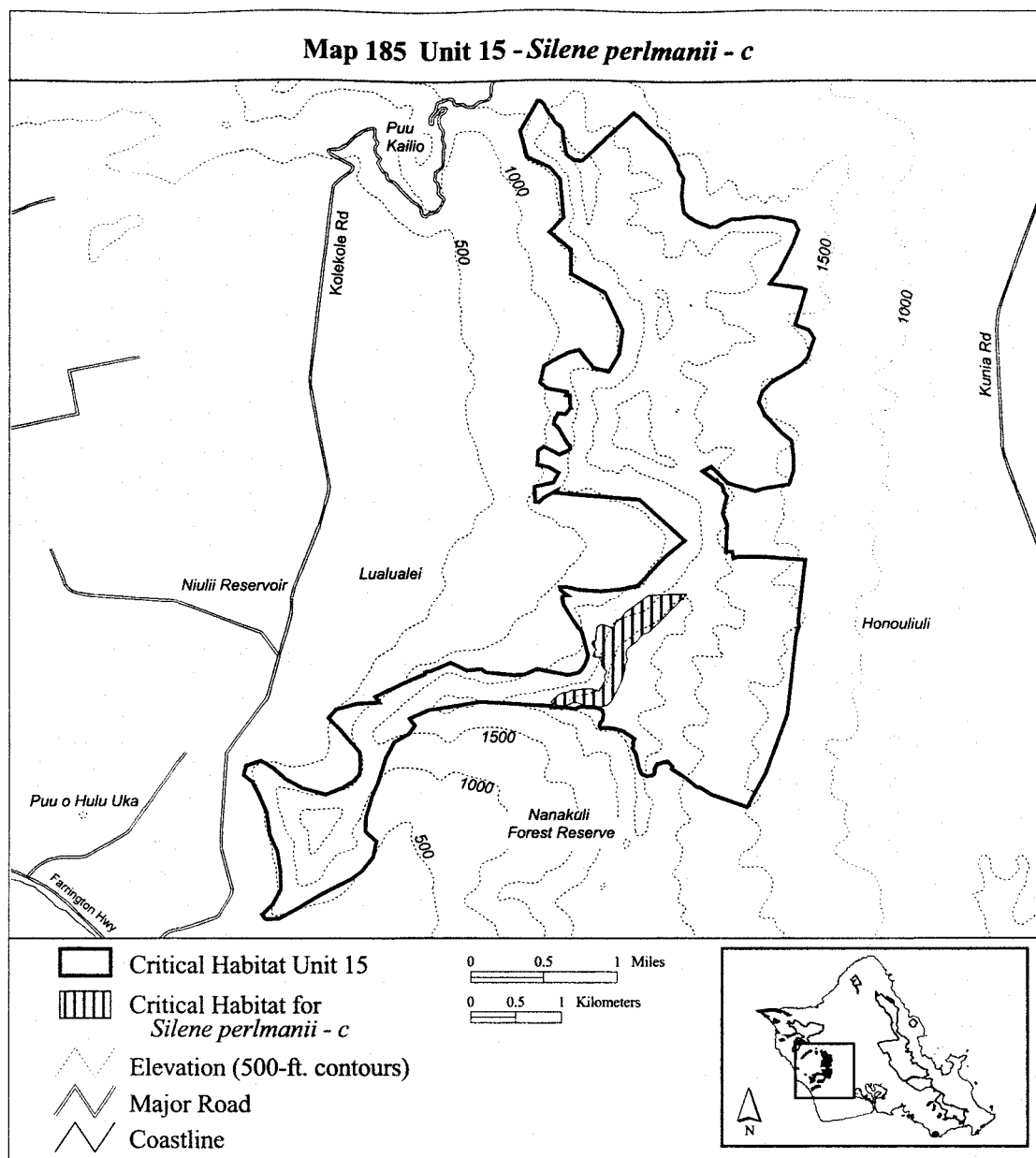
(i) Unit consists of the following 84 boundary points: Start at 593209,

2369122; 593244, 2369132; 593296, 2369202; 593559, 2369391; 593796, 2369405; 593974, 2369402; 593563, 2368985; 593500, 2368964; 593468, 2368930; 593436, 2368888; 593385, 2368847; 593335, 2368813; 593316, 2368786; 593310, 2368732; 593320, 2368691; 593320, 2368659; 593296, 2368615; 593296, 2368574; 593276, 2368506; 593262, 2368431; 593215, 2368344; 593181, 2368281; 593157, 2368227; 593112, 2368184; 593064,

2368166; 593019, 2368162; 592969, 2368162; 592892, 2368168; 592813, 2368196; 592761, 2368206; 592712, 2368204; 592666, 2368186; 592603, 2368172; 592538, 2368184; 592486, 2368208; 592518, 2368245; 592563, 2368285; 592603, 2368307; 592639, 2368326; 592676, 2368326; 592716, 2368346; 592751, 2368348; 592773, 2368350; 592821, 2368356; 592892, 2368358; 592934, 2368364; 592967, 2368350; 593019, 2368336; 593031, 2368366; 593056, 2368405; 593074, 2368437; 593086, 2368457; 593076, 2368485; 593076, 2368504; 593096, 2368524; 593096, 2368560; 593060,

2368592; 593038, 2368625; 593044, 2368651; 593029, 2368669; 593038, 2368681; 593052, 2368700; 593029, 2368710; 592993, 2368710; 592971, 2368710; 592945, 2368726; 592961, 2368758; 592973, 2368780; 592985, 2368795; 592953, 2368823; 592936, 2368851; 592943, 2368885; 592977, 2368894; 592977, 2368910; 592977, 2368948; 592983, 2368993; 592989, 2369041; 593025, 2369063; 593058, 2369065; 593108, 2369055; 593145, 2369037; 593163, 2369037; 593179, 2369041; 593193, 2369094; return to starting point.

(ii) **Note:** Map 185 follows:



(186) Oahu 15—*Silene perlmantii*—d (52 ha; 130 ac)

(i) Unit consists of the following 143

boundary points: Start at 593997, 2368967; 593925, 2368950; 593880, 2368875; 593872, 2368831; 593866, 2368782; 593848, 2368750; 593810, 2368714; 593753, 2368675; 593763, 2368643; 593781, 2368617; 593816, 2368586; 593850, 2368546; 593866, 2368504; 593878, 2368427; 593896, 2368388; 593929, 2368362; 593931, 2368344; 593902, 2368340; 593846, 2368358; 593805, 2368348; 593816, 2368326; 593850, 2368291; 593894, 2368255; 593915, 2368223; 593959, 2368178; 593969, 2368146; 593953, 2368136; 593900, 2368142; 593836, 2368156; 593808, 2368146; 593783,

2368097; 593763, 2368051; 593727, 2368014; 593717, 2367986; 593747, 2367966; 593791, 2367956; 593826, 2367942; 593880, 2367932; 593896, 2367903; 593880, 2367893; 593785, 2367885; 593727, 2367879; 593660, 2367859; 593605, 2367853; 593514, 2367847; 593454, 2367881; 593413, 2367899; 593413, 2367934; 593428, 2367980; 593446, 2368010; 593401, 2368037; 593397, 2368077; 593403, 2368122; 593438, 2368132; 593456, 2368158; 593478, 2368174; 593506, 2368194; 593551, 2368194; 593563, 2368229; 593567, 2368261; 593529, 2368289; 593525, 2368322; 593476, 2368356; 593478, 2368374; 593500, 2368407; 593516, 2368425; 593516, 2368459; 593516, 2368489; 593502,

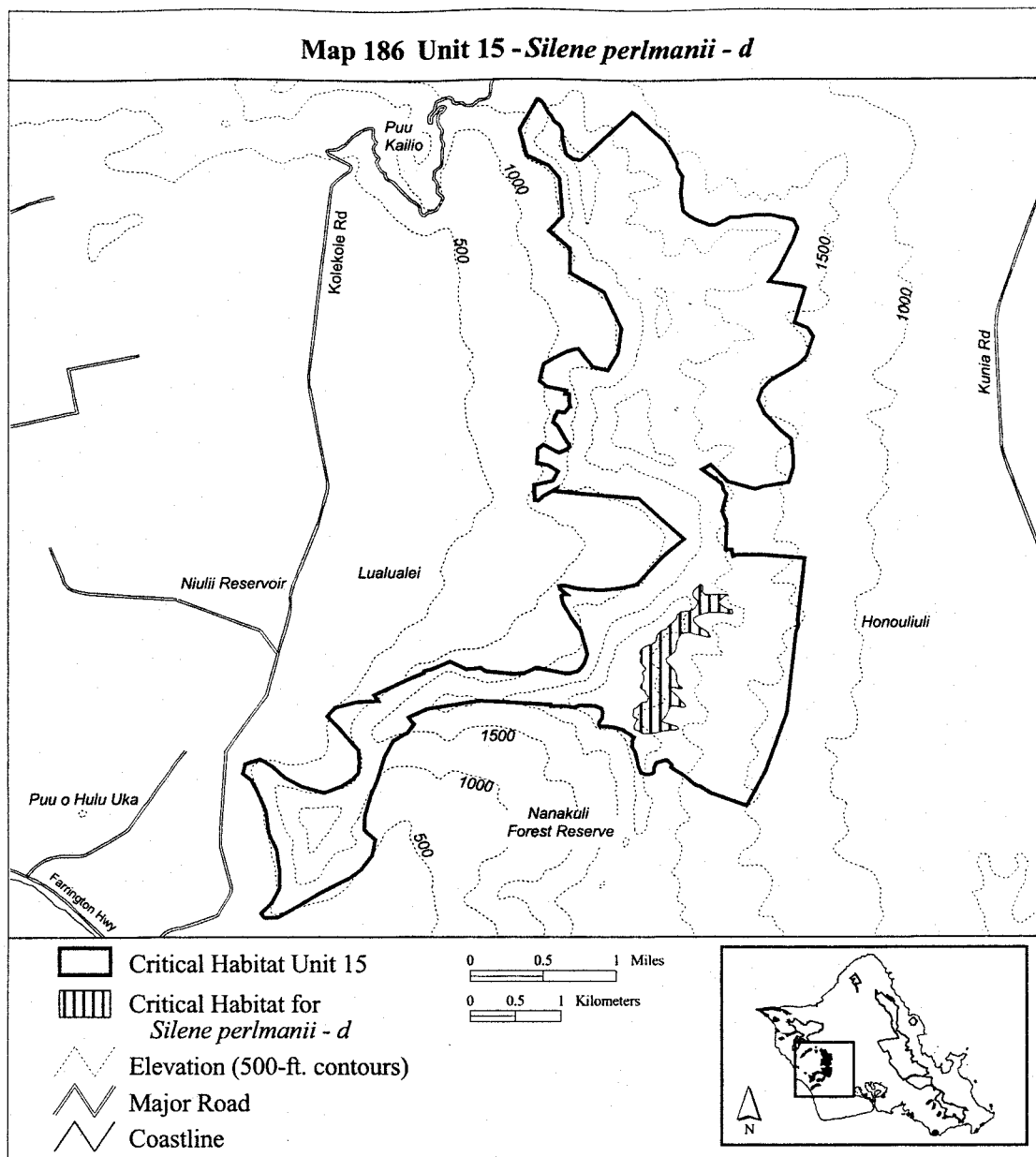
2368508; 593502, 2368528; 593533, 2368552; 593525, 2368574; 593502, 2368609; 593472, 2368641; 593478, 2368677; 593492, 2368708; 593470, 2368738; 593480, 2368774; 593512, 2368797; 593567, 2368825; 593611, 2368839; 593644, 2368863; 593656, 2368898; 593658, 2368938; 593702, 2368982; 593751, 2368997; 593771, 2369015; 593778, 2369030; 593775, 2369031; 593779, 2369035; 593781, 2369039; 593783, 2369038; 593818, 2369069; 593860, 2369110; 593878, 2369138; 593878, 2369156; 593919, 2369185; 593989, 2369197; 594056, 2369209; 594080, 2369247; 594099, 2369276; 594101, 2369308; 594082, 2369328; 594052, 2369356; 594044, 2369381; 594056, 2369413; 594109,

2369472; 594133, 2369494; 594157,
2369476; 594155, 2369443; 594151,
2369409; 594185, 2369379; 594240,
2369375; 594299, 2369377; 594347,
2369383; 594424, 2369377; 594383,
2369346; 594351, 2369320; 594329,
2369294; 594359, 2369263; 594400,

2369231; 594446, 2369217; 594478,
2369209; 594480, 2369187; 594483,
2369170; 594434, 2369170; 594386,
2369179; 594339, 2369179; 594305,
2369179; 594228, 2369183; 594189,
2369174; 594149, 2369162; 594111,
2369146; 594082, 2369138; 594052,

2369120; 594058, 2369077; 594113,
2369033; 594202, 2368978; 594224,
2368952; 594246, 2368914; 594226,
2368908; 594183, 2368918; 594113,
2368934; return to starting point.

(ii) **Note:** Map 186 follows:



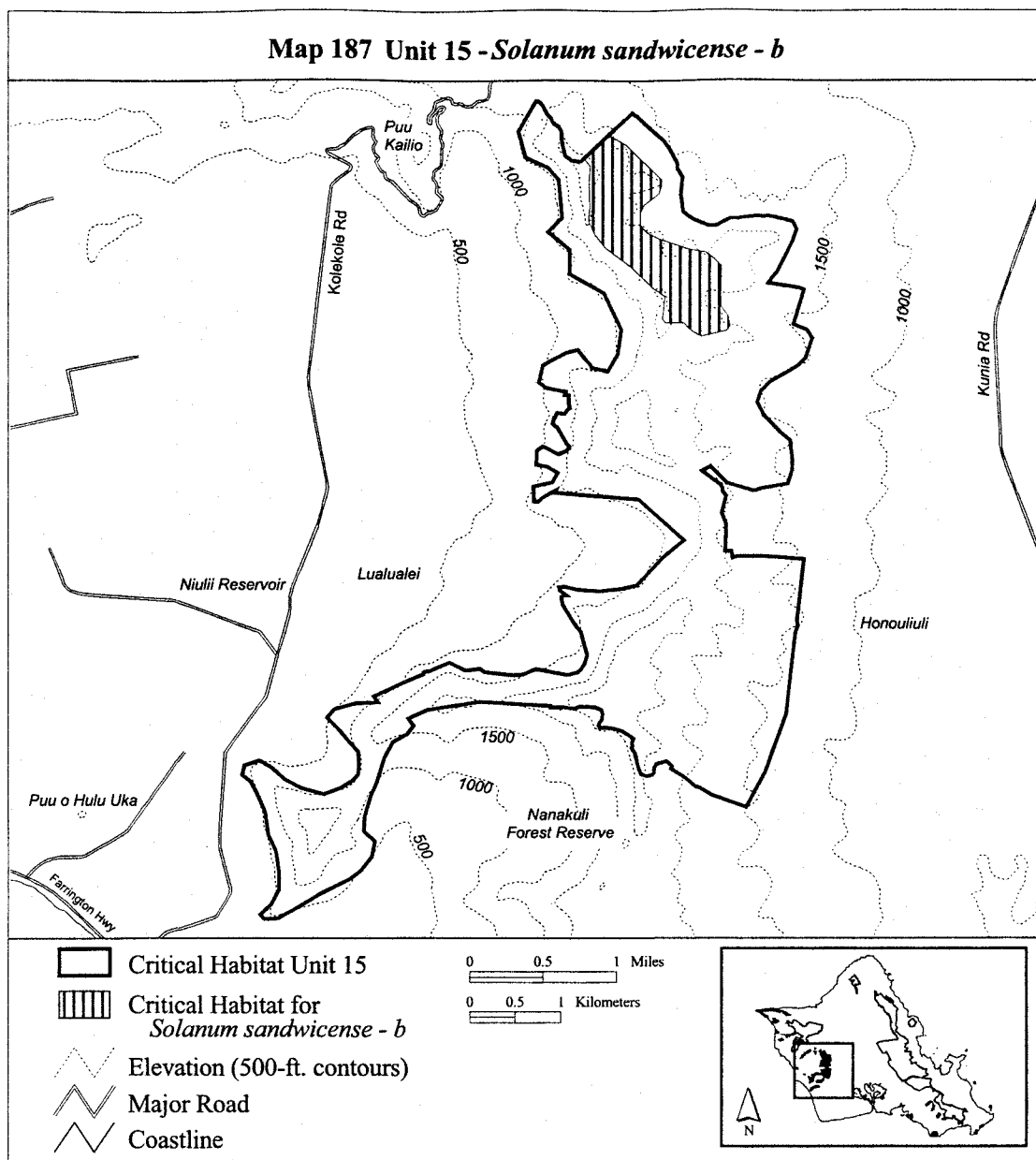
(187) Oahu 15—*Solanum sandwicense*—b (146 ha; 361 ac)

(i) Unit consists of the following 43 boundary points: Start at 593124, 2374469; 593130, 2374466; 593319, 2374367; 593704, 2373986; 593704, 2373909; 593670, 2373819; 593520, 2373703; 593477, 2373609; 593477, 2373480; 593550, 2373394; 593692,

2373322; 593889, 2373253; 594004, 2373206; 594184, 2373180; 594261, 2373120; 594356, 2373030; 594356, 2372910; 594351, 2372825; 594351, 2372705; 594351, 2372589; 594433, 2372481; 594454, 2372361; 594424, 2372318; 594223, 2372276; 594133, 2372255; 594039, 2372315; 593987, 2372358; 593953, 2372400; 593902,

2372405; 593747, 2372405; 593717, 2372447; 593726, 2372555; 593739, 2372696; 593614, 2372782; 593366, 2373022; 593237, 2373120; 593087, 2373232; 592972, 2373373; 592903, 2373531; 592916, 2373664; 592912, 2373960; 592925, 2374131; 592854, 2374216; return to starting point.

(ii) **Note:** Map 187 follows:



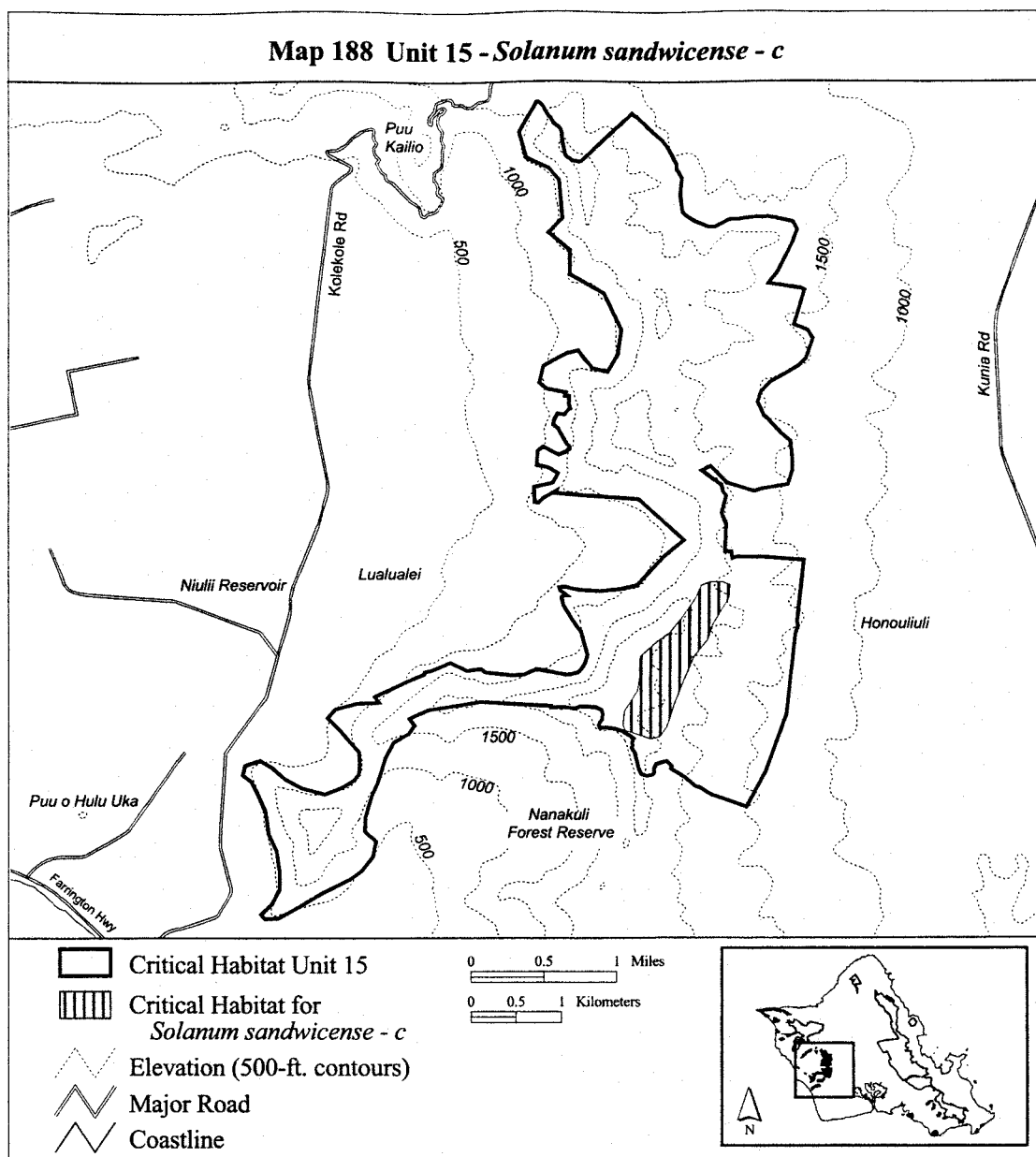
(188) Oahu 15—*Solanum sandwicense*—c (78 ha; 193 ac)

(i) Unit consists of the following 26 boundary points: Start at 593318, 2367895; 593284, 2367952; 593303, 2368105; 593442, 2368331; 593466,

2368474; 593466, 2368637; 593476, 2368709; 593667, 2368881; 593801, 2368972; 593931, 2369140; 594079, 2369346; 594146, 2369499; 594247, 2369538; 594381, 2369538; 594458, 2369504; 594448, 2369360; 594367, 2369217; 594266, 2369063; 594209,

2368896; 594060, 2368704; 593945, 2368431; 593859, 2368206; 593768, 2367933; 593696, 2367832; 593595, 2367799; 593495, 2367842; return to starting point.

(ii) **Note:** Map 188 follows:



(189) Oahu 15—*Stenogyne kanehoana*—
a (140 ha; 346 ac)

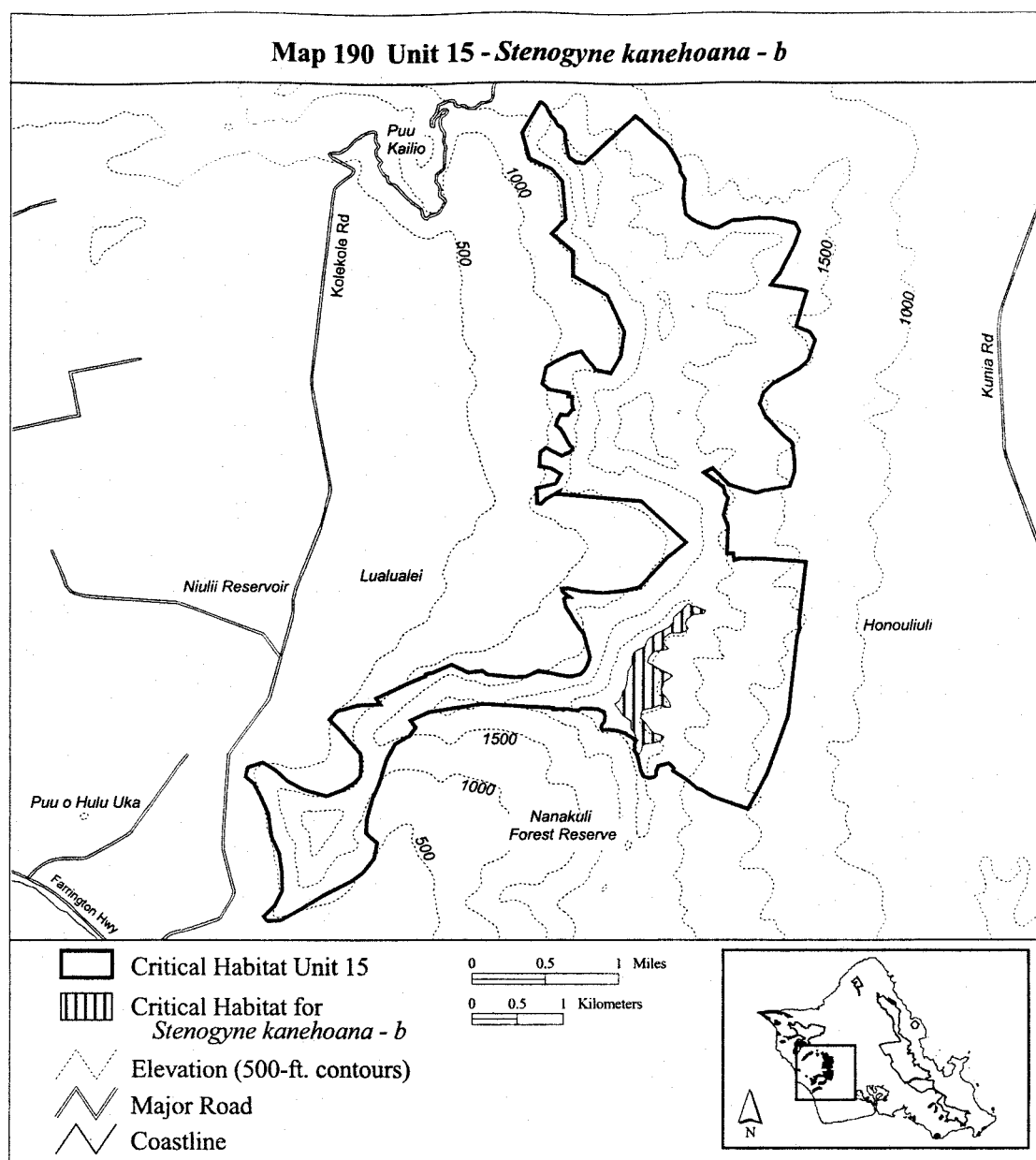
(i) Unit consists of the following 91 boundary points: Start at 593105, 2374451; 593128, 2374409; 593098, 2374338; 593128, 2374268; 593215, 2374248; 593282, 2374278; 593336, 2374291; 593353, 2374224; 593370, 2374187; 593360, 2374171; 593339, 2374154; 593371, 2374111; 593383, 2374110; 593443, 2374080; 593480, 2374073; 593558, 2374073; 593631, 2374047; 593665, 2374003; 593652, 2373949; 593548, 2373788; 593494, 2373671; 593480, 2373546; 593544, 2373392; 593605, 2373301; 593688, 2373241; 593776, 2373197; 593819,

2373181; 593863, 2373181; 593890, 2373214; 593930, 2373244; 594004, 2373258; 594048, 2373231; 594108, 2373150; 594165, 2373090; 594235, 2373050; 594293, 2373040; 594346, 2373046; 594390, 2373036; 594423, 2372963; 594423, 2372919; 594397, 2372872; 594296, 2372791; 594209, 2372721; 594209, 2372657; 594209, 2372580; 594266, 2372556; 594350, 2372513; 594370, 2372462; 594356, 2372402; 594373, 2372362; 594470, 2372341; 594544, 2372314; 594568, 2372277; 594544, 2372277; 594397, 2372290; 594266, 2372268; 594142, 2372258; 594041, 2372268; 594004, 2372311; 593940, 2372338; 593893,

2372379; 593756, 2372405; 593688, 2372432; 593692, 2372533; 593712, 2372640; 593709, 2372687; 593578, 2372795; 593480, 2372862; 593343, 2372983; 593343, 2373030; 593205, 2373117; 593115, 2373191; 593041, 2373254; 592953, 2373362; 592886, 2373466; 592873, 2373533; 592890, 2373620; 592890, 2373694; 592876, 2373775; 592843, 2373848; 592836, 2373926; 592836, 2373976; 592829, 2373996; 592829, 2374040; 592797, 2374134; 592796, 2374134; 592782, 2374182; 592805, 2374172; 592806, 2374171; 592807, 2374171; 592807, 2374172; return to starting point.

(ii) **Note:** Map 189 follows:





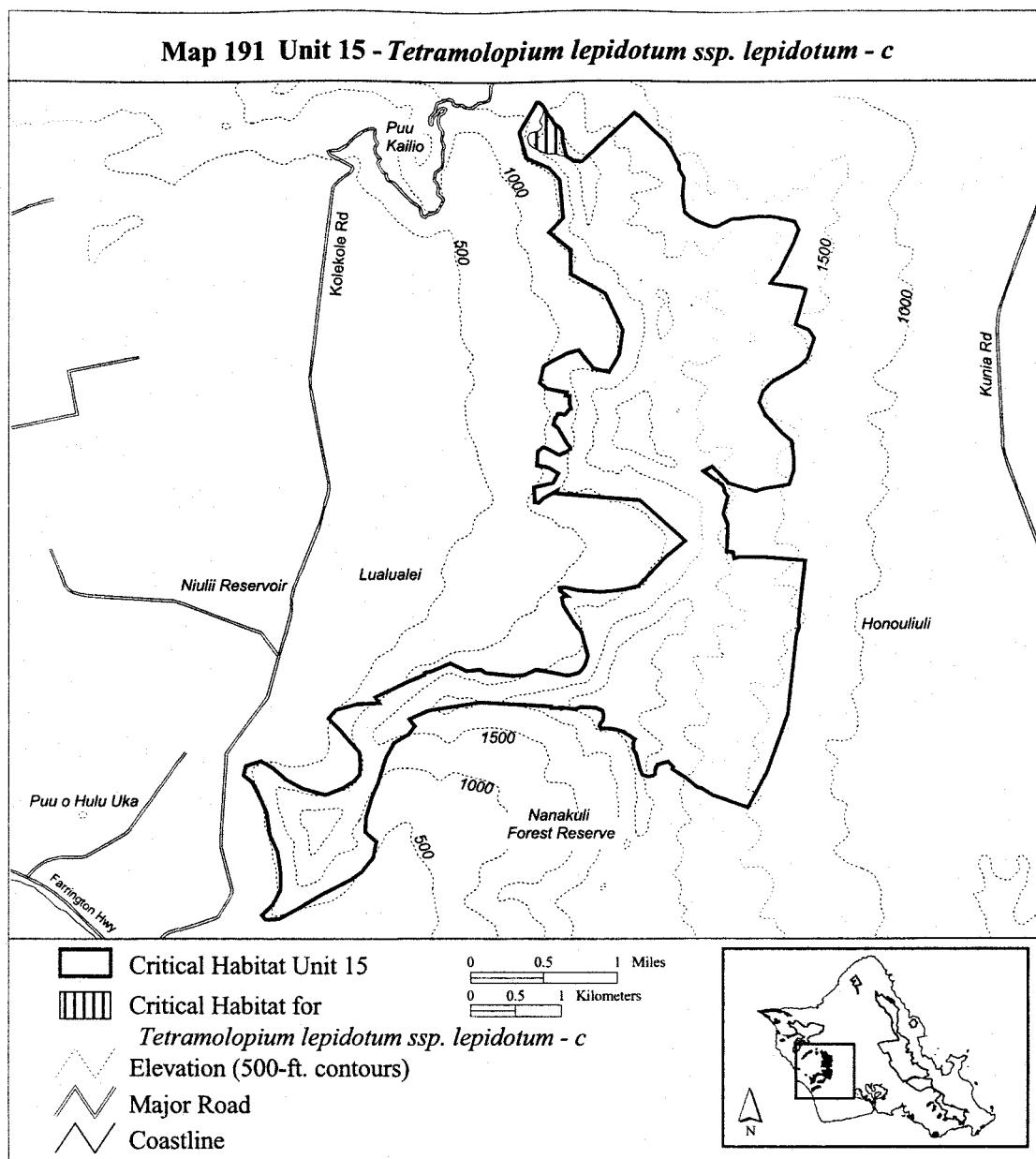
(191) Oahu 15—*Tetramolopium lepidotum* ssp. *lepidotum*—c (11 ha; 28 ac)

(i) Unit consists of the following 47 boundary points: Start at 592641, 2374247; 592622, 2374247; 592573, 2374250; 592556, 2374263; 592529, 2374272; 592492, 2374269; 592454, 2374269; 592428, 2374276; 592385, 2374295; 592356, 2374306; 592318,

2374329; 592292, 2374337; 592265, 2374361; 592249, 2374374; 592236, 2374388; 592227, 2374416; 592225, 2374439; 592225, 2374462; 592236, 2374481; 592258, 2374502; 592288, 2374511; 592315, 2374515; 592342, 2374524; 592360, 2374535; 592372, 2374549; 592382, 2374565; 592383, 2374586; 592379, 2374602; 592360, 2374624; 592366, 2374649; 592374,

2374670; 592386, 2374700; 592396, 2374725; 592402, 2374747; 592402, 2374768; 592404, 2374781; 592454, 2374691; 592484, 2374661; 592514, 2374601; 592514, 2374600; 592574, 2374561; 592594, 2374531; 592604, 2374492; 592604, 2374422; 592634, 2374282; 592634, 2374281; 592644, 2374251; return to starting point.

(ii) **Note:** Map 191 follows:



(192) Oahu 15—*Tetramolopium lepidotum* ssp. *lepidotum*—d (94 ha; 232 ac)

(i) Unit consists of the following 190 boundary points: Start at 593324,

2373029; 593355, 2373021; 593385, 2373001; 593415, 2372982; 593421, 2372956; 593426, 2372942; 593439, 2372931; 593471, 2372897; 593507, 2372866; 593560, 2372829; 593598, 2372794; 593633, 2372775; 593650, 2372767; 593677, 2372755; 593696, 2372755; 593747, 2372732; 593782, 2372715; 593806, 2372699; 593815, 2372672; 593777, 2372631; 593747, 2372583; 593742, 2372540; 593753, 2372480; 593750, 2372429; 593760, 2372351; 593741, 2372273; 593722, 2372183; 593718, 2372168; 593719,

2372168; 593713, 2372144; 593706, 2372138; 593706, 2372137; 593700, 2372106; 593698, 2372106; 593698, 2372103; 593668, 2372056; 593653, 2372007; 593648, 2371975; 593623, 2371940; 593602, 2371902; 593590, 2371860; 593585, 2371843; 593583, 2371798; 593585, 2371738; 593587, 2371710; 593601, 2371678; 593599, 2371635; 593593, 2371595; 593572, 2371562; 593575, 2371540; 593574, 2371511; 593558, 2371489; 593528, 2371444; 593496, 2371398; 593483, 2371378; 593499, 2371352; 593536, 2371333; 593585, 2371320; 593623, 2371305; 593687, 2371281; 593704, 2371269; 593706, 2371259; 593687, 2371254; 593650, 2371262; 593610, 2371269; 593556, 2371269; 593518,

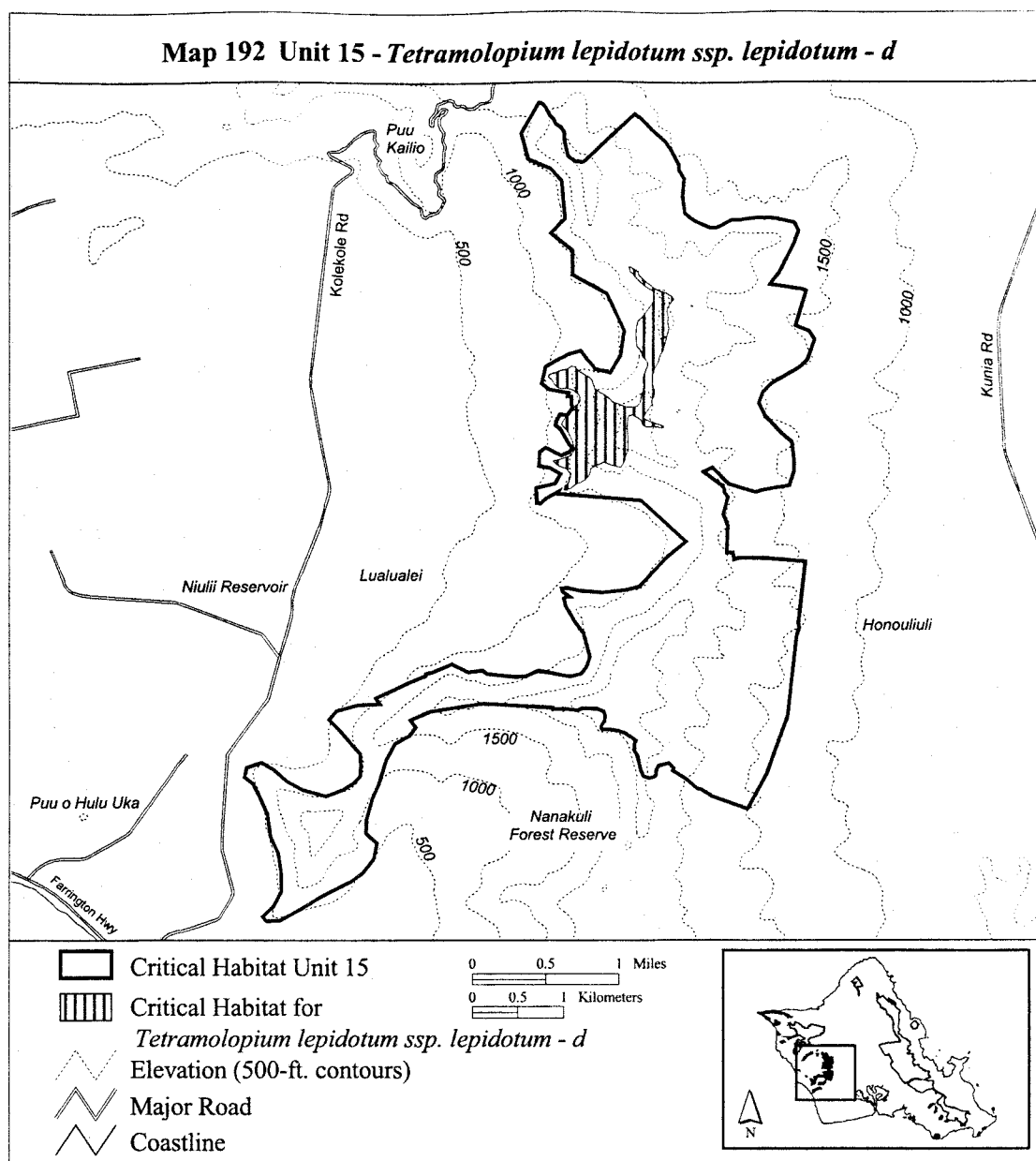
2371265; 593493, 2371278; 593471, 2371300; 593458, 2371339; 593436, 2371362; 593398, 2371387; 593359, 2371405; 593323, 2371392; 593309, 2371362; 593305, 2371256; 593315, 2371110; 593312, 2371110; 593319, 2371035; 593309, 2370992; 593286, 2370948; 593274, 2370884; 593239, 2370829; 593201, 2370825; 593139, 2370843; 593043, 2370874; 592935, 2370835; 592898, 2370802; 592898, 2370780; 592882, 2370737; 592851, 2370694; 592786, 2370655; 592745, 2370637; 592679, 2370592; 592636, 2370569; 592606, 2370569; 592626, 2370614; 592653, 2370649; 592683, 2370749; 592632, 2370806; 592581, 2370825; 592530, 2370853; 592493, 2370896; 592528, 2370905; 592630,

2370935; 592685, 2370954; 592720,
2371017; 592700, 2371103; 592649,
2371213; 592579, 2371303; 592589,
2371328; 592642, 2371407; 592696,
2371467; 592781, 2371551; 592779,
2371571; 592777, 2371614; 592751,
2371647; 592708, 2371679; 592632,
2371694; 592581, 2371692; 592534,
2371700; 592497, 2371745; 592469,
2371792; 592436, 2371816; 592440,
2371843; 592507, 2371865; 592573,
2371894; 592638, 2371908; 592687,
2371941; 592736, 2371931; 592759,
2371892; 592790, 2371872; 592824,
2371851; 592859, 2371830; 592890,

2371813; 592908, 2371793; 592925,
2371749; 592939, 2371704; 592963,
2371679; 593010, 2371649; 593059,
2371622; 593104, 2371583; 593147,
2371547; 593139, 2371545; 593185,
2371531; 593280, 2371494; 593329,
2371484; 593388, 2371486; 593423,
2371503; 593442, 2371533; 593450,
2371578; 593458, 2371614; 593477,
2371657; 593480, 2371695; 593479,
2371746; 593477, 2371805; 593488,
2371843; 593507, 2371892; 593520,
2371927; 593523, 2371953; 593523,
2371978; 593509, 2372011; 593471,
2372053; 593461, 2372083; 593459,

2372088; 593451, 2372114; 593441,
2372123; 593432, 2372134; 593433,
2372134; 593405, 2372169; 593401,
2372308; 593404, 2372377; 593417,
2372432; 593482, 2372494; 593533,
2372559; 593564, 2372604; 593585,
2372640; 593590, 2372677; 593591,
2372724; 593591, 2372761; 593556,
2372783; 593517, 2372801; 593466,
2372843; 593425, 2372885; 593394,
2372915; 593367, 2372942; 593355,
2372959; 593332, 2372974; 593326,
2372993; 593313, 2373029; return to
starting point.

(ii) **Note:** Map 192 follows:



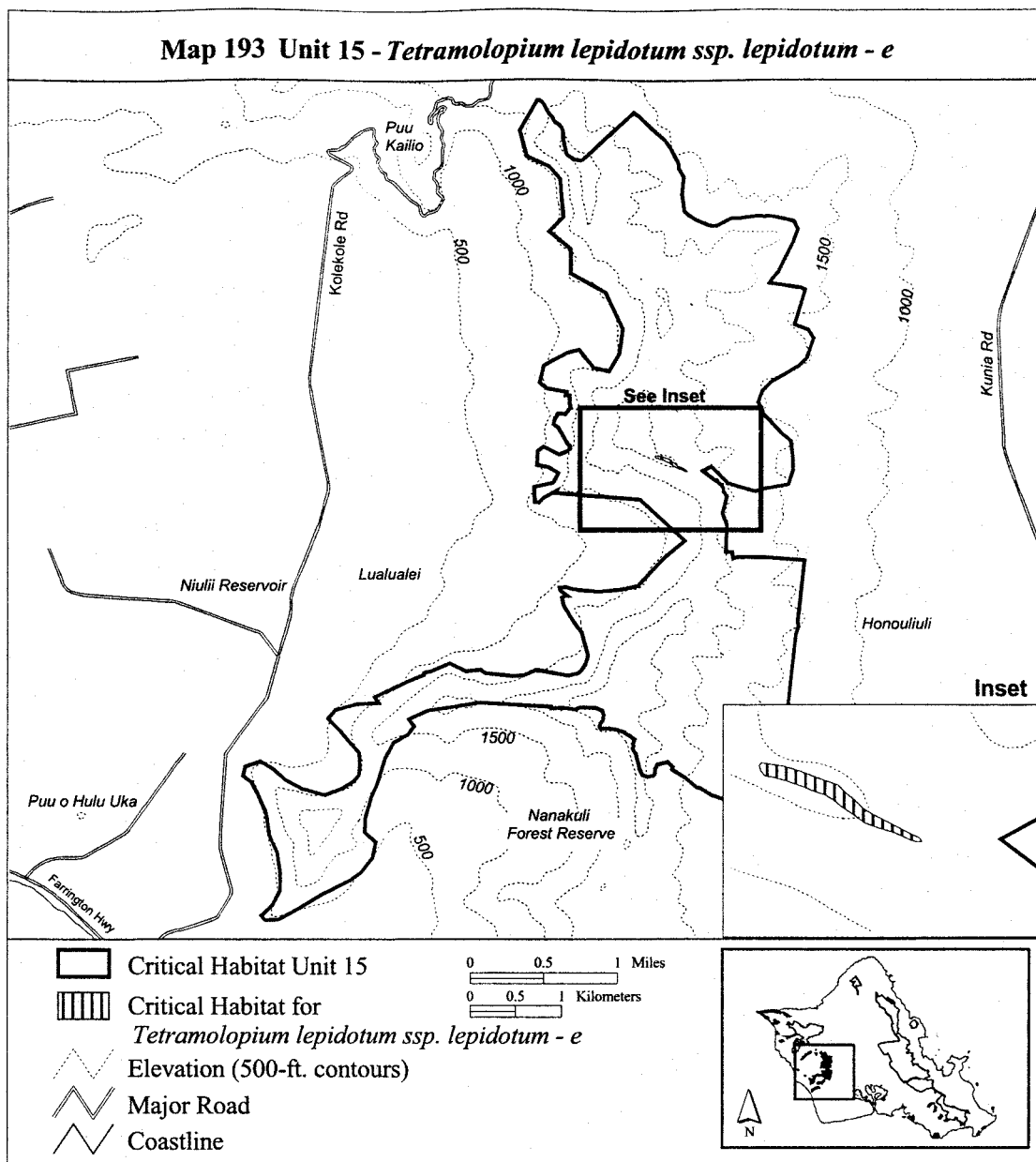
(193) Oahu 15—*Tetramolopium lepidotum* ssp. *lepidotum*—e (1 ha; 2 ac)

(i) Unit consists of the following 32 boundary points: Start at 593625, 2370937; 593672, 2370931; 593706, 2370921; 593746, 2370906; 593792, 2370889; 593811, 2370871; 593828,

2370857; 593847, 2370838; 593878, 2370820; 593922, 2370798; 593952, 2370782; 593971, 2370774; 593977, 2370765; 593966, 2370765; 593952, 2370769; 593933, 2370777; 593919, 2370784; 593903, 2370789; 593884, 2370794; 593865, 2370802; 593851, 2370807; 593827, 2370824; 593802,

2370841; 593781, 2370858; 593764, 2370867; 593737, 2370877; 593713, 2370887; 593681, 2370898; 593652, 2370906; 593633, 2370909; 593622, 2370921; 593620, 2370933; return to starting point.

(ii) Note: Map 193 follows:



(194) Oahu 15—*Tetramolopium lepidotum* ssp. *lepidotum*—f (260 ha; 641 ac)

(i) Unit consists of the following 94 boundary points: Start at 594589, 2369071; 594601, 2369071; 594553, 2368922; 594541, 2368792; 594513, 2368696; 594447, 2368445; 594329, 2368194; 594169, 2367882; 594051,

2367677; 593936, 2367646; 593869, 2367646; 593773, 2367655; 593673, 2367689; 593582, 2367743; 593531, 2367785; 593482, 2367801; 593446, 2367794; 593444, 2367789; 593435, 2367797; 593381, 2367824; 593380, 2367824; 593379, 2367825; 593301, 2367885; 593201, 2367915; 593116, 2367928; 593029, 2367928; 593020,

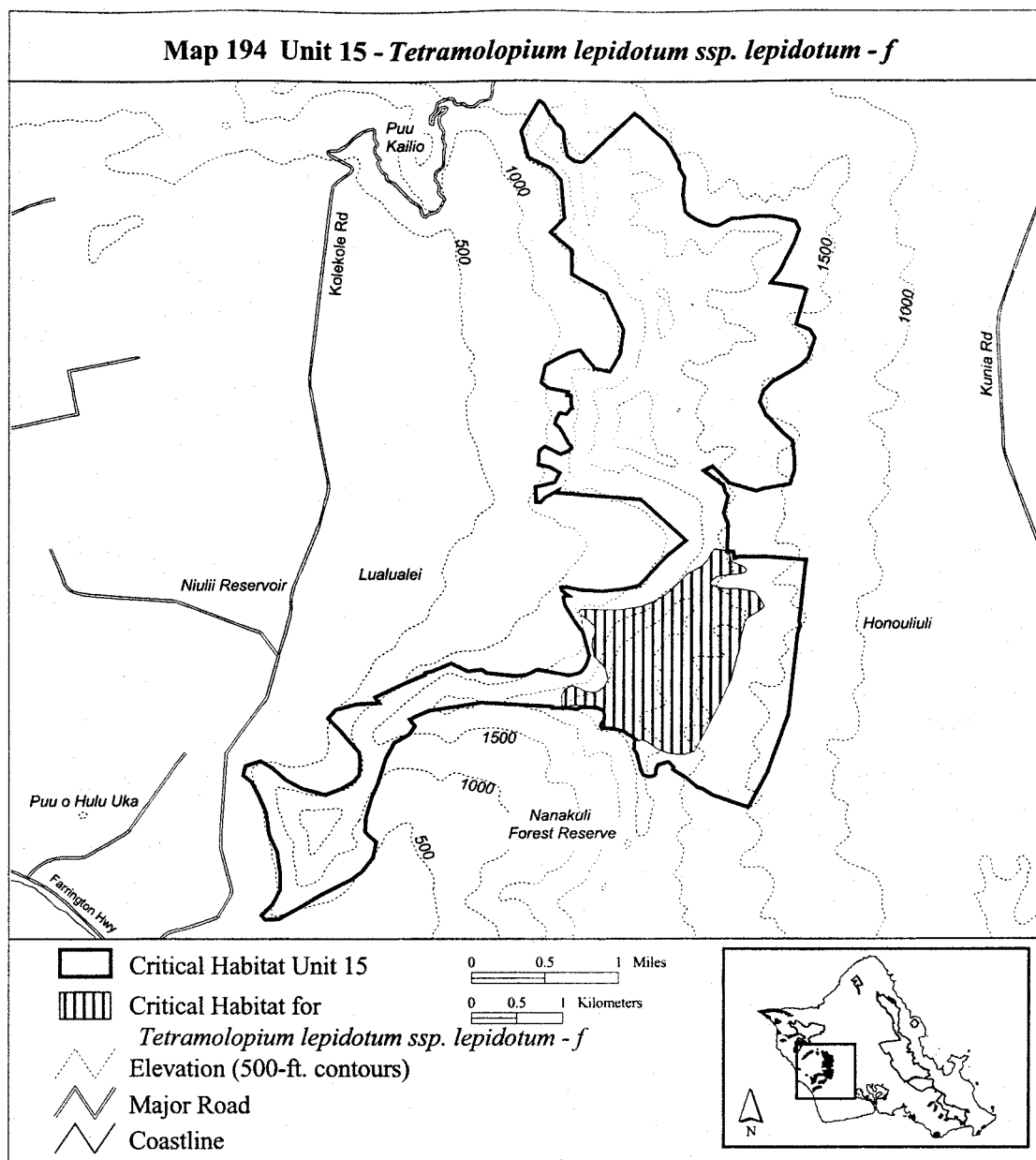
2367955; 593029, 2367985; 593056, 2368018; 593059, 2368073; 593050, 2368127; 592986, 2368154; 592838, 2368182; 592751, 2368185; 592678, 2368175; 592611, 2368151; 592590, 2368194; 592590, 2368290; 592630, 2368363; 592699, 2368399; 592778, 2368378; 592838, 2368342; 592935, 2368321; 593008, 2368339; 593059,

2368393; 593098, 2368463; 593080,
2368544; 593071, 2368590; 593011,
2368659; 592944, 2368720; 592944,
2368756; 592920, 2368823; 592926,
2368913; 592948, 2368954; 592956,
2369031; 592941, 2369061; 592875,
2369125; 592811, 2369167; 592775,
2369213; 592802, 2369237; 592875,
2369237; 593038, 2369231; 593216,

2369234; 593452, 2369261; 593594,
2369322; 593730, 2369394; 593884,
2369536; 593975, 2369630; 594120,
2369709; 594187, 2369772; 594223,
2369845; 594262, 2369896; 594377,
2369887; 594426, 2369845; 594447,
2369778; 594474, 2369751; 594577,
2369715; 594622, 2369678; 594604,
2369645; 594541, 2369627; 594420,

2369621; 594290, 2369591; 594241,
2369557; 594220, 2369515; 594299,
2369476; 594392, 2369464; 594504,
2369464; 594601, 2369455; 594713,
2369427; 594770, 2369349; 594813,
2369267; 594770, 2369222; 594668,
2369170; 594628, 2369140; return to
starting point.

(ii) Note: Map 194 follows:



(195) Oahu 15—*Urera kaalae*—c (224 ha; 555 ac)

(i) Unit consists of the following 63 boundary points: Start at 593151, 2374494; 593315, 2374385; 593612, 2374173; 593793, 2374029; 593779, 2373964; 593731, 2373894; 593660, 2373784; 593609, 2373702; 593592,

2373648; 593592, 2373594; 593601, 2373538; 593629, 2373467; 593661, 2373423; 593652, 2373439; 594121, 2373373; 594460, 2373552; 594941, 2373564; 594974, 2373334; 594744, 2373091; 594696, 2372334; 594697, 2372333; 594697, 2372283; 594652, 2372257; 594541, 2372266; 594454,

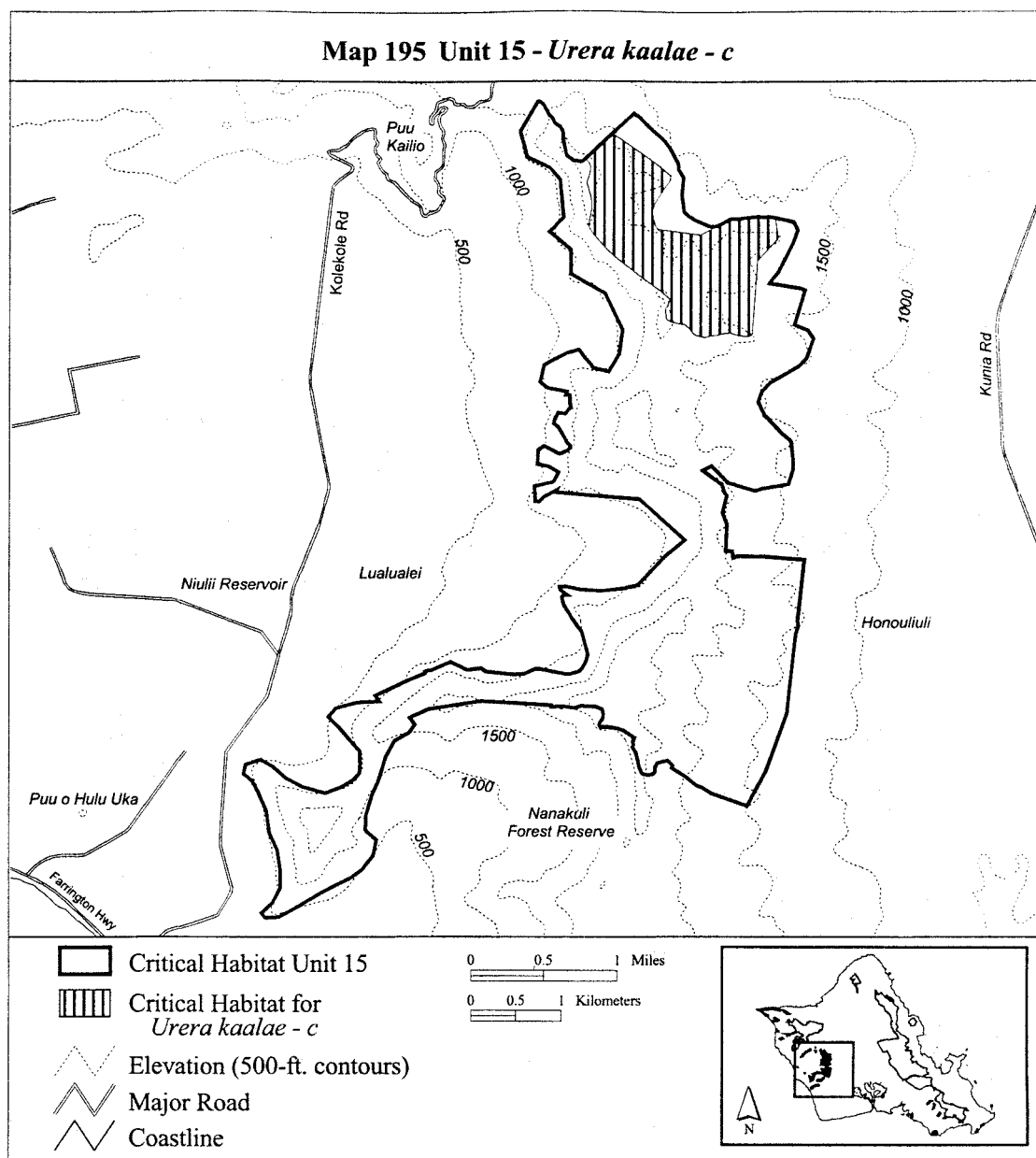
2372294; 594400, 2372294; 594293, 2372267; 594231, 2372261; 594168, 2372241; 594126, 2372258; 594075, 2372267; 594030, 2372303; 593999, 2372354; 593948, 2372388; 593889, 2372397; 593812, 2372413; 593781, 2372425; 593756, 2372442; 593742, 2372467; 593742, 2372490; 593736,

2372521; 593736, 2372560; 593757,
2372587; 593781, 2372659; 593790,
2372662; 593663, 2372772; 593490,
2372897; 593202, 2373123; 593095,
2373213; 593019, 2373295; 592937,

2373388; 592889, 2373462; 592897,
2373535; 592908, 2373597; 592923,
2373668; 592914, 2373772; 592889,
2373866; 592866, 2373947; 592894,
2374029; 592908, 2374120; 592894,

2374162; 592860, 2374213; 592854,
2374216; return to starting point.

(ii) **Note:** Map 195 follows:



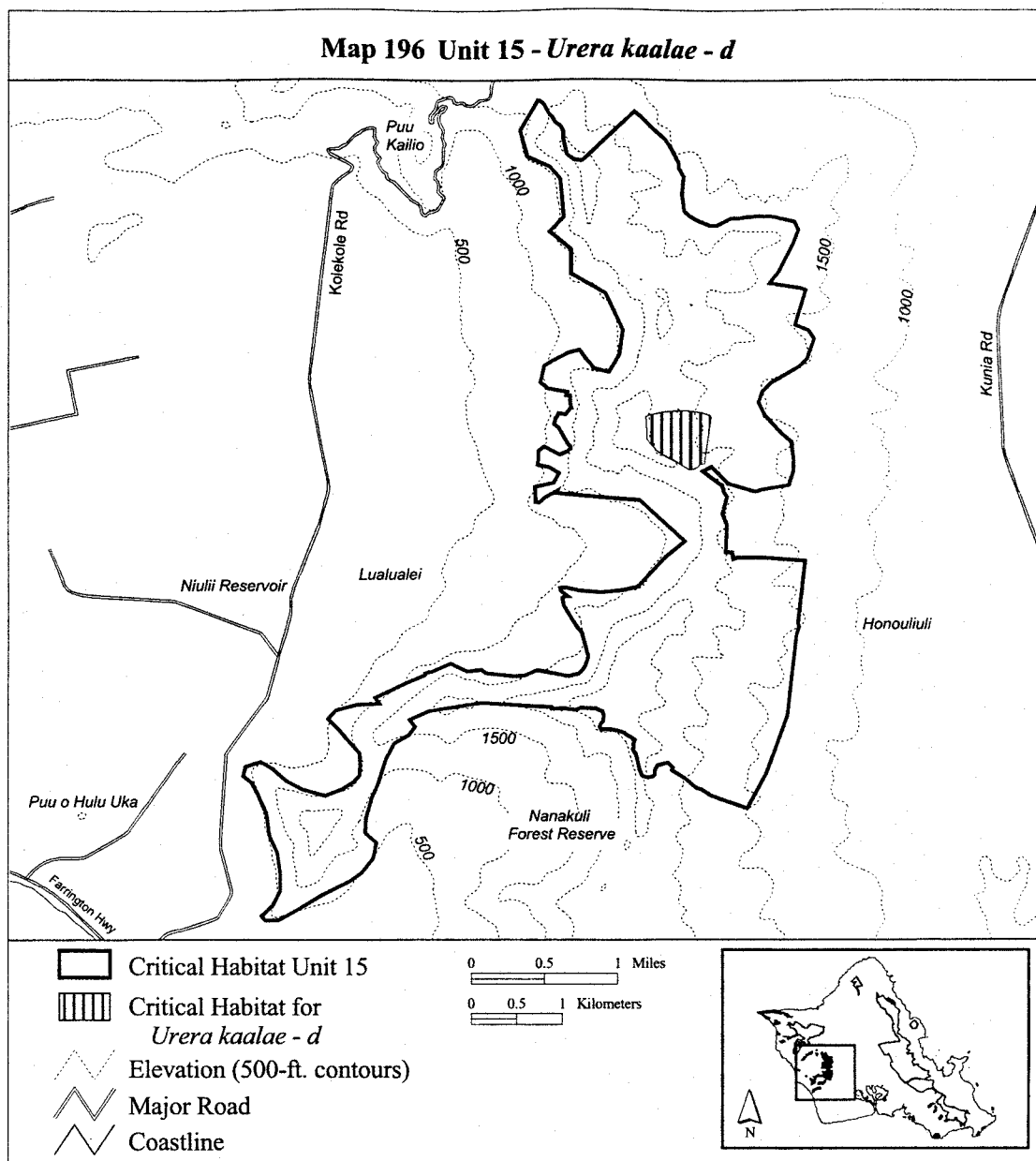
(196) Oahu 15—*Urera kaalae*—d (35 ha; 87 ac)

(i) Unit consists of the following 35 boundary points: Start at 594170, 2370879; 594172, 2370877; 594170, 2370855; 594166, 2370854; 594166, 2370853; 594164, 2370854; 594122,

2370843; 594090, 2370815; 594040, 2370789; 593996, 2370789; 593930, 2370827; 593852, 2370875; 593778, 2370907; 593716, 2370947; 593642, 2370999; 593602, 2371041; 593574, 2371067; 593558, 2371095; 593539, 2371118; 593531, 2371121; 593534, 2371173; 593519, 2371375; 593533,

2371375; 593552, 2371390; 593628, 2371404; 593716, 2371426; 593794, 2371431; 593876, 2371437; 593974, 2371435; 594036, 2371431; 594138, 2371415; 594190, 2371399; 594232, 2371385; 594246, 2371359; 594239, 2371354; return to starting point.

(ii) **Note:** Map 196 follows:



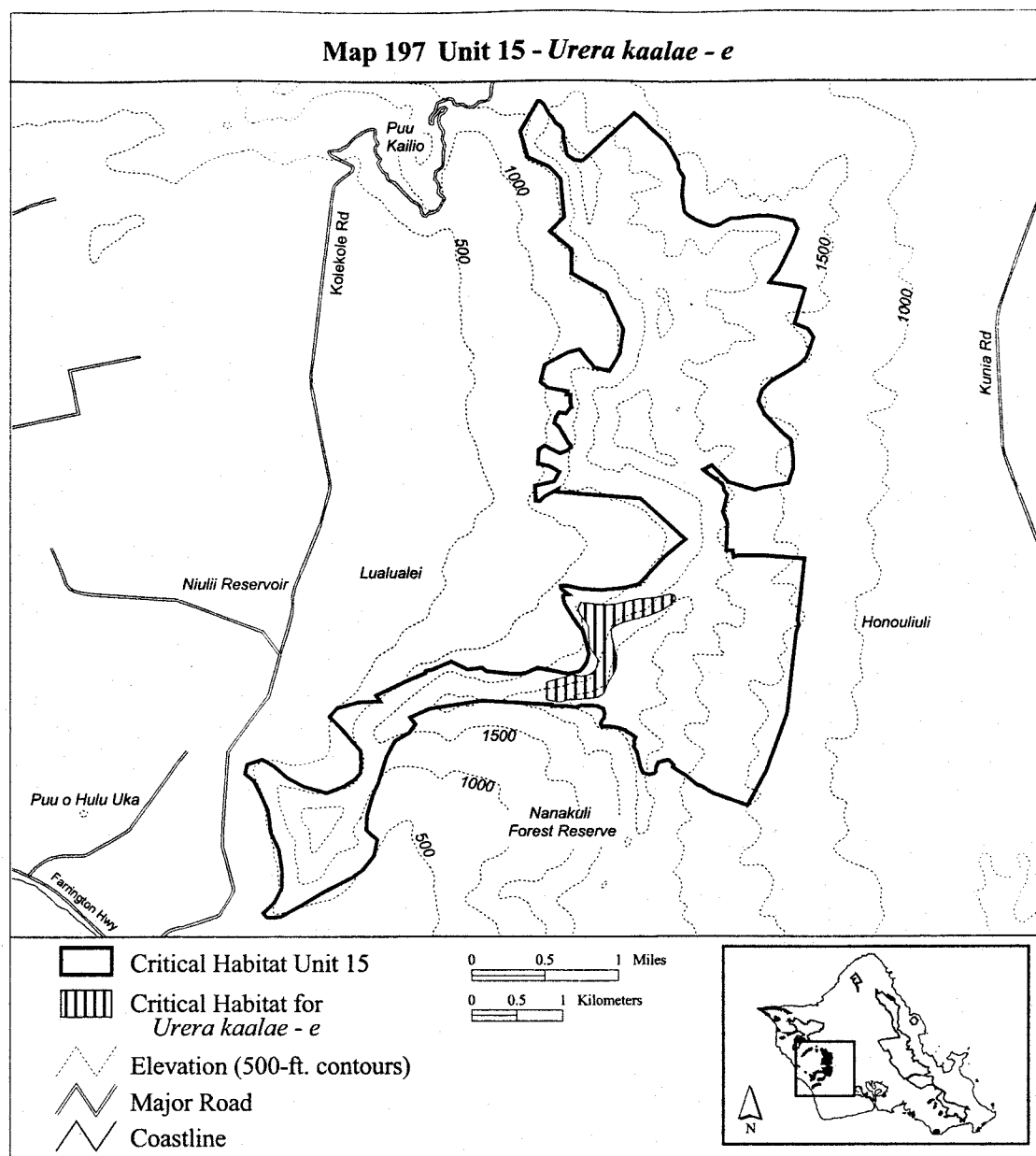
(197) Oahu 15—*Urera kaalae*—e (51 ha; 125 ac)

(i) Unit consists of the following 45 boundary points: Start at 592800, 2369299; 593043, 2369270; 593165, 2369274; 593420, 2369331; 593630, 2369355; 593788, 2369392; 593828, 2369376; 593845, 2369335; 593792, 2369270; 593687, 2369206; 593537,

2369149; 593367, 2369105; 593233, 2369068; 593136, 2369007; 593140, 2368926; 593161, 2368813; 593193, 2368696; 593189, 2368566; 593149, 2368485; 593088, 2368376; 593047, 2368283; 592979, 2368247; 592898, 2368239; 592744, 2368230; 592679, 2368230; 592566, 2368198; 592461, 2368222; 592426, 2368228; 592424, 2368417; 592713, 2368500; 592812,

2368483; 592900, 2368502; 592931, 2368518; 592969, 2368564; 592987, 2368616; 592989, 2368667; 592979, 2368688; 592926, 2368757; 592898, 2368821; 592885, 2368931; 592881, 2369036; 592849, 2369100; 592805, 2369141; 592784, 2369185; 592772, 2369226; return to starting point.

(ii) **Note:** Map 197 follows:



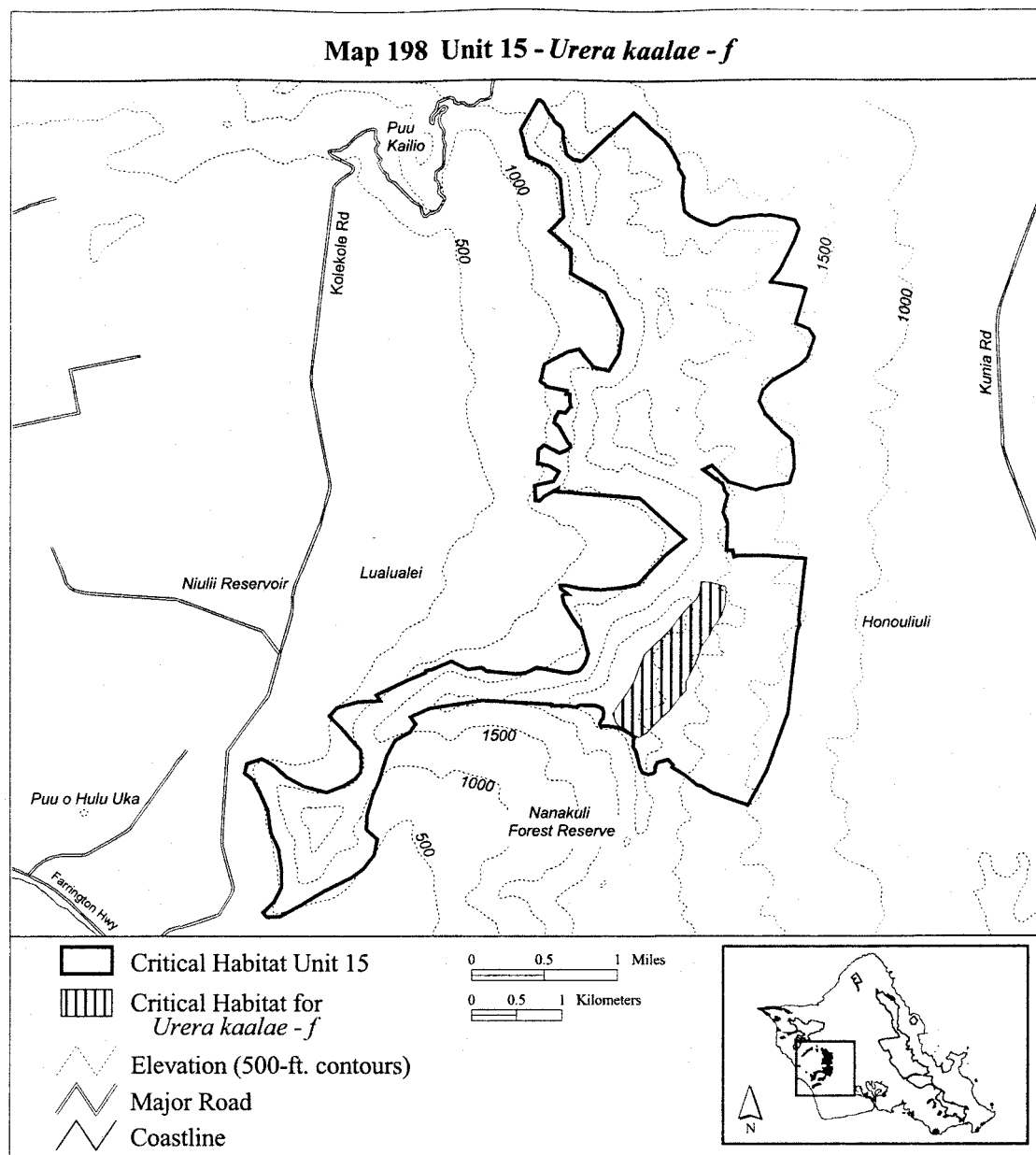
(198) Oahu 15—*Urera kaalae*—f (82 ha; 202 ac)

(i) Unit consists of the following 39 boundary points: Start at 594148, 2369525; 594213, 2369525; 594310, 2369497; 594395, 2369473; 594399, 2369392; 594387, 2369279; 594354, 2369153; 594302, 2369072; 594257,

2369015; 594213, 2368914; 594136, 2368809; 594083, 2368672; 594035, 2368550; 593966, 2368417; 593966, 2368324; 593909, 2368259; 593792, 2368105; 593675, 2368000; 593529, 2367854; 593448, 2367801; 593302, 2367874; 593242, 2367927; 593193, 2367967; 593165, 2368065; 593217, 2368150; 593314, 2368283; 593399,

2368425; 593448, 2368578; 593505, 2368716; 593622, 2368833; 593703, 2368906; 593764, 2368963; 593832, 2369044; 593901, 2369145; 594002, 2369262; 594079, 2369331; 594104, 2369396; 594120, 2369485; 594124, 2369521; return to starting point.

(ii) **Note:** Map 198 follows:



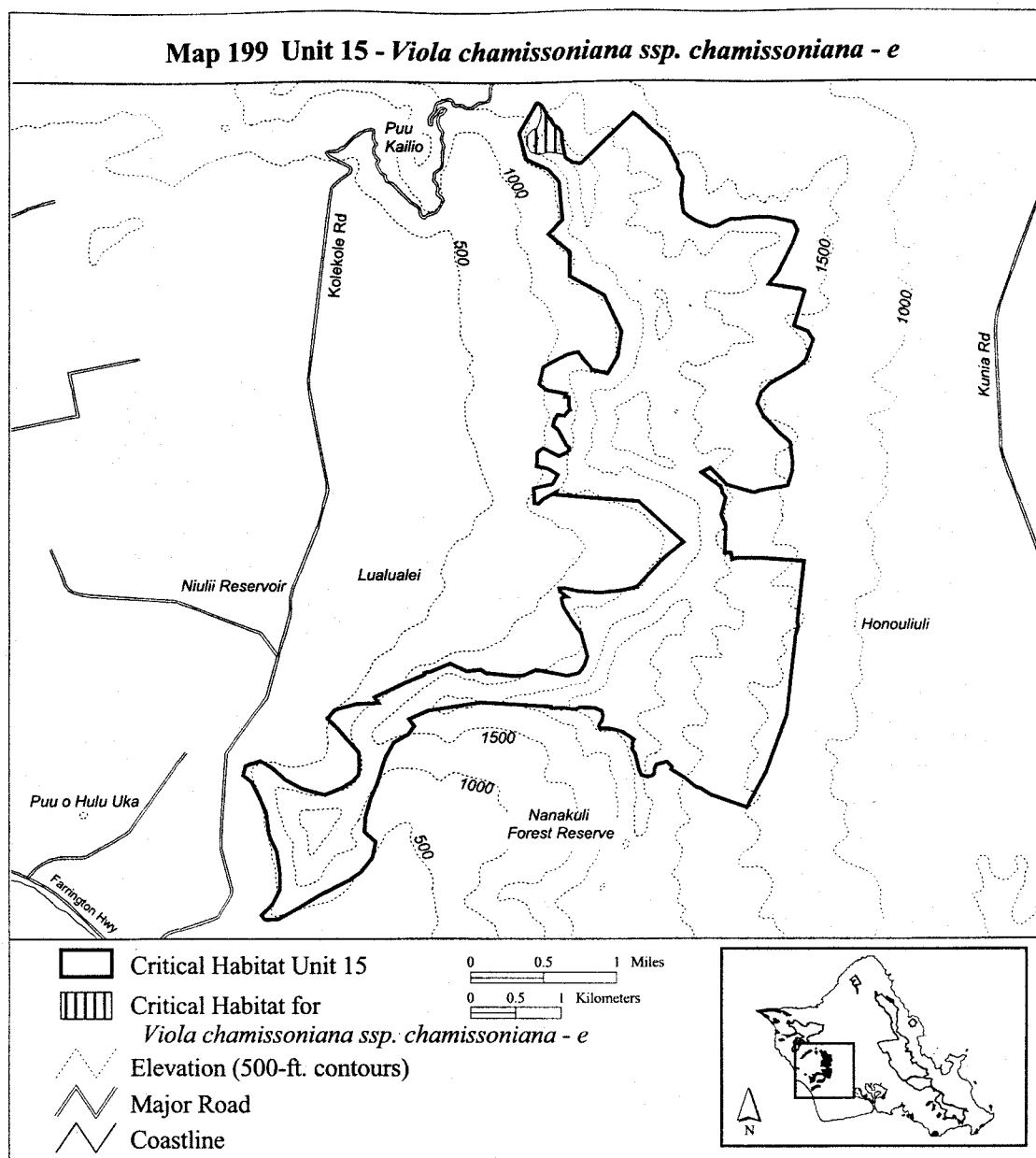
(199) Oahu 15—*Viola chamissoniana* ssp. *chamissoniana*—e (13 ha; 31 ac)

(i) Unit consists of the following 25 boundary points: Start at 592635, 2374276; 592624, 2374278; 592539, 2374292; 592462, 2374305; 592356,

2374278; 592262, 2374307; 592218, 2374388; 592214, 2374482; 592285, 2374553; 592331, 2374567; 592354, 2374630; 592379, 2374698; 592370, 2374786; 592391, 2374800; 592404, 2374781; 592454, 2374691; 592484,

2374661; 592514, 2374601; 592514, 2374600; 592574, 2374561; 592594, 2374531; 592604, 2374492; 592604, 2374422; 592634, 2374282; 592634, 2374281; return to starting point.

(ii) **Note:** Map 199 follows:



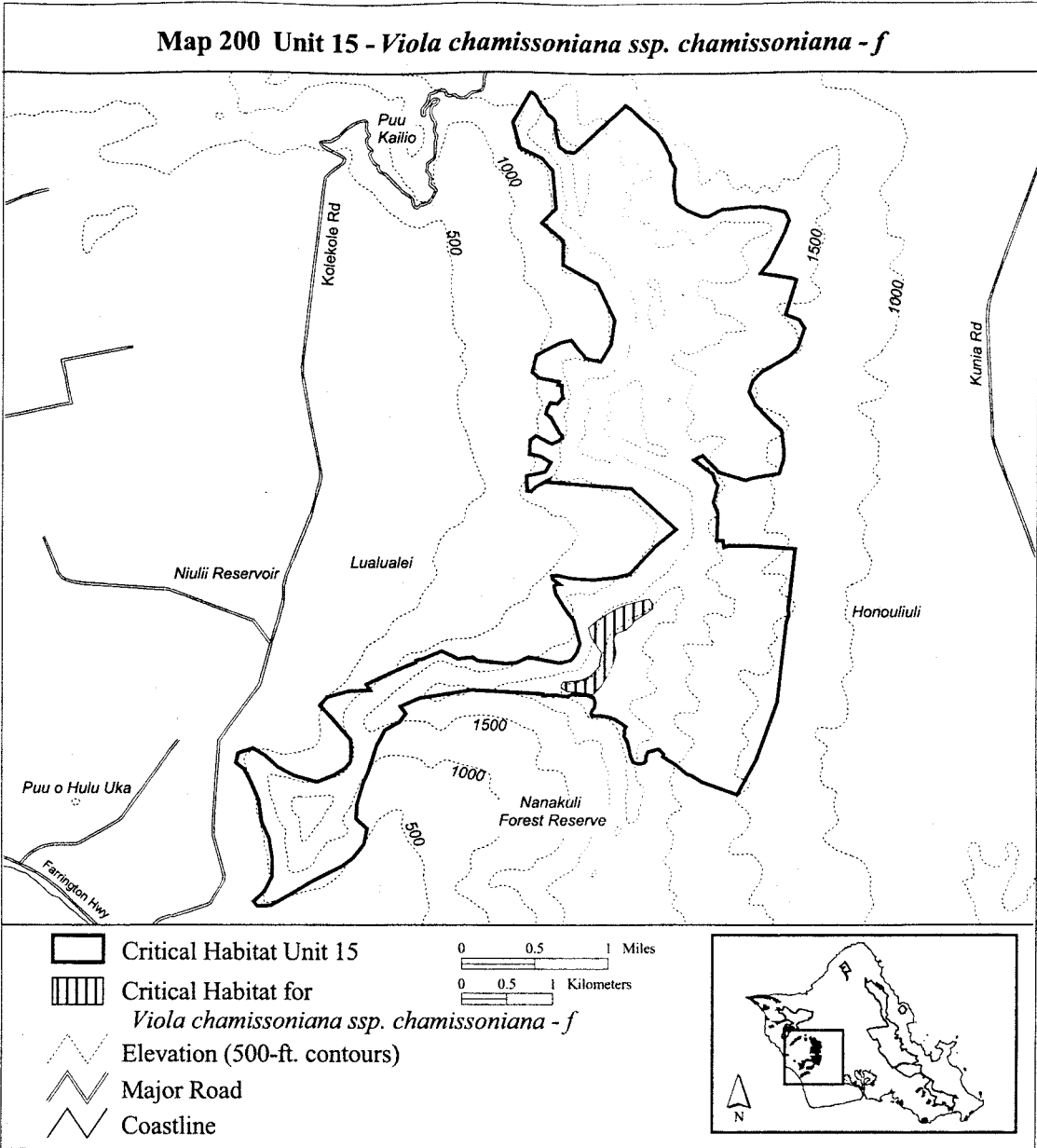
(200) Oahu 15—*Viola chamissoniana* ssp. *chamissoniana*—f (29 ha; 72 ac)

(i) Unit consists of the following 36 boundary points: Start at 593654, 2369223; 593680, 2369196; 593696, 2369173; 593696, 2369118; 593632, 2369068; 593572, 2369025; 593497, 2368977; 593467, 2368931; 593397,

2368874; 593305, 2368844; 593269, 2368785; 593269, 2368742; 593278, 2368694; 593292, 2368621; 593257, 2368493; 593203, 2368370; 593136, 2368267; 593043, 2368167; 592874, 2368187; 592760, 2368199; 592689, 2368242; 592689, 2368267; 592714, 2368301; 592817, 2368313; 592917,

2368322; 593009, 2368367; 593061, 2368427; 593107, 2368466; 593116, 2368543; 593134, 2368621; 593095, 2368676; 593013, 2368803; 592986, 2368904; 593098, 2368995; 593280, 2369105; 593410, 2369162; return to starting point.

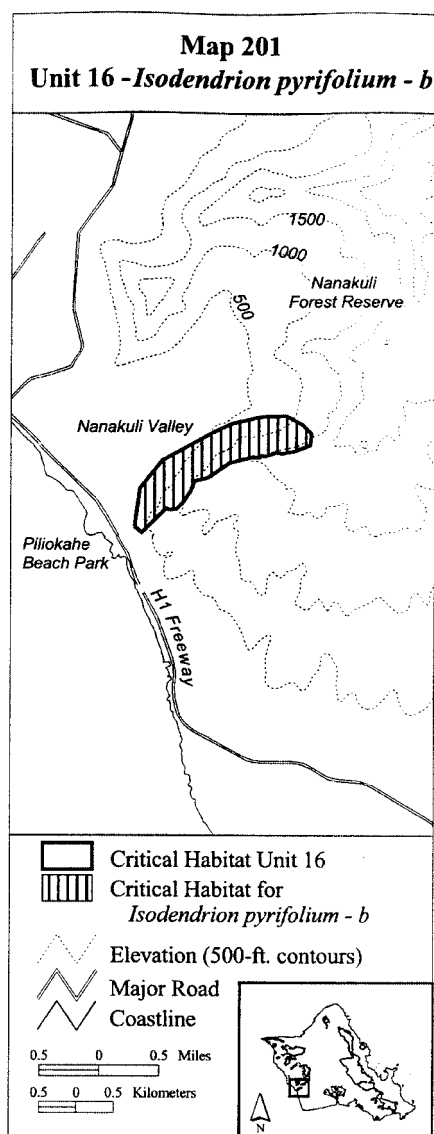
(ii) **Note:** Map 200 follows:



(201) Oahu 16—*Isodendron pyrifolium*—b (129 ha; 319 ac)

(i) Unit consists of the following 27 boundary points: Start at 589674, 2363678; 589752, 2364203; 590044, 2364573; 590689, 2364934; 590964, 2365071; 591394, 2365166; 591712, 2365175; 591919, 2365063; 592048, 2364934; 592031, 2364779; 591841, 2364702; 591661, 2364667; 591575, 2364684; 591436, 2364630; 591377, 2364641; 591346, 2364612; 591265, 2364624; 590956, 2364547; 590672, 2364349; 590483, 2364289; 590427, 2364155; 590381, 2364088; 590344, 2364028; 590236, 2363915; 590142, 2363906; 590096, 2363919; 589769, 2363592; return to starting point.

(ii) Note: Map 201 follows:

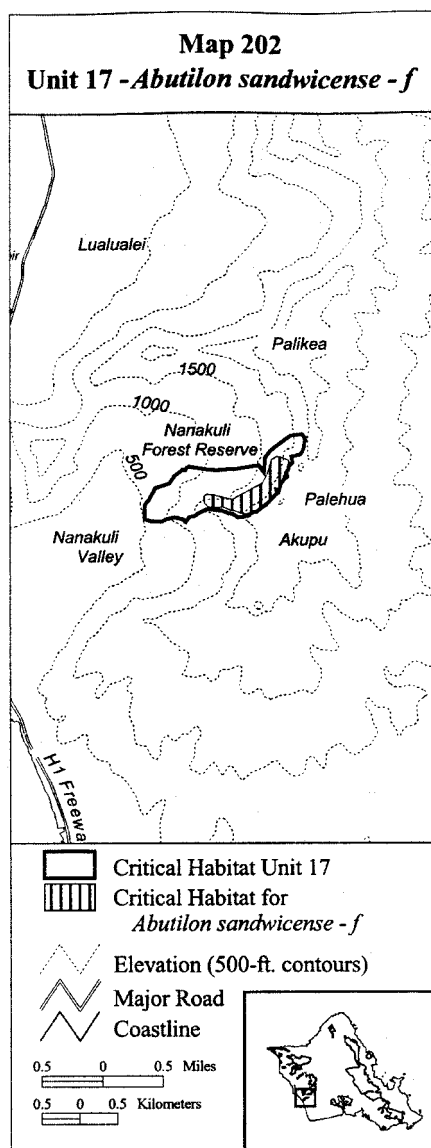


(202) Oahu 17—*Abutilon sandwicense*—f (30 ha; 74 ac)

(i) Unit consists of the following 35 boundary points: Start at 592994,

2366343; 592976, 2366353; 592994, 2366336; 593014, 2366317; 592998, 2366299; 592891, 2366183; 592730, 2366057; 592556, 2366026; 592434, 2366070; 592410, 2366082; 592411, 2366067; 592292, 2366117; 592150, 2366120; 592089, 2366117; 592037, 2366172; 592025, 2366265; 592072, 2366291; 592156, 2366282; 592272, 2366253; 592402, 2366227; 592815, 2366444; 592814, 2366444; 592869, 2366563; 592895, 2366650; 592924, 2366746; 592999, 2366801; 593089, 2366775; 593150, 2366749; 593167, 2366705; 593157, 2366664; 593144, 2366609; 593098, 2366549; 593089, 2366526; 593054, 2366433; 593025, 2366325; return to starting point.

(ii) Note: Map 202 follows:

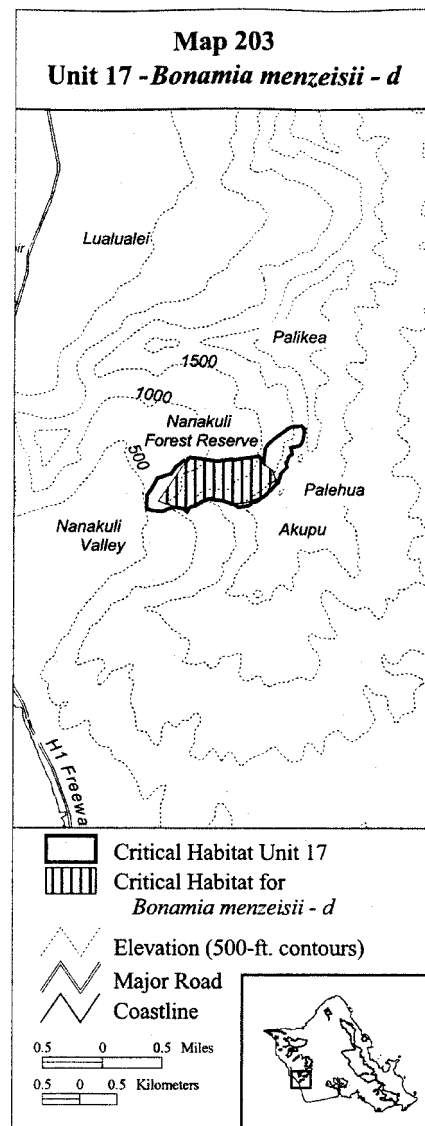


(203) Oahu 17—*Bonamia menziesii*—d (77 ha; 191 ac)

(i) Unit consists of the following 17 boundary points: Start at 591812,

2366666; 592269, 2366597; 592755, 2366681; 592869, 2366536; 592937, 2366491; 592983, 2366354; 592922, 2366301; 592854, 2366149; 592580, 2366042; 592390, 2366027; 592124, 2366118; 591828, 2365981; 591790, 2365921; 591743, 2365955; 591626, 2365984; 591501, 2366027; 591402, 2366065; return to starting point.

(ii) Note: Map 203 follows:

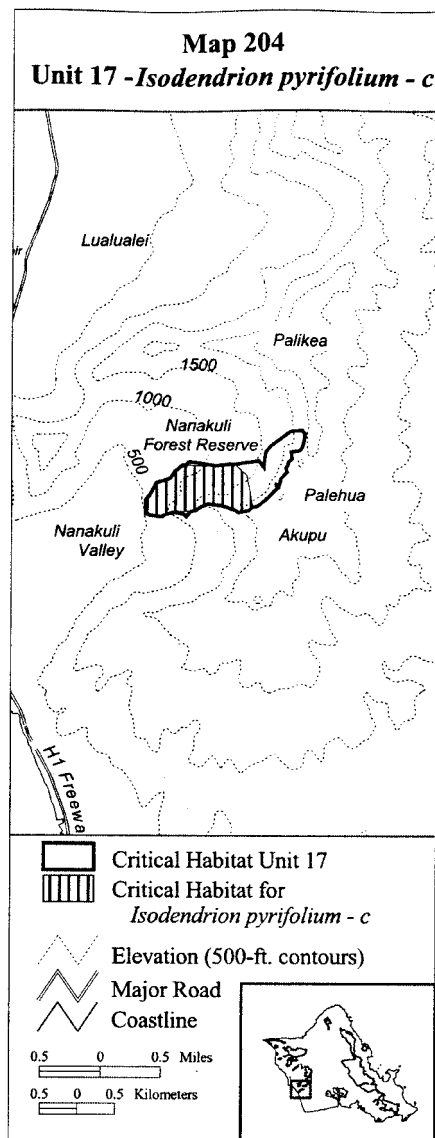


(204) Oahu 17—*Isodendron pyrifolium*—c (73 ha; 181 ac)

(i) Unit consists of the following 22 boundary points: Start at 591235, 2365957; 591239, 2366138; 591300, 2366224; 591386, 2366378; 591566, 2366439; 591626, 2366525; 591738, 2366619; 591962, 2366602; 592194, 2366611; 592375, 2366636; 592452, 2366619; 592598, 2366482; 592676, 2366052; 592624, 2366000; 592478, 2365983; 592383, 2366052; 592031, 2366103; 591910, 2366000; 591669,

2365991; 591529, 2365960; 591455, 2365921; 591308, 2365932; return to starting point.

(ii) **Note:** Map 204 follows:

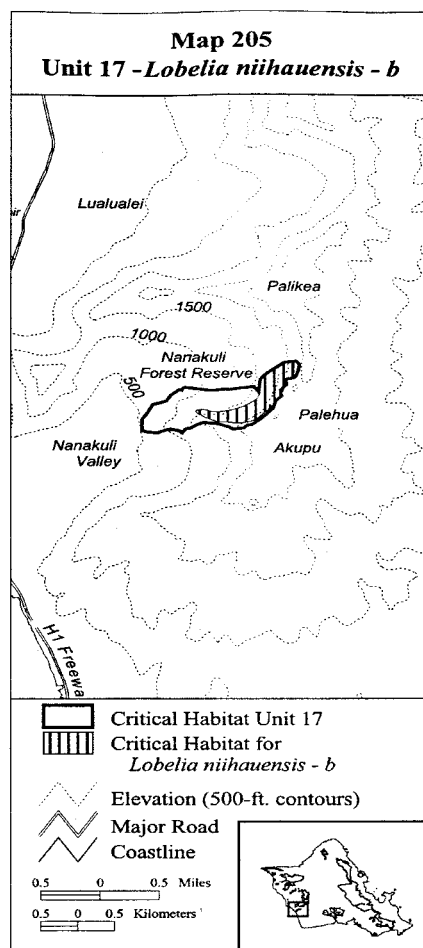


(205) Oahu 17—*Lobelia niihauensis*—b
(41 ha; 102 ac)

(i) Unit consists of the following 48 boundary points: Start at 592843, 2366793; 592908, 2366869; 592974, 2366924; 593065, 2366996; 593127, 2367041; 593182, 2367075; 593337, 2367089; 593376, 2367046; 593376, 2367000; 593359, 2366917; 593323, 2366838; 593307, 2366815; 593193, 2366797; 593208, 2366729; 593203, 2366707; 593187, 2366695; 593187, 2366685; 593167, 2366671; 593128, 2366644; 593113, 2366633; 593111, 2366632; 593108, 2366630; 593137, 2366522; 593041, 2366425; 593003, 2366356; 592993, 2366345; 592939, 2366286; 592865, 2366205; 592776, 2366134; 592669, 2366095; 592545,

2366081; 592385, 2366091; 592258, 2366105; 592182, 2366138; 592101, 2366174; 592048, 2366208; 591991, 2366236; 591972, 2366272; 592007, 2366301; 592074, 2366298; 592208, 2366265; 592323, 2366270; 592466, 2366291; 592621, 2366353; 592719, 2366413; 592798, 2366475; 592822, 2366523; 592835, 2366686; return to starting point.

(ii) **Note:** Map 205 follows:

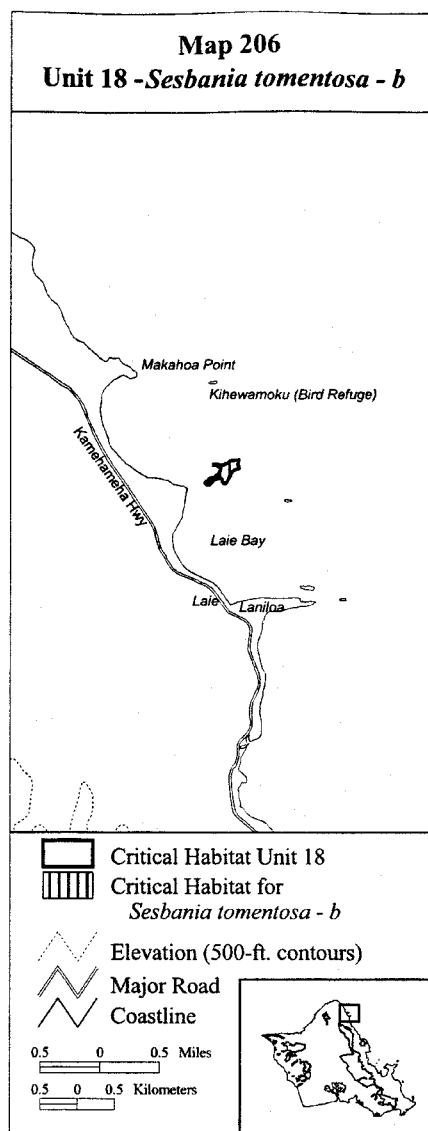


(206) Oahu 18—*Sesbania tomentosa*—b
(5 ha; 12 ac)

(i) Unit consists of the following 117 boundary points: Start at 611637, 2395945; 611637, 2395929; 611616, 2395921; 611615, 2395920; 611614, 2395917; 611607, 2395917; 611580, 2395908; 611568, 2395898; 611548, 2395879; 611547, 2395879; 611541, 2395867; 611531, 2395852; 611526, 2395843; 611526, 2395842; 611525, 2395838; 611516, 2395820; 611515, 2395820; 611515, 2395819; 611515,

2395816; 611514, 2395815; 611513, 2395815; 611513, 2395814; 611513, 2395812; 611503, 2395782; 611494, 2395764; 611485, 2395755; 611473, 2395746; 611461, 2395745; 611455, 2395746; 611442, 2395756; 611436, 2395770; 611426, 2395795; 611425, 2395796; 611418, 2395802; 611417, 2395802; 611396, 2395803; 611373, 2395803; 611357, 2395799; 611335, 2395788; 611334, 2395788; 611326, 2395777; 611297, 2395742; 611285, 2395734; 611274, 2395729; 611254, 2395726; 611244, 2395728; 611235, 2395735; 611232, 2395741; 611232, 2395751; 611241, 2395762; 611259, 2395772; 611264, 2395778; 611264, 2395779; 611263, 2395786; 611269, 2395793; 611283, 2395803; 611338, 2395824; 611363, 2395837; 611366, 2395843; 611373, 2395846; 611374, 2395846; 611388, 2395856; 611389, 2395857; 611400, 2395879; 611407, 2395896; 611408, 2395897; 611408, 2395907; 611412, 2395912; 611412, 2395913; 611413, 2395928; 611413, 2395929; 611412, 2395930; 611411, 2395935; 611411, 2395936; 611405, 2395947; 611404, 2395948; 611399, 2395953; 611398, 2395953; 611384, 2395959; 611383, 2395959; 611355, 2395966; 611331, 2395970; 611330, 2395972; 611330, 2395978; 611337, 2395983; 611350, 2395984; 611365, 2395984; 611396, 2395977; 611419, 2395970; 611438, 2395969; 611439, 2395969; 611452, 2395973; 611453, 2395973; 611466, 2395982; 611477, 2395986; 611492, 2395990; 611493, 2395990; 611504, 2395995; 611504, 2395996; 611506, 2395998; 611510, 2396001; 611525, 2396016; 611537, 2396021; 611607, 2396032; 611622, 2396032; 611629, 2396030; 611631, 2396025; 611630, 2396005; 611624, 2395990; 611624, 2395989; 611625, 2395973; 611625, 2395972; 611627, 2395969; 611630, 2395961; 611633, 2395953; 611633, 2395952; 611635, 2395949; return to starting point.

(ii) **Note:** Map 206 follows:



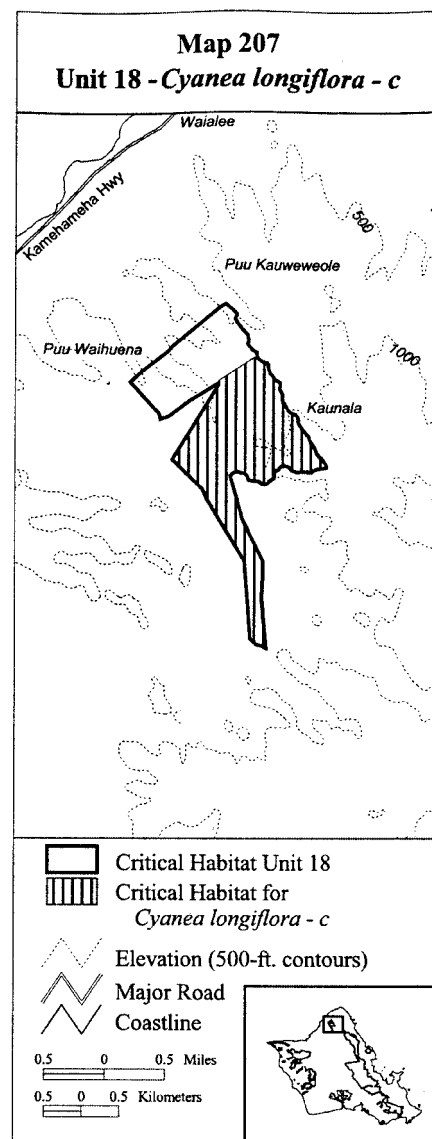
(207) Oahu 19—*Cyanea longiflora*—c
(324 ha; 801 ac)

(i) Unit consists of the following 202 boundary points: Start at 603332, 2393228; 603224, 2393213; 603164, 2393200; 603163, 2393200; 603142, 2393184; 603108, 2393154; 603094, 2393152; 603083, 2393152; 603072, 2393157; 603054, 2393168; 603053, 2393169; 603021, 2393169; 602988, 2393169; 602983, 2393171; 602982, 2393172; 602982, 2393171; 602952, 2393170; 602918, 2393162; 602897, 2393161; 602869, 2393169; 602816, 2393190; 602806, 2393196; 602781, 2393232; 602780, 2393232; 602758, 2393252; 602757, 2393252; 602739, 2393260; 602738, 2393260; 602711, 2393260; 602662, 2393250; 602641, 2393240; 602635, 2393232; 602634, 2393232; 602624, 2393209; 602616, 2393201; 602579, 2393186; 602578, 2393186; 602578, 2393185; 602567, 2393167; 602567, 2393166; 602564,

2393147; 602554, 2393122; 602554, 2393121; 602556, 2393090; 602549, 2393075; 602492, 2393031; 602478, 2393024; 602477, 2393024; 602477, 2393023; 602467, 2393006; 602445, 2392990; 602419, 2392980; 602394, 2392979; 602382, 2392983; 602341, 2393005; 602325, 2393016; 602322, 2393020; 602321, 2393021; 602289, 2393025; 602244, 2393025; 602190, 2393036; 602171, 2393049; 602155, 2393069; 602138, 2393109; 602127, 2393127; 602126, 2393127; 602118, 2393136; 602118, 2393137; 602094, 2393149; 602093, 2393149; 602071, 2393152; 602048, 2393154; 602026, 2393164; 602013, 2393171; 602012, 2393171; 601992, 2393174; 601980, 2393173; 601979, 2393173; 601924, 2393139; 601898, 2393113; 601898, 2393112; 601897, 2393112; 601897, 2393111; 601907, 2393068; 601978, 2392805; 602085, 2392443; 602110, 2392392; 602148, 2392315; 602150, 2392310; 602186, 2392236; 602370, 2391859; 602391, 2391819; 602383, 2391680; 602368, 2391295; 602366, 2391244; 602439, 2390510; 602435, 2390510; 602412, 2390526; 602382, 2390544; 602370, 2390550; 602369, 2390550; 602314, 2390563; 602299, 2390568; 602284, 2390576; 602227, 2390632; 602226, 2390633; 602204, 2390649; 602106, 2391826; 601550, 2392745; 601471, 2392922; 601043, 2393341; 601032, 2393359; 601715, 2394477; 601720, 2394541; 602274, 2394909; 602311, 2394883; 602318, 2394874; 602318, 2394873; 602338, 2394854; 602339, 2394854; 602344, 2394852; 602375, 2394834; 602415, 2394825; 602444, 2394812; 602454, 2394803; 602460, 2394785; 602461, 2394763; 602463, 2394753; 602467, 2394734; 602482, 2394683; 602499, 2394652; 602500, 2394652; 602520, 2394623; 602547, 2394585; 602564, 2394566; 602565, 2394566; 602606, 2394536; 602607, 2394536; 602621, 2394530; 602638, 2394521; 602641, 2394514; 602641, 2394513; 602642, 2394513; 602645, 2394510; 602645, 2394489; 602642, 2394462; 602636, 2394450; 602636, 2394449; 602632, 2394427; 602632, 2394426; 602640, 2394398; 602640, 2394397; 602674, 2394348; 602678, 2394329; 602673, 2394297; 602677, 2394247; 602677, 2394246; 602687, 2394224; 602704, 2394204; 602768, 2394098; 602768, 2394097; 602769, 2394097; 602793, 2394068; 602793, 2394067; 602794, 2394067; 602801, 2394063; 602827, 2394049; 602828, 2394049; 602844, 2394045; 602871, 2394032; 602887, 2394018; 602900, 2394002; 602916, 2393968; 602910, 2393929; 602910, 2393912; 602910, 2393911; 602933,

2393881; 602988, 2393800; 603003, 2393780; 603040, 2393735; 603041, 2393735; 603051, 2393726; 603070, 2393696; 603083, 2393654; 603104, 2393614; 603105, 2393614; 603125, 2393588; 603155, 2393538; 603167, 2393516; 603193, 2393448; 603201, 2393431; 603201, 2393430; 603202, 2393430; 603213, 2393417; 603232, 2393392; 603233, 2393391; 603242, 2393389; 603275, 2393357; 603287, 2393339; 603325, 2393282; 603333, 2393261; 603332, 2393229; return to starting point.

(ii) Note: Map 207 follows:

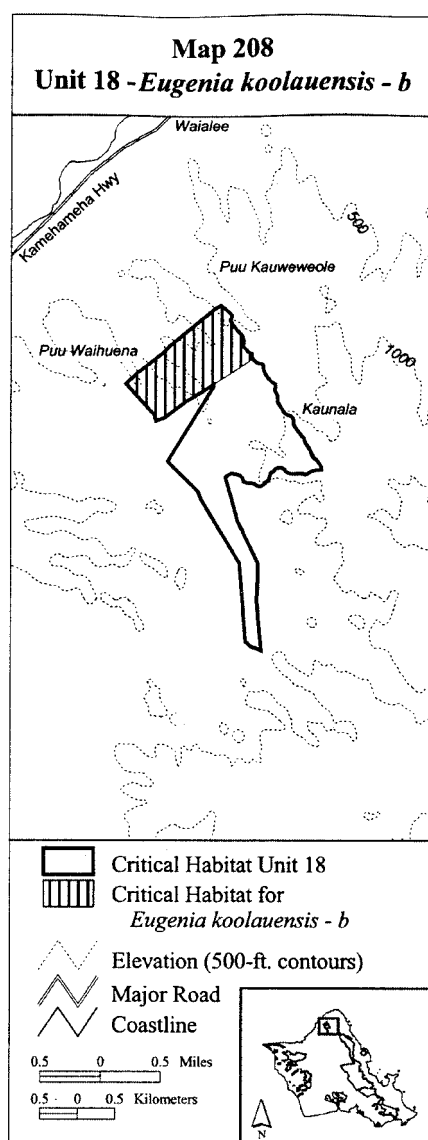


(208) Oahu 19—*Eugenia koolauensis*—b
(150 ha; 371 ac)

(i) Unit consists of the following 56 boundary points: Start at 600799, 2394083; 600408, 2394520; 600561, 2394661; 600963, 2394982; 601045, 2395072; 601721, 2395631; 601756, 2395655; 601822, 2395697; 601906,

2395628; 601960, 2395579; 601990, 2395546; 601990, 2395525; 601973, 2395502; 601972, 2395501; 601966, 2395486; 601966, 2395485; 601965, 2395470; 601965, 2395469; 601970, 2395453; 601970, 2395452; 601978, 2395439; 601979, 2395439; 601982, 2395435; 602044, 2395359; 602081, 2395304; 602121, 2395260; 602130, 2395252; 602146, 2395229; 602160, 2395198; 602167, 2395166; 602167, 2395141; 602163, 2395125; 602156, 2395114; 602155, 2395114; 602155, 2395113; 602152, 2395099; 602152, 2395098; 602152, 2395097; 602174, 2395061; 602175, 2395061; 602213, 2395027; 602220, 2395021; 602219, 2395012; 602220, 2395011; 602282, 2394972; 602287, 2394960; 602292, 2394915; 602292, 2394914; 602302, 2394895; 602293, 2394888; 602107, 2394761; 601575, 2394420; 601284, 2394239; 600993, 2394008; 600858, 2393961; 600831, 2394050; return to starting point.

(ii) **Note:** Map 208 follows:



(209) Oahu 20—*Adenophorus periens*—a (712 ha; 1,758 ac)

(i) Unit consists of the following 450 boundary points: Start at 609139, 2387002; 609180, 2387197; 609315, 2387390; 609551, 2387406; 609696, 2387428; 609933, 2387428; 610245, 2387401; 610530, 2387353; 610777, 2387261; 611143, 2387127; 611520, 2386933; 611756, 2386783; 611832, 2386702; 611939, 2386481; 611993, 2386266; 612041, 2386089; 612160, 2385949; 612246, 2385852; 612310, 2385707; 612386, 2385546; 612407, 2385347; 612412, 2385196; 612444, 2385120; 612450, 2385121; 612447, 2385113; 612456, 2385094; 612440, 2385093; 612337, 2384814; 612300, 2384696; 612300, 2384615; 612273, 2384427; 612273, 2384292; 612213, 2384153; 612278, 2383916; 612326, 2383679; 612262, 2383518; 612203, 2383432; 612144, 2383319; 612084, 2383179; 612084, 2383002; 612084,

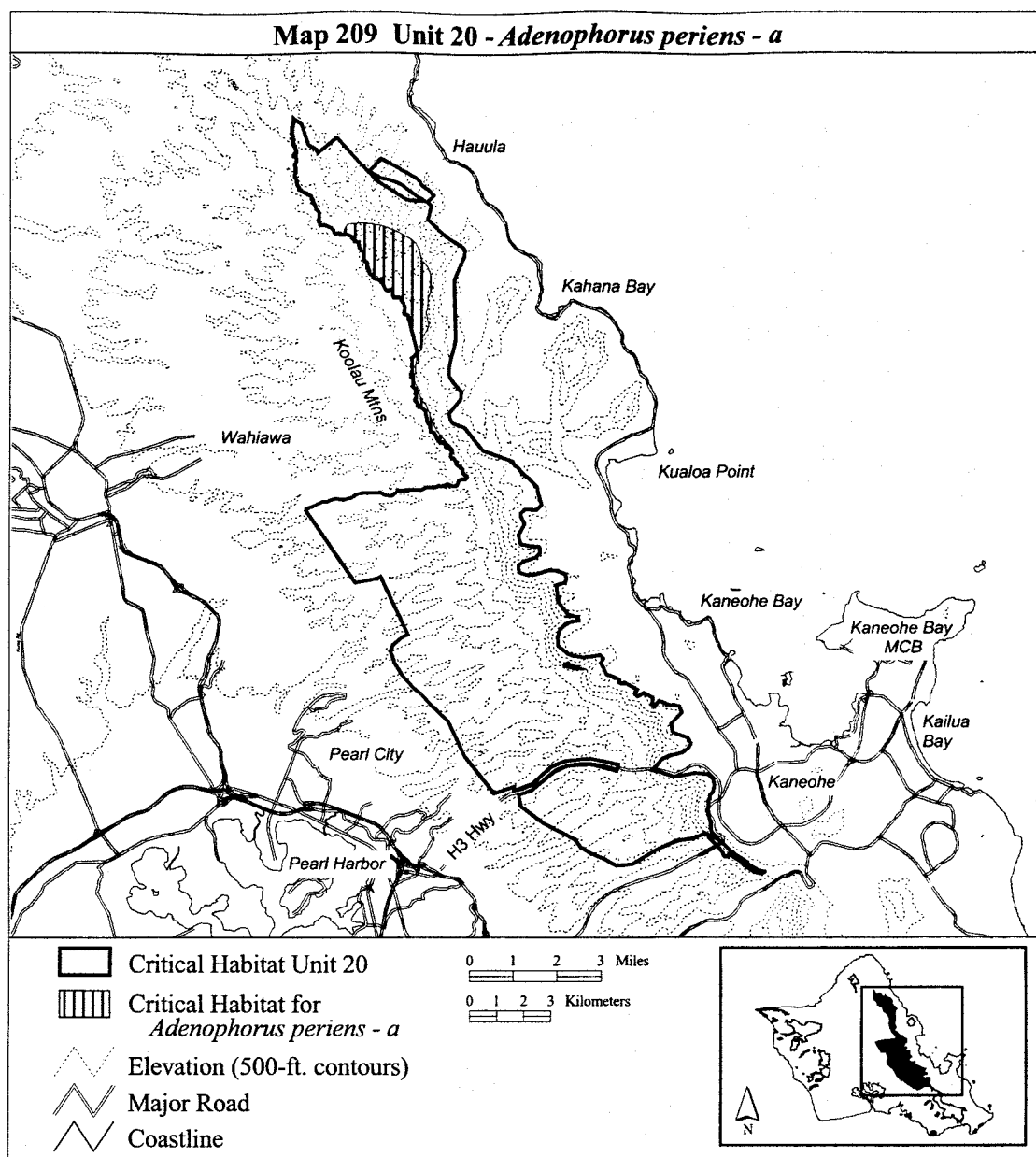
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2387021; 609184, 2387014; return to
starting point.

(ii) **Note:** Map 209 follows:



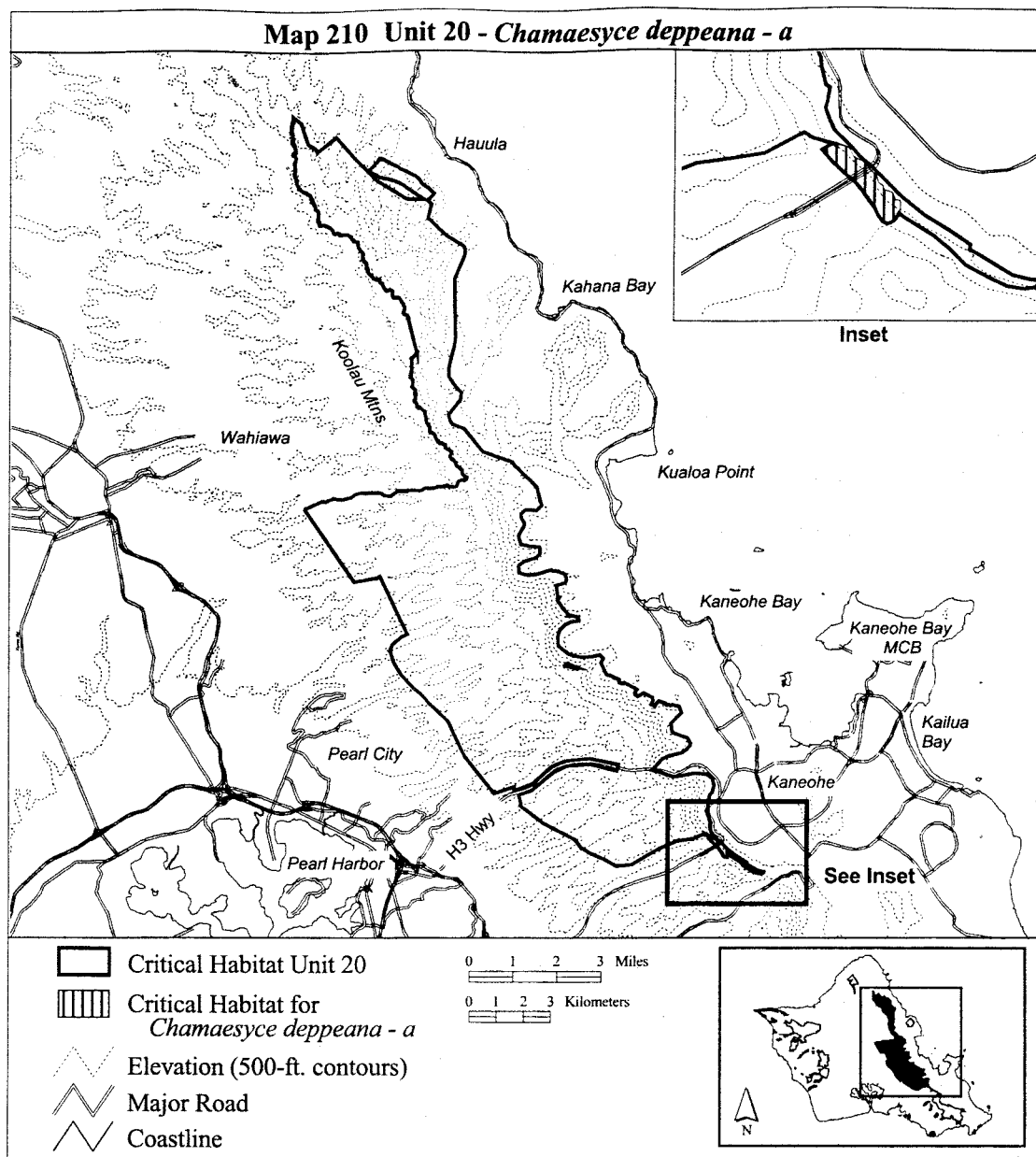
(210) Oahu 20—*Chamaesyce deppeana*—a (18 ha; 44 ac)

(i) Unit consists of the following 48 boundary points: Start at 622671, 2364767; 622720, 2364796; 622771, 2364821; 622817, 2364830; 622857, 2364807; 622899, 2364799; 622920, 2364796; 622942, 2364771; 622976, 2364700; 623023, 2364673; 623074, 2364653; 623094, 2364624; 623117,

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(ii) **Note:** Map 210 follows:



(211) Oahu 20—*Chamaesyce rockii*—a
(825 ha; 2,039 ac)

(i) Unit consists of the following 363 boundary points: Start at 608102,

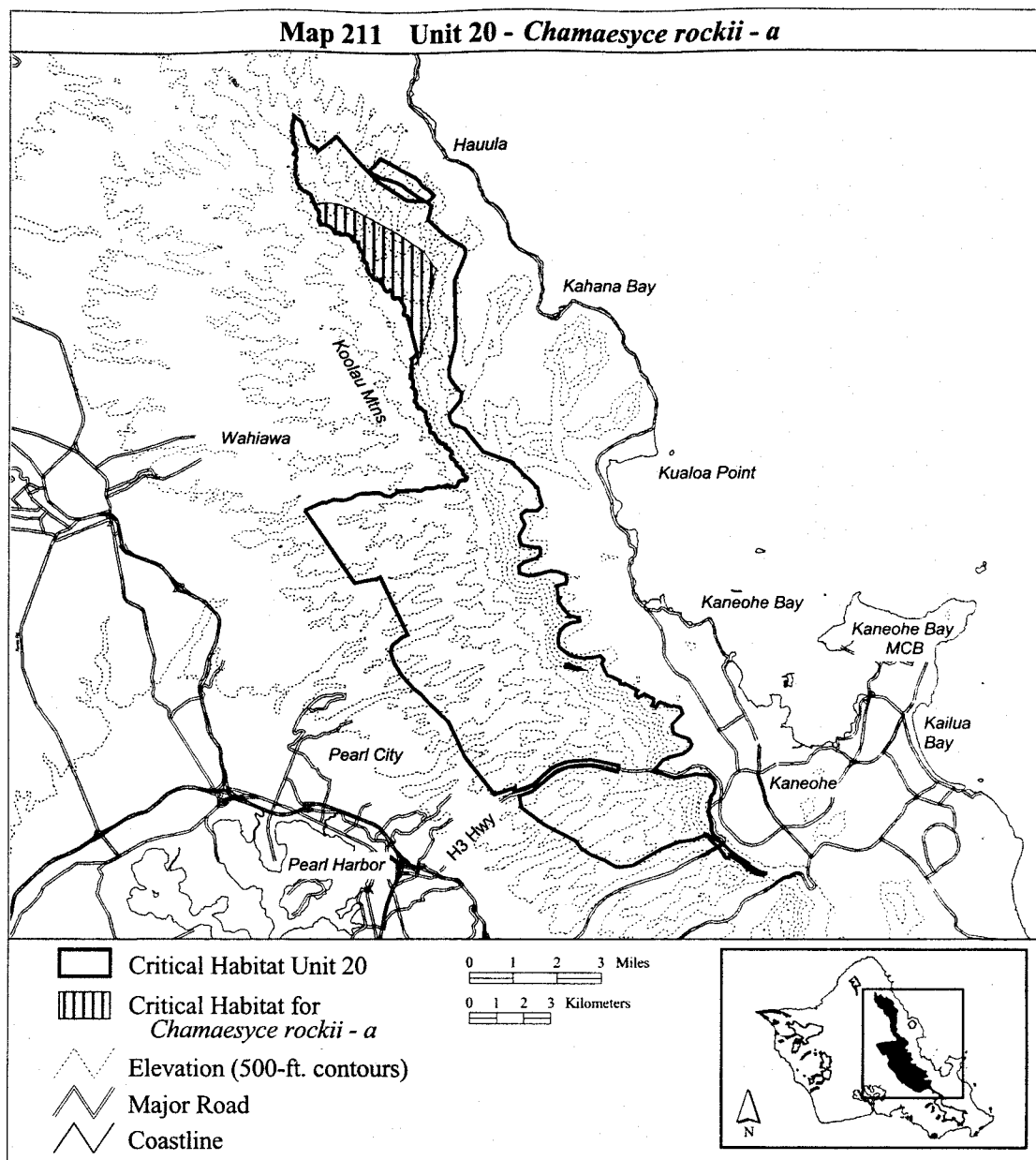
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(ii) **Note:** Map 211 follows:



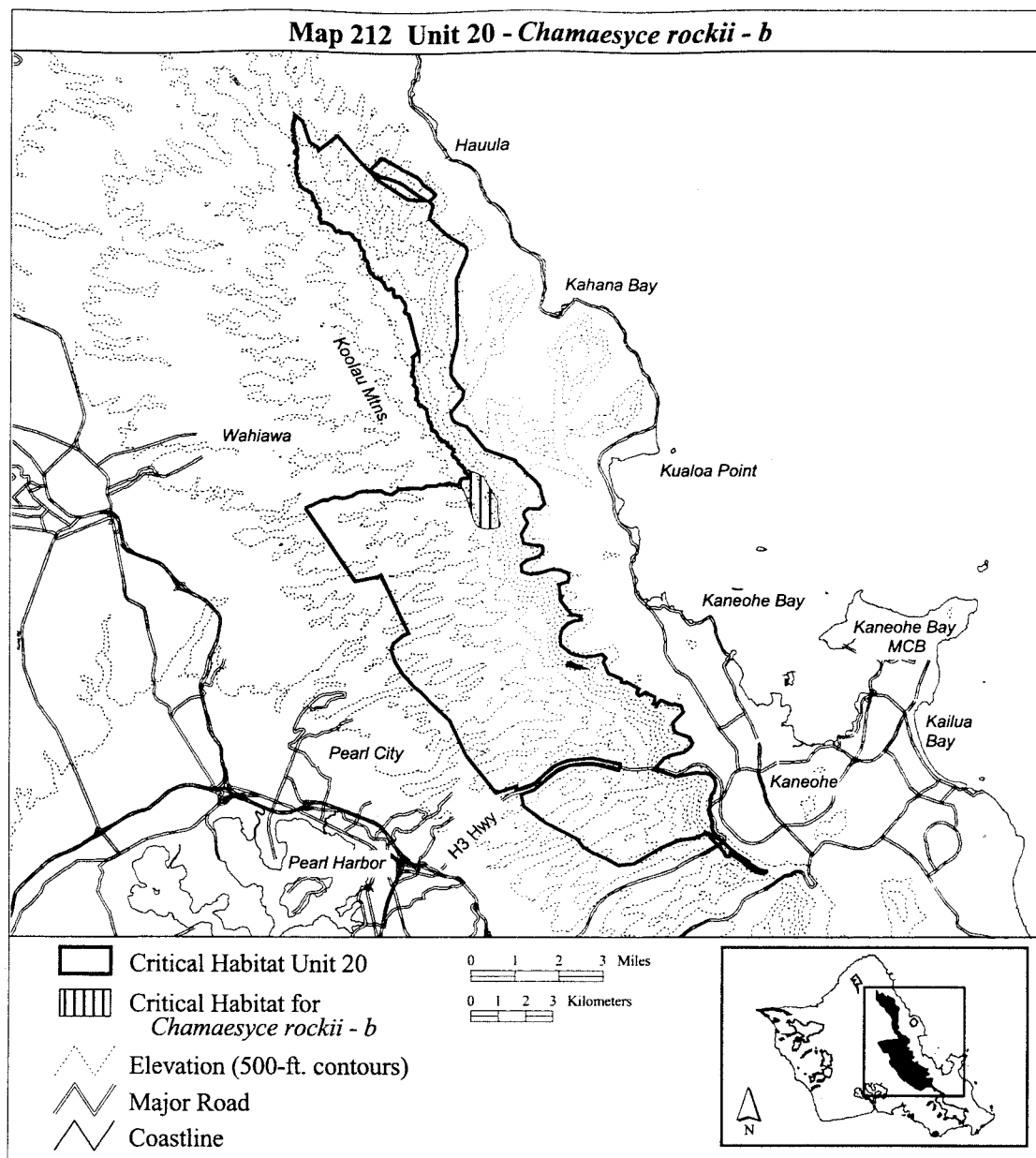
(212) Oahu 20—*Chamaesyce rockii*—b
(197 ha; 487 ac)

(i) Unit consists of the following 49 boundary points: Start at 613058, 2377772; 613083, 2377776; 613146, 2377768; 613220, 2377736; 613266, 2377726; 613342, 2377738; 613361, 2377750; 613368, 2377747; 613413, 2377754; 613415, 2377755; 613449, 2377784; 613454, 2377825; 613460,

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(ii) **Note:** Map 212 follows:



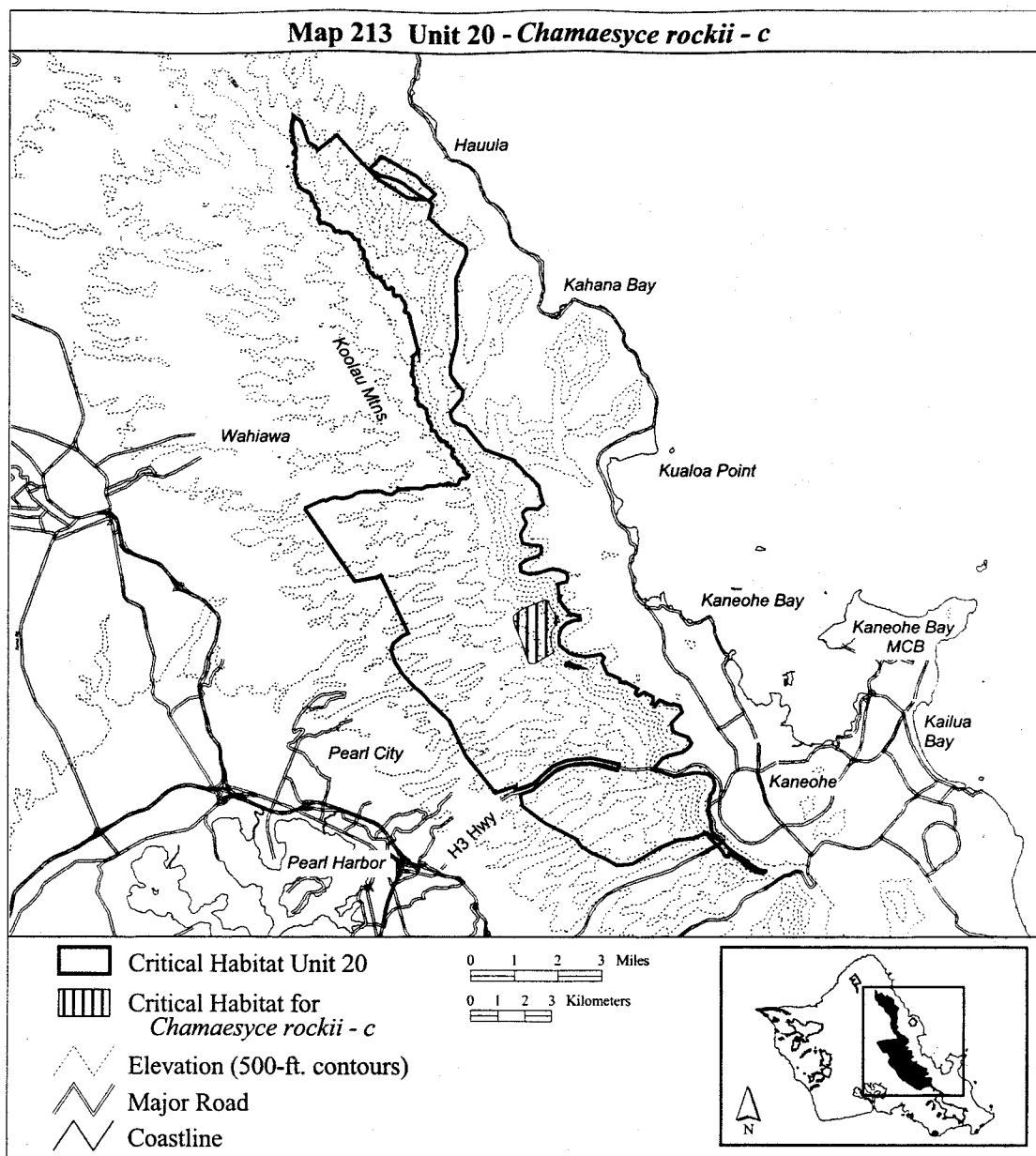
(213) Oahu 20—*Chamaesyce rockii*—c
(258 ha; 639 ac)

(i) Unit consists of the following 24 boundary points: Start at 616808, 2373189; 616937, 2372986; 617094, 2372792; 617131, 2372718; 616965,

2372533; 616836, 2372311; 616817, 2372043; 616836, 2371794; 616963, 2371582; 616212, 2371122; 616003, 2371142; 615865, 2371461; 615736, 2371941; 615496, 2372468; 615422, 2372690; 615413, 2372893; 615625,

2373078; 615810, 2373180; 616106, 2373309; 616457, 2373448; 616623, 2373503; 616697, 2373457; 616752, 2373448; 616752, 2373337; return to starting point.

(ii) **Note:** Map 213 follows:



(214) Oahu 20—*Cyanea acuminata*—b
(2,522 ha; 6,231 ac)

(i) Unit consists of the following 537 boundary: Start at 612247, 2377695;

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612482, 2377684; 612483, 2377688;
612505, 2377688; 612575, 2377698;
612596, 2377708; 612604, 2377703;
612630, 2377702; 612668, 2377720;
612688, 2377749; 612686, 2377751;
612705, 2377757; 612764, 2377738;
612765, 2377738; 612794, 2377742;
612814, 2377728; 612853, 2377742;
612870, 2377747; 613040, 2377760;
613059, 2377772; 613059, 2377774;
613085, 2377777; 613154, 2377768;
613224, 2377738; 613264, 2377728;

613265, 2377728; 613335, 2377738;
613336, 2377738; 613359, 2377752;
613368, 2377747; 613413, 2377754;
613415, 2377755; 613449, 2377784;
613454, 2377825; 613460, 2377881;
613497, 2377929; 613554, 2377977;
613555, 2377987; 613674, 2377978;
613675, 2377978; 613694, 2377988;
613721, 2377976; 613733, 2377976;
613762, 2378001; 613771, 2378068;
613764, 2378090; 613757, 2378093;
613753, 2378093; 613751, 2378091;
613747, 2378094; 613746, 2378095;
613718, 2378106; 613711, 2378117;
613691, 2378143; 613660, 2378168;
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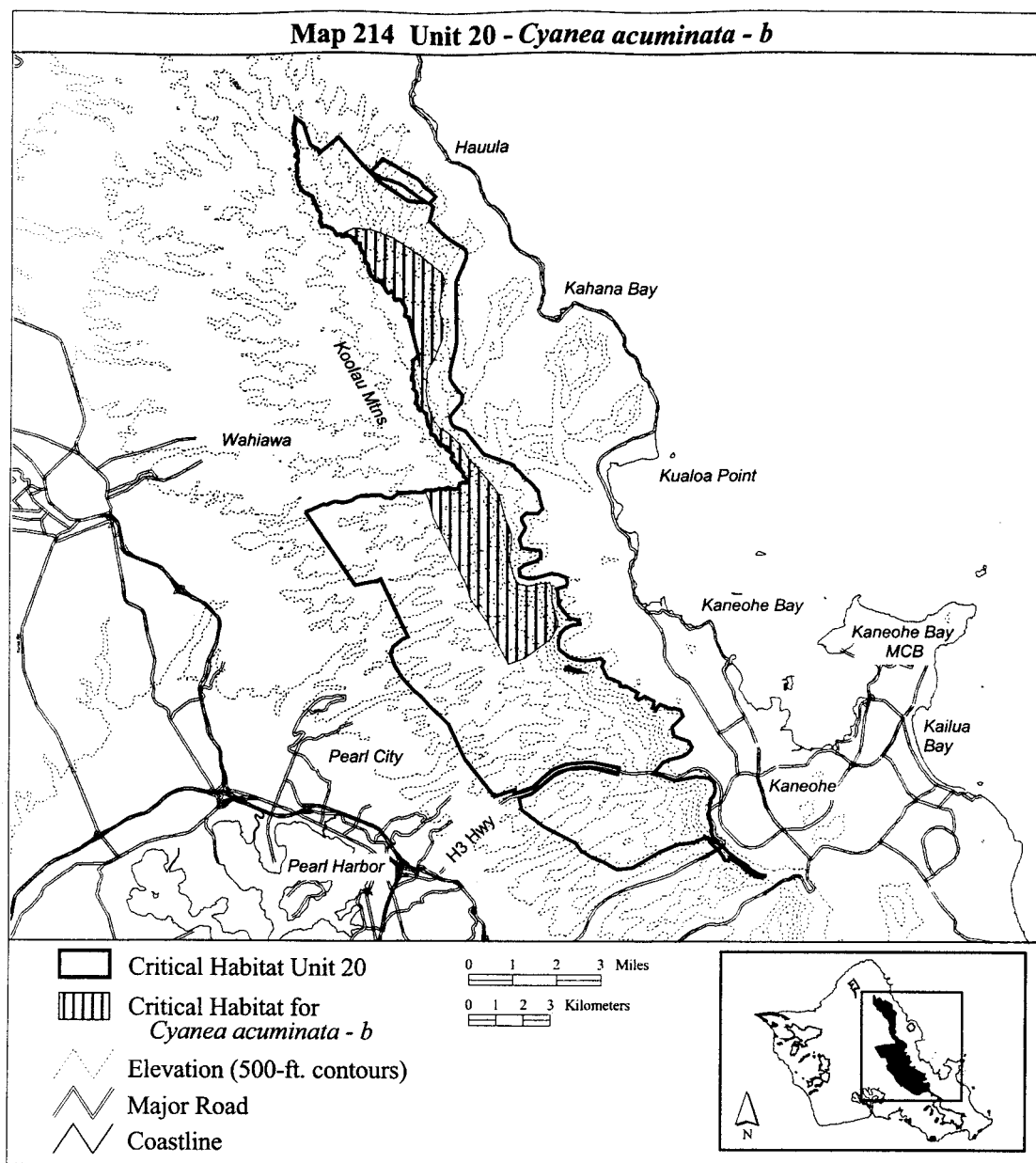
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616258, 2374227; 616495, 2374258;
616773, 2374279; 616865, 2374145;

616865, 2373898; 616865, 2373579;
616947, 2373250; 617019, 2373035;
617081, 2372880; 617081, 2372675;
616958, 2372428; 616855, 2372214;
615893, 2371500; 615279, 2371259;

615220, 2371369; 614768, 2372233;
614490, 2372808; 613853, 2373682;
613871, 2373690; 613709, 2374196;
613256, 2375091; 612866, 2375944;
612496, 2376674; 612310, 2377312;

612177, 2377626; 612247, 2377687;
return to starting point.

(ii) **Note:** Map 214 follows:



(215) Oahu 20—*Cyanea crista*—a (1,831 ha; 4,525 ac)

(i) Unit consists of the following 326 boundary points: Start at 607399, 2389315; 608317, 2389401; 608490, 2389389; 608490, 2389387; 608704, 2389418; 608998, 2389418; 609459, 2389349; 609794, 2389211; 610458, 2388905; 610724, 2388690; 610978, 2388578; 611675, 2388051; 611900, 2387826; 612915, 2386959; 612933, 2386966; 613504, 2386561; 613647,

2386386; 613617, 2386176; 613441, 2385755; 613242, 2385368; 613234, 2385195; 613204, 2384658; 613279, 2383989; 613298, 2383575; 613298, 2383305; 613250, 2383066; 613234, 2382844; 613147, 2382562; 613073, 2382491; 612466, 2382243; 611823, 2382158; 612178, 2383560; 612031, 2384175; 611415, 2384914; 610979, 2384884; 610976, 2384927; 610973, 2384941; 610973, 2384942; 610965, 2384959; 610965, 2384960; 610957, 2384969; 610957, 2384970; 610934,

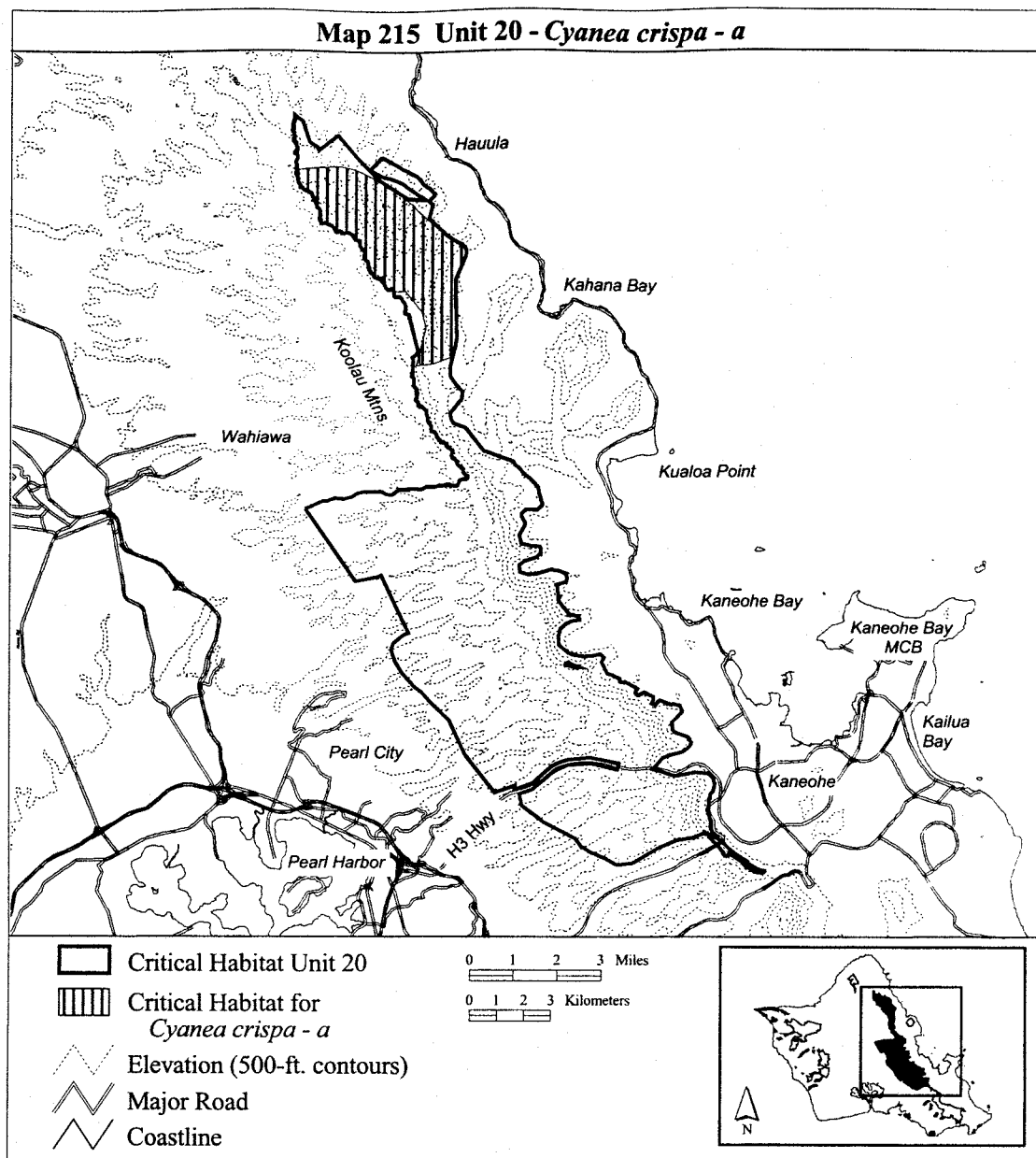
2384987; 610933, 2384987; 610909, 2384993; 610908, 2384993; 610888, 2384986; 610839, 2384956; 610809, 2384945; 610780, 2384942; 610766, 2384942; 610749, 2384953; 610709, 2384995; 610692, 2385014; 610679, 2385041; 610630, 2385180; 610616, 2385205; 610606, 2385215; 610606, 2385216; 610598, 2385220; 610558, 2385236; 610543, 2385248; 610533, 2385266; 610516, 2385329; 610509, 2385341; 610509, 2385342; 610508, 2385342; 610497, 2385351; 610496,

2385351; 610454, 2385362; 610440,
2385362; 610394, 2385362; 610370,
2385370; 610333, 2385392; 610292,
2385406; 610280, 2385413; 610261,
2385429; 610248, 2385449; 610237,
2385473; 610222, 2385512; 610222,
2385513; 610214, 2385522; 610206,
2385531; 610206, 2385532; 610187,
2385540; 610166, 2385544; 610134,
2385558; 610129, 2385561; 610122,
2385580; 610119, 2385604; 610119,
2385605; 610112, 2385620; 610111,
2385621; 610093, 2385637; 610078,
2385652; 610077, 2385659; 610090,
2385687; 610097, 2385698; 610098,
2385699; 610098, 2385700; 610097,
2385705; 610097, 2385706; 610081,
2385734; 610054, 2385762; 610039,
2385790; 610028, 2385816; 610024,
2385839; 610027, 2385873; 610035,
2385901; 610035, 2385902; 610035,
2385943; 610035, 2385944; 610029,
2385956; 610029, 2385957; 610003,
2385991; 609994, 2386004; 609993,
2386004; 609993, 2386005; 609971,
2386017; 609955, 2386025; 609948,
2386031; 609929, 2386085; 609909,
2386112; 609908, 2386113; 609898,
2386121; 609887, 2386134; 609883,
2386146; 609884, 2386168; 609879,
2386204; 609884, 2386223; 609905,
2386254; 609905, 2386255; 609909,
2386278; 609909, 2386279; 609907,
2386291; 609881, 2386354; 609880,
2386355; 609858, 2386384; 609834,
2386404; 609797, 2386443; 609790,
2386450; 609769, 2386468; 609748,
2386495; 609737, 2386524; 609719,
2386644; 609711, 2386719; 609711,
2386720; 609705, 2386737; 609704,
2386737; 609704, 2386738; 609693,
2386745; 609692, 2386745; 609595,
2386759; 609570, 2386766; 609560,
2386772; 609536, 2386797; 609481,

2386863; 609461, 2386894; 609449,
2386918; 609449, 2386919; 609439,
2386933; 609438, 2386934; 609425,
2386943; 609379, 2386966; 609323,
2387005; 609308, 2387012; 609269,
2387020; 609248, 2387021; 609184,
2387014; 609134, 2387001; 609078,
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2387051; 608989, 2387068; 608988,
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2387055; 608862, 2387042; 608856,
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2387246; 608718, 2387247; 608693,
2387265; 608692, 2387265; 608643,
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2387362; 608459, 2387369; 608458,
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2387351; 608316, 2387358; 608308,
2387366; 608294, 2387395; 608292,
2387413; 608300, 2387459; 608299,
2387471; 608298, 2387472; 608298,
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2387489; 608234, 2387501; 608228,
2387506; 608223, 2387520; 608230,
2387572; 608232, 2387576; 608238,
2387590; 608252, 2387607; 608267,
2387627; 608267, 2387628; 608272,
2387642; 608275, 2387670; 608275,
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2387885; 608190, 2387914; 608165,
2387924; 608146, 2387938; 608143,

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2388052; 608116, 2388066; 608100,
2388105; 608092, 2388136; 608092,
2388137; 608082, 2388155; 608034,
2388210; 608029, 2388227; 608037,
2388262; 608037, 2388263; 608034,
2388274; 608017, 2388312; 608011,
2388328; 608011, 2388329; 607997,
2388340; 607987, 2388344; 607980,
2388349; 607975, 2388357; 607973,
2388367; 607974, 2388406; 607974,
2388407; 607972, 2388420; 607965,
2388446; 607964, 2388447; 607956,
2388457; 607956, 2388458; 607898,
2388494; 607897, 2388494; 607887,
2388497; 607865, 2388499; 607855,
2388502; 607821, 2388528; 607809,
2388537; 607808, 2388537; 607783,
2388550; 607782, 2388550; 607736,
2388557; 607719, 2388559; 607692,
2388571; 607666, 2388594; 607654,
2388609; 607653, 2388609; 607613,
2388646; 607567, 2388681; 607550,
2388690; 607540, 2388696; 607534,
2388706; 607532, 2388717; 607534,
2388752; 607534, 2388761; 607534,
2388762; 607514, 2388795; 607461,
2388853; 607451, 2388878; 607448,
2388911; 607450, 2388923; 607446,
2388944; 607426, 2388990; 607425,
2389020; 607427, 2389043; 607427,
2389044; 607417, 2389071; 607411,
2389083; 607404, 2389108; 607378,
2389157; 607359, 2389185; 607358,
2389186; 607353, 2389189; 607357,
2389208; 607364, 2389224; 607376,
2389239; 607389, 2389258; 607389,
2389259; 607394, 2389273; 607399,
2389307; 607400, 2389308; return to
starting point.

(ii) **Note:** Map 215 follows:



(216) Oahu 20—*Cyanea crispa*—b (3,874 ha; 9,572 ac)

(i) Unit consists of the following 120 boundary points: Start at 618290, 2364233; 618037, 2364397; 617997, 2364397; 617770, 2364713; 617769, 2364714; 616591, 2365312; 616219, 2365594; 615789, 2365919; 615699, 2366341; 616026, 2366454; 616159, 2366492; 616880, 2367092; 616979, 2367172; 617017, 2367191; 617469, 2367394; 618307, 2367463; 618509, 2367419; 619283, 2367245; 619284, 2367245; 619285, 2367245; 619285, 2367246; 619351, 2367450; 619351, 2367451; 619351, 2367452; 619350, 2367452; 619340, 2367454; 619344, 2367466; 618301, 2367677; 617421,

2367598; 616993, 2367420; 616871, 2367371; 616186, 2366751; 615512, 2366486; 615556, 2366713; 614049, 2369433; 618671, 2371225; 618900, 2370776; 619118, 2370706; 619372, 2370572; 619374, 2370484; 619525, 2370441; 619565, 2370469; 620035, 2370220; 619958, 2370126; 619950, 2370045; 620054, 2369969; 620264, 2370098; 620591, 2369924; 620603, 2369796; 620565, 2369678; 620681, 2369614; 620750, 2369721; 620836, 2369794; 620837, 2369794; 620893, 2369780; 621068, 2369721; 621103, 2369654; 621177, 2369662; 621259, 2369628; 621340, 2369662; 621443, 2369636; 621570, 2369603; 621648, 2369368; 621266, 2368963; 621265, 2368962; 621265, 2368961; 621321,

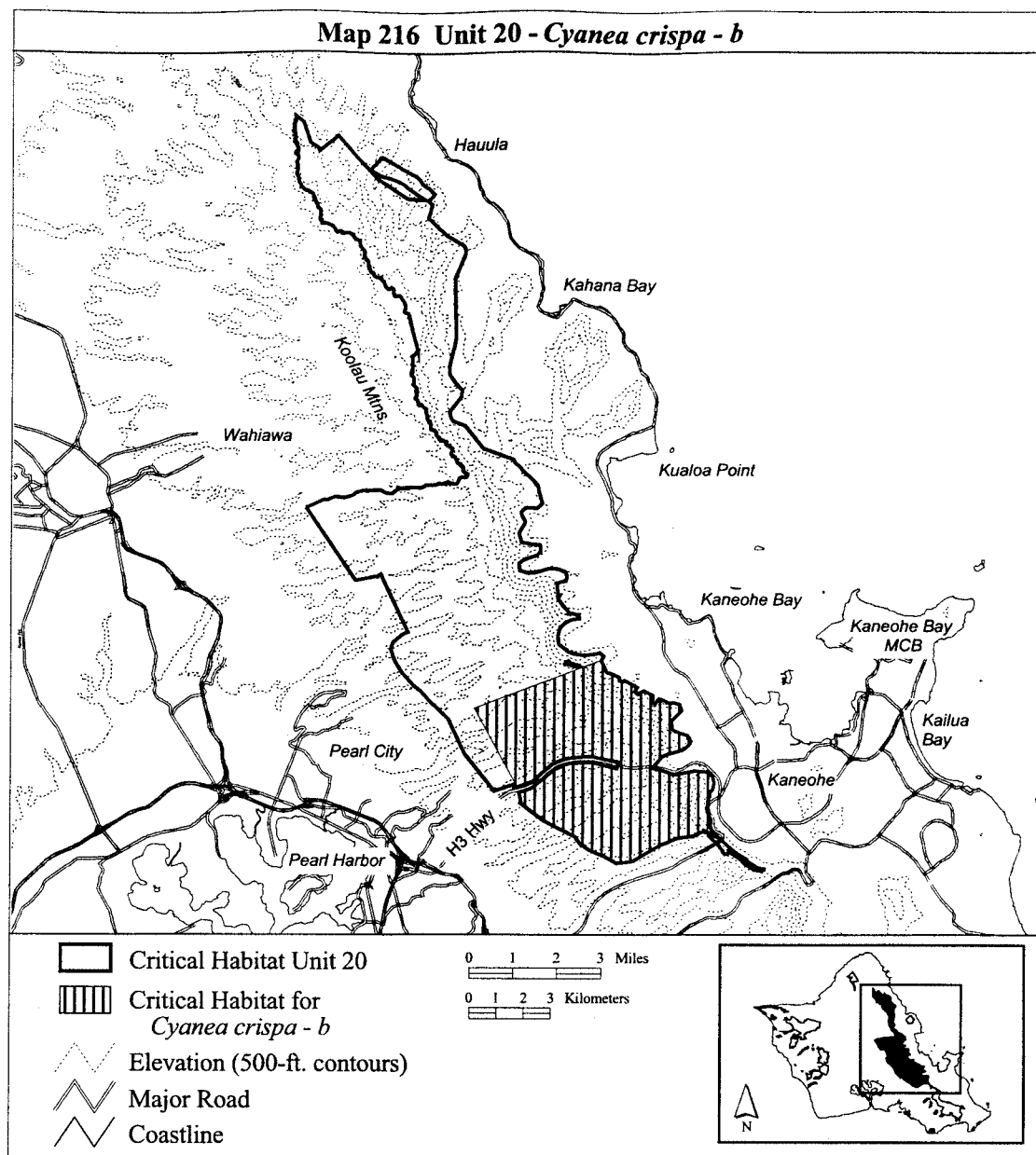
2368668; 621322, 2368667; 621347, 2368657; 621526, 2368567; 621638, 2368535; 621883, 2368432; 621958, 2368318; 621999, 2368255; 621955, 2368124; 621842, 2368014; 621694, 2367904; 621659, 2367893; 621142, 2367756; 620978, 2367684; 620961, 2367679; 620604, 2367260; 620603, 2367260; 620603, 2367259; 620604, 2367258; 621050, 2367138; 621075, 2367114; 621379, 2367024; 621510, 2367014; 621830, 2367079; 622145, 2367158; 622360, 2367124; 622607, 2367101; 622785, 2366983; 622809, 2366966; 622866, 2366712; 622789, 2366441; 622688, 2366317; 622686, 2366200; 622657, 2366174; 622641, 2366065; 622641, 2365926; 622595, 2365765; 622595, 2365764; 622658,

2365627; 622664, 2365546; 622731,
2365278; 622707, 2365156; 622707,
2365155; 622708, 2365153; 622641,
2365005; 622145, 2364750; 621489,

2364647; 620825, 2364374; 619887,
2363809; 619327, 2363736; 619306,
2363734; 619289, 2363742; 618843,

2364003; 618621, 2364070; return to
starting point.

(ii) **Note:** Map 216 follows:



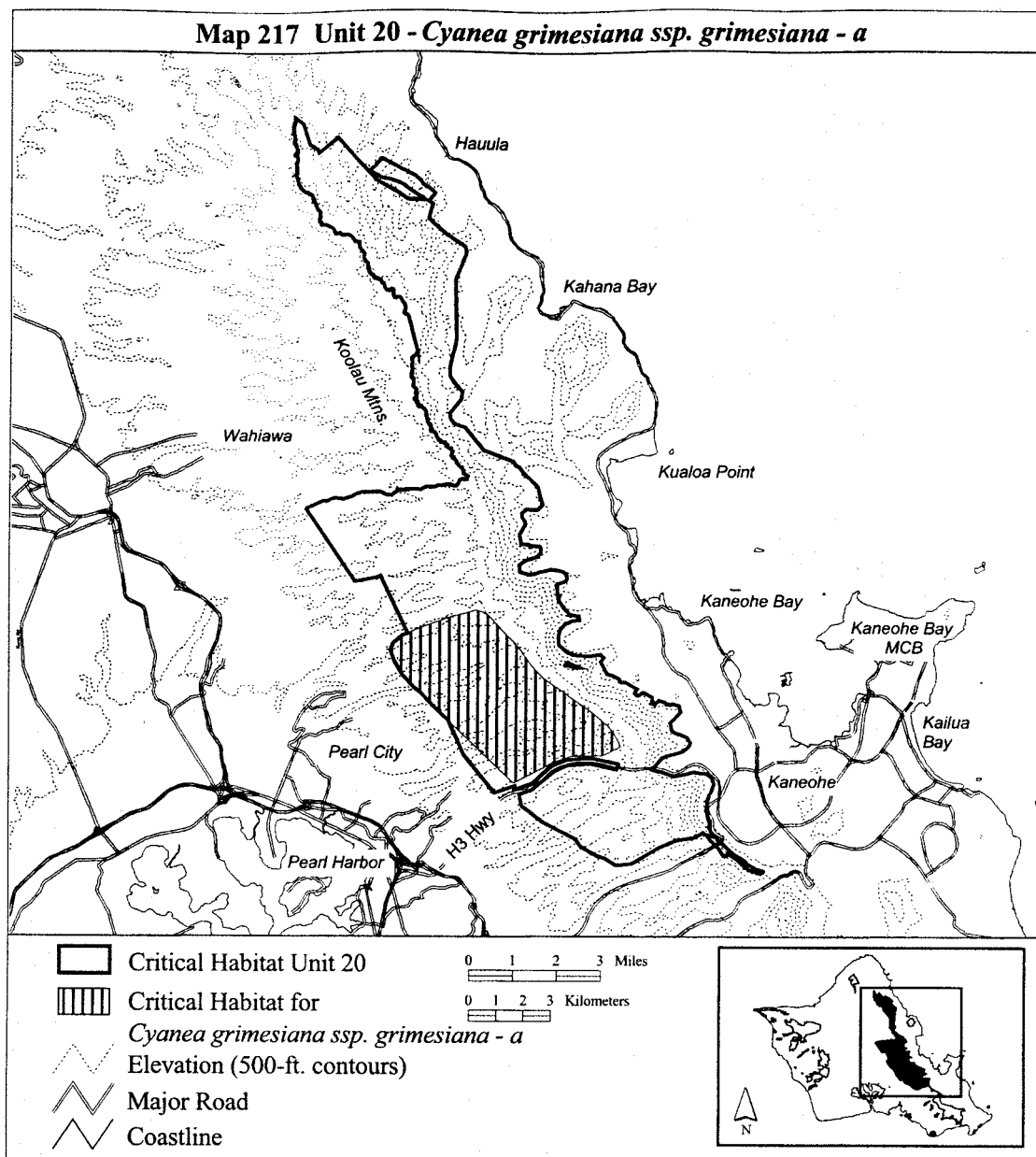
(217) Oahu 20—*Cyanea grimesiana* ssp. *grimesiana*—a (2,634 ha; 6,506 ac)

(i) Unit consists of the following 38 boundary points: Start at 615490, 2366752; 612398, 2369695; 612094, 2370041; 611819, 2370260; 611368, 2370754; 611085, 2371205; 610944, 2371614; 611022, 2371876; 611396,

2372179; 611946, 2372426; 612560, 2372652; 613209, 2372878; 613703, 2373012; 614077, 2373117; 614331, 2373061; 614557, 2372906; 614910, 2372539; 615136, 2372264; 615481, 2371939; 615799, 2371565; 615800, 2371529; 616088, 2371135; 616300, 2370873; 616582, 2370598; 616942, 2370344; 617358, 2370062; 617535,

2369928; 618156, 2369490; 618692, 2369067; 618996, 2368827; 618981, 2368819; 619052, 2368735; 619186, 2368559; 619327, 2368319; 619423, 2368067; 618778, 2367765; 617647, 2367736; 616951, 2367504; return to starting point.

(ii) **Note:** Map 217 follows:



(218) Oahu 20—*Cyanea humboldtiana*—a (502 ha; 1,242 ac)

(i) Unit consists of the following 228 boundary points: Start at 610424,

2385362; 610216, 2385979; 610366, 2386247; 611070, 2386825; 611542, 2386672; 611670, 2386629; 611770, 2386563; 611851, 2386477; 611913, 2386372; 611956, 2386253; 612013, 2386148; 612085, 2386096; 612147, 2386005; 612290, 2385881; 612418, 2385800; 612518, 2385719; 612523, 2385648; 612485, 2385529; 612418, 2385324; 612409, 2385100; 612332, 2384972; 612309, 2384867; 612342, 2384781; 612313, 2384571; 612299, 2384309; 612297, 2384309; 612271, 2383706; 612129, 2383015; 611899, 2382437; 611847, 2382271; 611842,

2382013; 611885, 2381742; 611928, 2381561; 611999, 2381404; 612042, 2381266; 612037, 2381266; 612227, 2380774; 611926, 2380827; 611882, 2380835; 611880, 2380839; 611856, 2380862; 611812, 2380892; 611799, 2380905; 611798, 2380918; 611800, 2380925; 611815, 2380943; 611838, 2380960; 611838, 2380961; 611848, 2380980; 611851, 2381022; 611848, 2381067; 611853, 2381081; 611879, 2381118; 611879, 2381119; 611879, 2381131; 611879, 2381132; 611868, 2381149; 611858, 2381155; 611857, 2381155; 611847, 2381160; 611837, 2381167; 611828, 2381178; 611825, 2381193; 611830, 2381214; 611838, 2381223; 611854, 2381250; 611854, 2381251; 611856, 2381258; 611855,

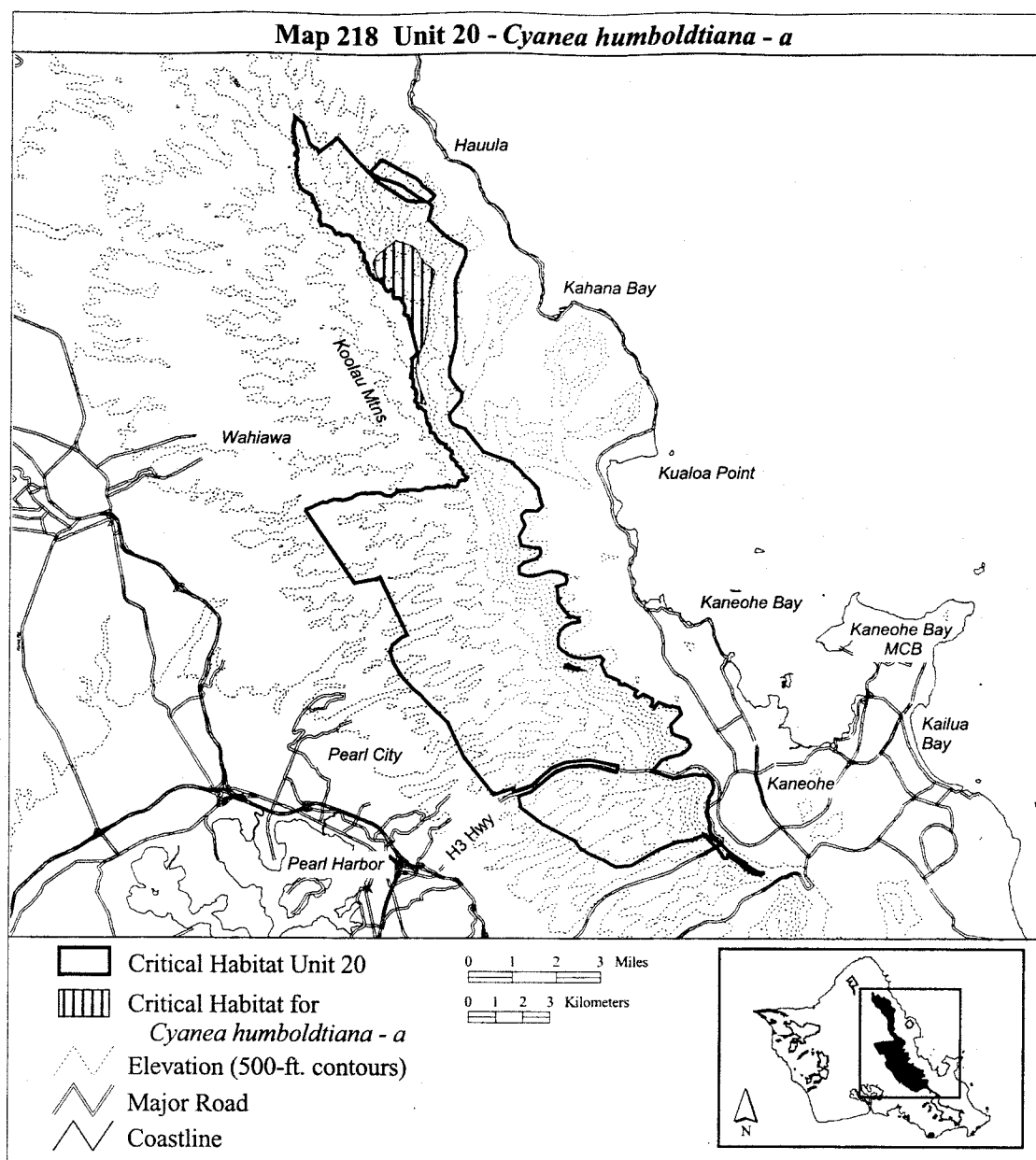
2381265; 611855, 2381266; 611849, 2381285; 611848, 2381285; 611848, 2381286; 611828, 2381312; 611784, 2381363; 611765, 2381383; 611734, 2381424; 611733, 2381424; 611730, 2381426; 611737, 2381446; 611745, 2381514; 611746, 2381550; 611748, 2381618; 611748, 2381619; 611739, 2381669; 611736, 2381680; 611736, 2381681; 611727, 2381699; 611727, 2381700; 611726, 2381700; 611673, 2381758; 611666, 2381774; 611666, 2381794; 611670, 2381810; 611702, 2381865; 611702, 2381866; 611712, 2381882; 611712, 2381883; 611712, 2381915; 611712, 2381916; 611710, 2381923; 611687, 2381955; 611687, 2381978; 611695, 2381990; 611702, 2382013; 611702, 2382014; 611700,

2382058; 611694, 2382120; 611695,
2382225; 611701, 2382278; 611701,
2382279; 611699, 2382320; 611695,
2382360; 611693, 2382433; 611692,
2382455; 611698, 2382473; 611744,
2382512; 611805, 2382557; 611831,
2382588; 611844, 2382604; 611844,
2382605; 611850, 2382621; 611874,
2382653; 611896, 2382683; 611896,
2382684; 611903, 2382704; 611903,
2382705; 611903, 2382706; 611902,
2382707; 611901, 2382707; 611900,
2382707; 611900, 2382706; 611899,
2382706; 611892, 2382686; 611891,
2382684; 611795, 2383056; 611597,
2383822; 611567, 2383939; 611567,
2383940; 611561, 2383949; 611537,
2384020; 611536, 2384020; 611525,
2384040; 611515, 2384051; 611495,
2384064; 611460, 2384078; 611430,
2384082; 611404, 2384097; 611396,

2384120; 611393, 2384150; 611397,
2384172; 611413, 2384204; 611422,
2384233; 611428, 2384263; 611435,
2384302; 611435, 2384321; 611429,
2384356; 611429, 2384357; 611417,
2384382; 611394, 2384464; 611387,
2384476; 611374, 2384488; 611374,
2384489; 611358, 2384501; 611334,
2384524; 611326, 2384536; 611302,
2384584; 611257, 2384667; 611256,
2384667; 611245, 2384680; 611244,
2384681; 611224, 2384695; 611223,
2384695; 611203, 2384703; 611202,
2384704; 611192, 2384704; 611191,
2384703; 611165, 2384698; 611119,
2384696; 611118, 2384696; 611082,
2384690; 611081, 2384690; 611065,
2384682; 611064, 2384681; 611058,
2384675; 611046, 2384674; 611039,
2384675; 611028, 2384688; 611014,
2384713; 610994, 2384778; 610981,

2384838; 610976, 2384927; 610973,
2384941; 610973, 2384942; 610965,
2384959; 610965, 2384960; 610957,
2384969; 610957, 2384970; 610934,
2384987; 610933, 2384987; 610909,
2384993; 610908, 2384993; 610888,
2384986; 610839, 2384956; 610809,
2384945; 610780, 2384942; 610766,
2384942; 610749, 2384953; 610709,
2384995; 610692, 2385014; 610679,
2385041; 610630, 2385180; 610616,
2385205; 610606, 2385215; 610606,
2385216; 610598, 2385220; 610558,
2385236; 610543, 2385248; 610533,
2385266; 610516, 2385329; 610509,
2385341; 610509, 2385342; 610508,
2385342; 610497, 2385351; 610496,
2385351; 610454, 2385362; 610440,
2385362; 610440, 2385363; return to
starting point.

(ii) **Note:** Map 218 follows:



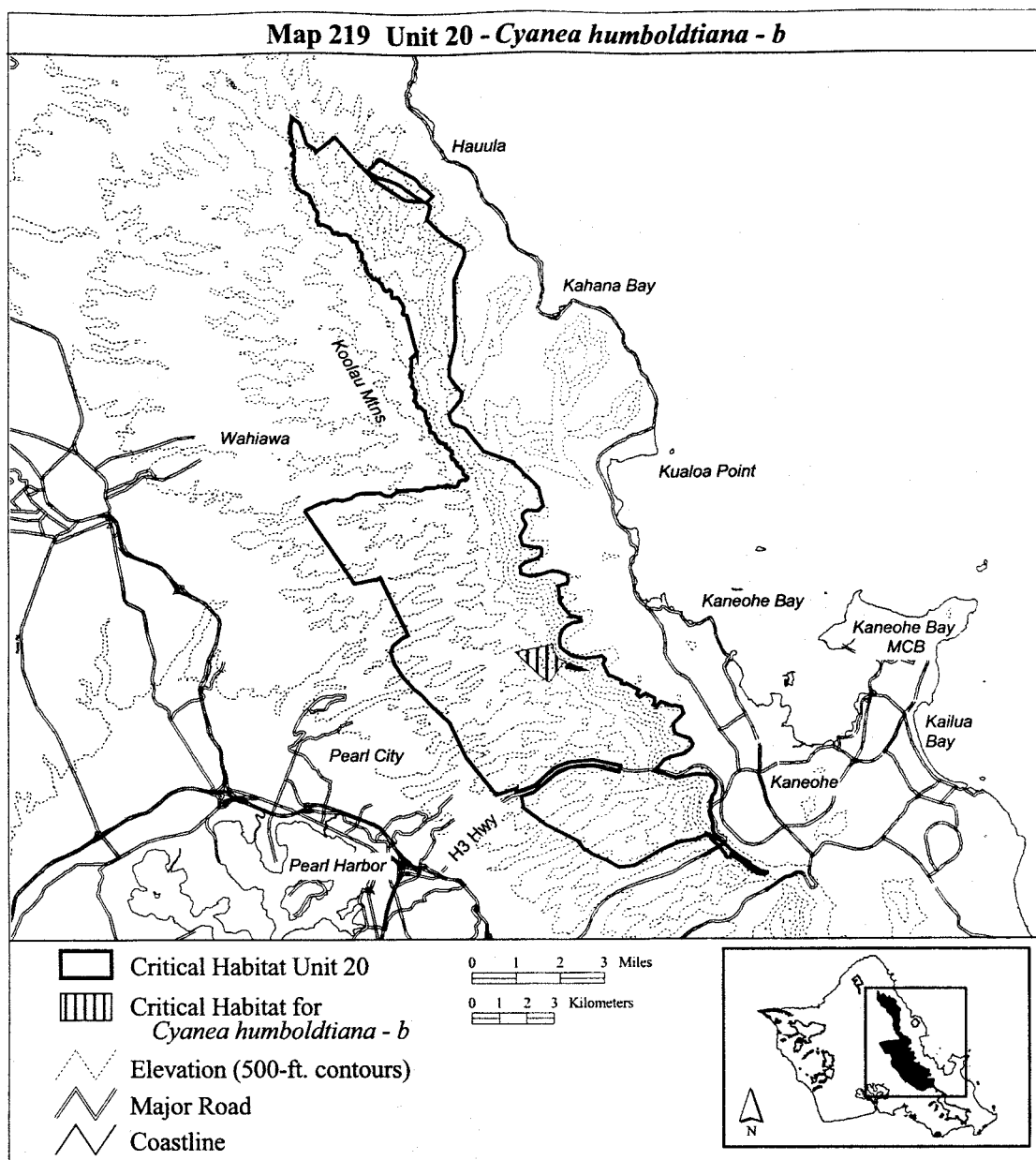
(219) Oahu 20—*Cyanea humboldtiana*—
b (127 ha; 315 ac)

(i) Unit consists of the following 8
boundary points: Start at 615466,

2371631; 616875, 2371919; 616875,
2371746; 617062, 2371401; 617350,
2371271; 617235, 2371214; 616746,

2370524; 616358, 2370797; return to
starting point.

(ii) **Note:** Map 219 follows:



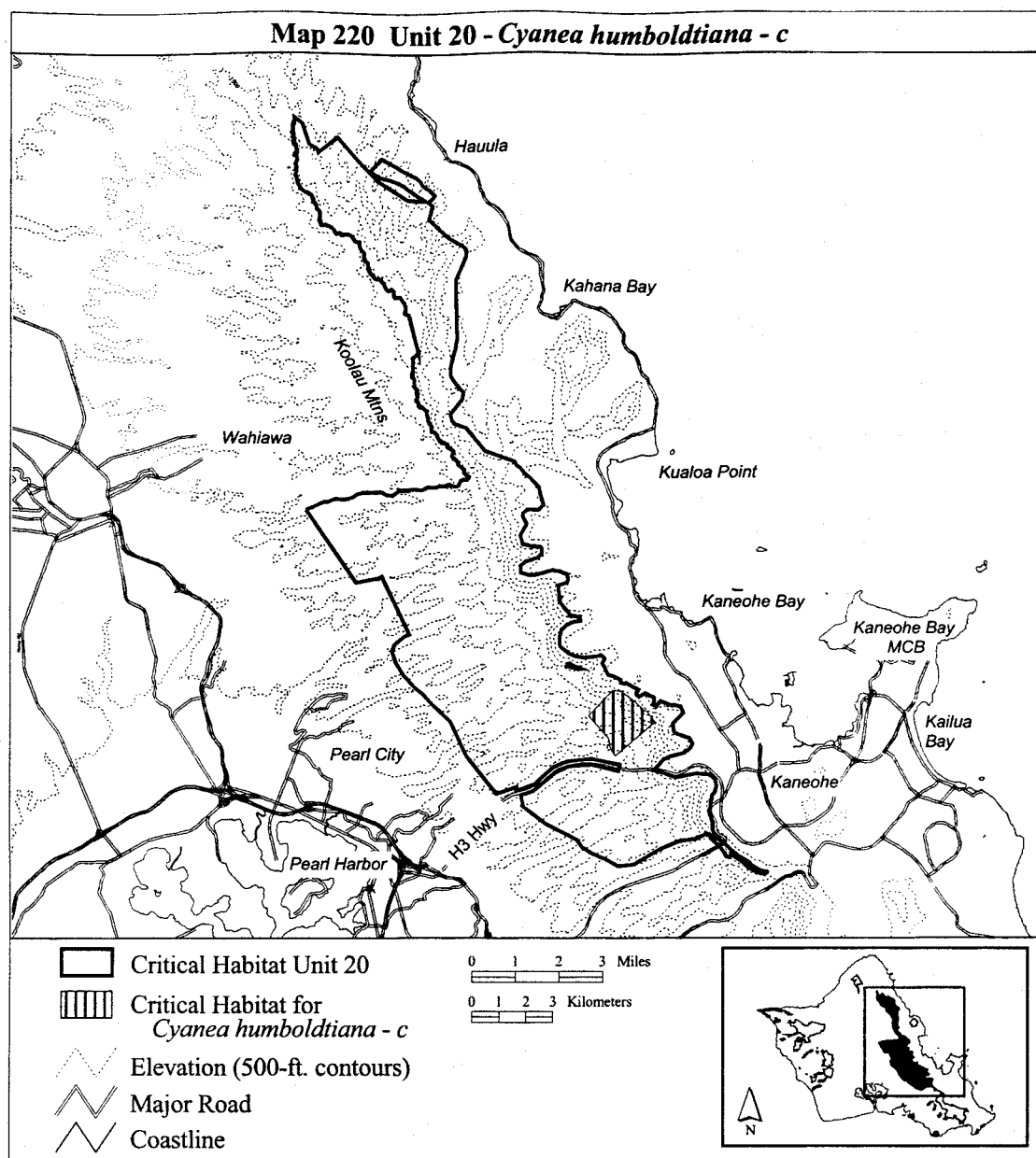
(220) Oahu—*Cyanea humboldtiana*—c
(299 ha; 740 ac)

(i) Unit consists of the following 10
boundary points: Start at 618213,

2369258; 619090, 2370193; 619421,
2370150; 619895, 2369776; 620269,
2369431; 620312, 2369445; 620629,
2369042; 619176, 2367791; 619018,

2368050; 618932, 2368438; return to
starting point.

(ii) **Note:** Map 220 follows:



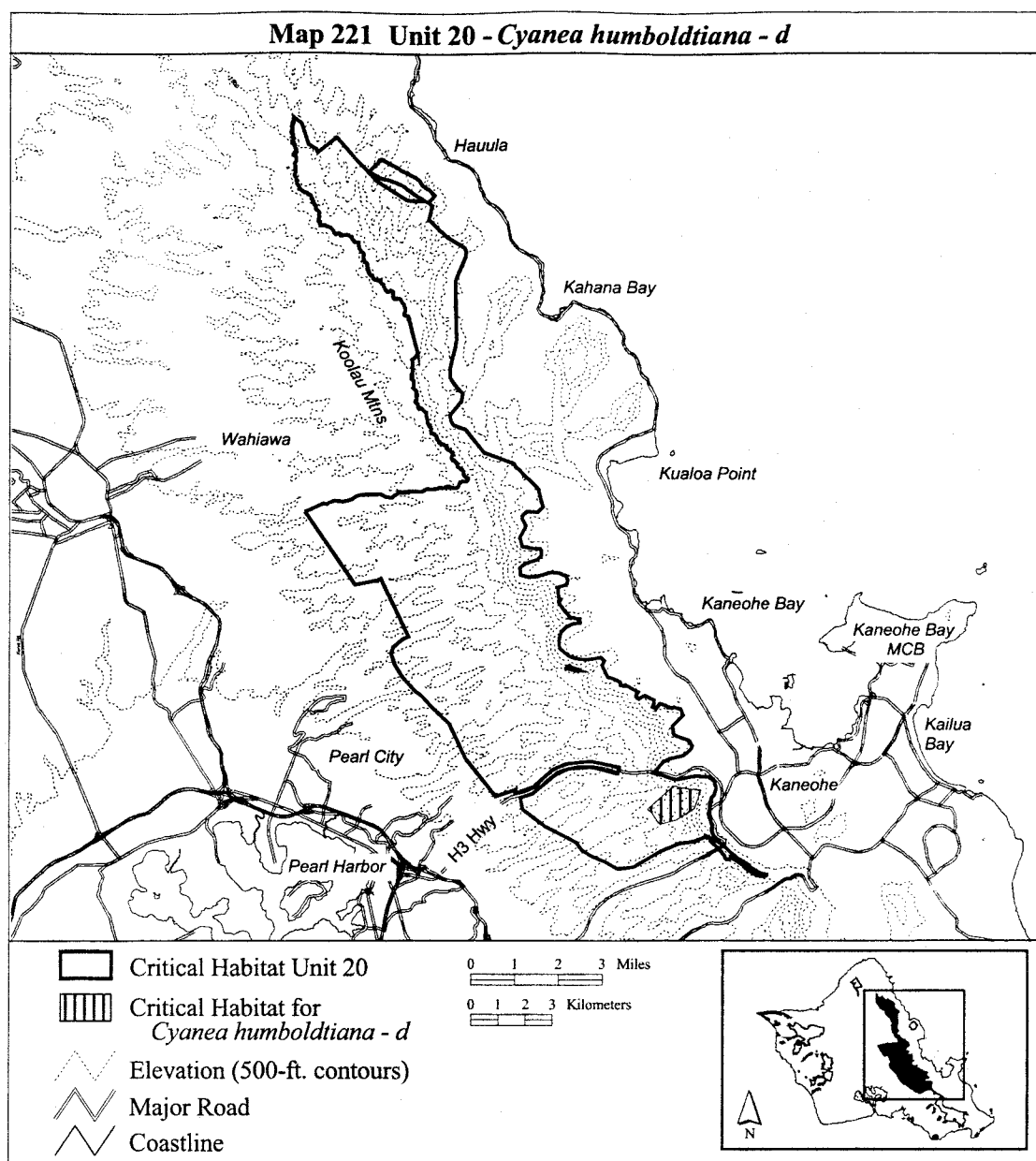
(221) Oahu—*Cyanea humboldtiana*—d
(159 ha; 393 ac)

(i) Unit consists of the following 12
boundary points: Start at 620384,

2365922; 621334, 2366799; 621549,
2366727; 621923, 2366654; 622081,
2366668; 622168, 2366668; 622311,
2366596; 622081, 2365949; 621434,

2365548; 620830, 2365375; 620701,
2365533; 620543, 2365792; return to
starting point.

(ii) **Note:** Map 221 follows:



(222) Oahu—*Cyanea koolauensis*—a
(468 ha; 1,158 ac)

(i) Unit consists of the following 417
boundary points: Start at 607259,

2390761; 607620, 2390452; 608141,
2390155; 608439, 2389559; 608513,
2388964; 608959, 2388518; 609183,
2388443; 609227, 2388443; 610028,
2387823; 610076, 2387327; 610083,
2387317; 609877, 2386574; 609867,
2386564; 610409, 2385617; 610403,
2385612; 610841, 2385019; 610826,
2384951; 610809, 2384945; 610780,
2384942; 610766, 2384942; 610749,
2384953; 610709, 2384995; 610692,
2385014; 610679, 2385041; 610630,
2385180; 610616, 2385205; 610606,
2385215; 610606, 2385216; 610598,
2385220; 610558, 2385236; 610543,

2385248; 610533, 2385266; 610516,
2385329; 610509, 2385341; 610509,
2385342; 610508, 2385342; 610497,
2385351; 610496, 2385351; 610454,
2385362; 610440, 2385362; 610394,
2385362; 610370, 2385370; 610333,
2385392; 610292, 2385406; 610280,
2385413; 610261, 2385429; 610248,
2385449; 610237, 2385473; 610222,
2385512; 610222, 2385513; 610214,
2385522; 610206, 2385531; 610206,
2385532; 610187, 2385540; 610166,
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2385561; 610122, 2385580; 610119,
2385604; 610119, 2385605; 610112,
2385620; 610111, 2385621; 610093,
2385637; 610078, 2385652; 610077,
2385659; 610090, 2385687; 610097,
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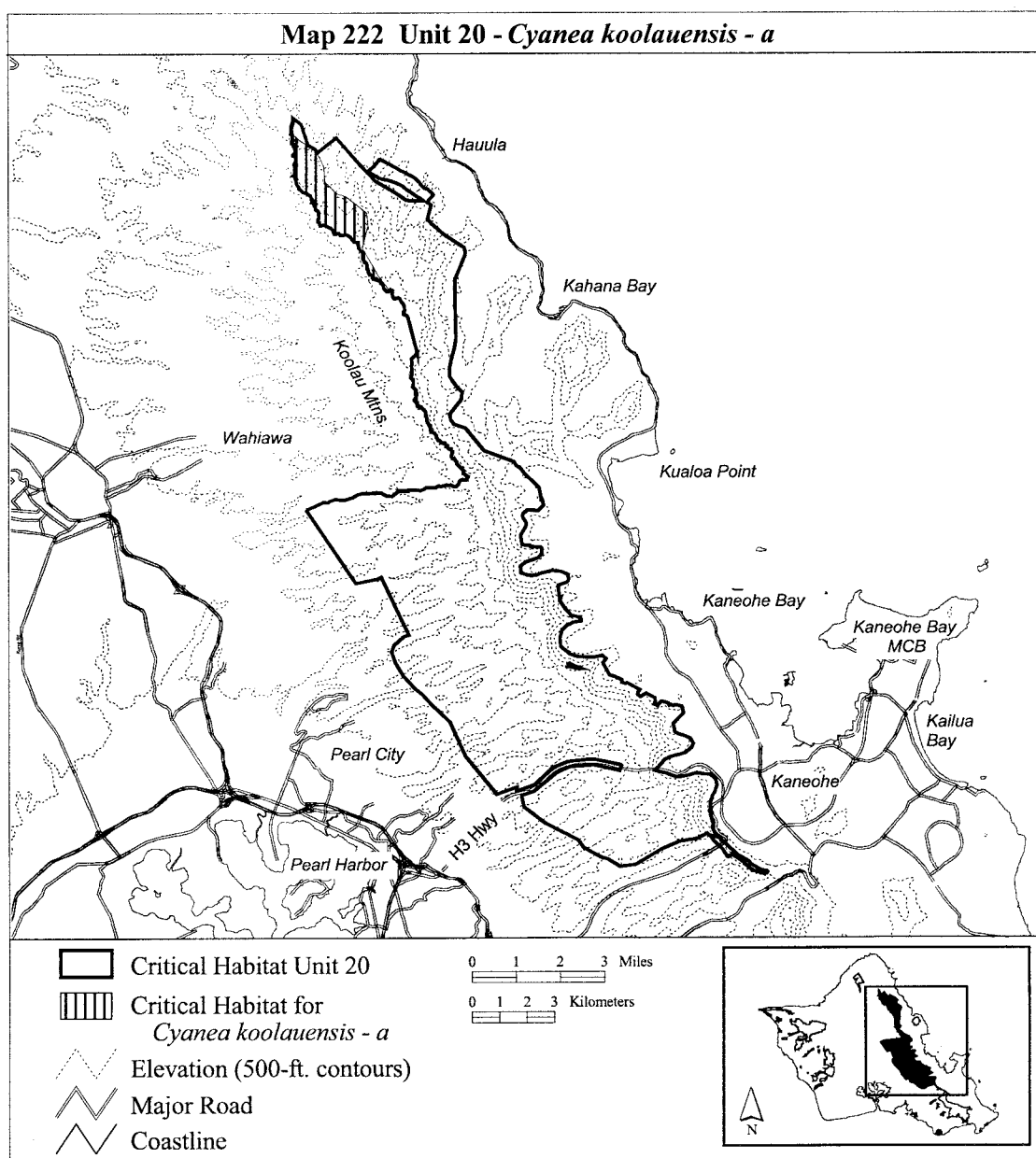
2385700; 610097, 2385705; 610097,
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2385762; 610039, 2385790; 610028,
2385816; 610024, 2385839; 610027,
2385873; 610035, 2385901; 610035,
2385902; 610035, 2385943; 610035,
2385944; 610029, 2385956; 610029,
2385957; 610003, 2385991; 609994,
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(ii) **Note:** Map 222 follows:



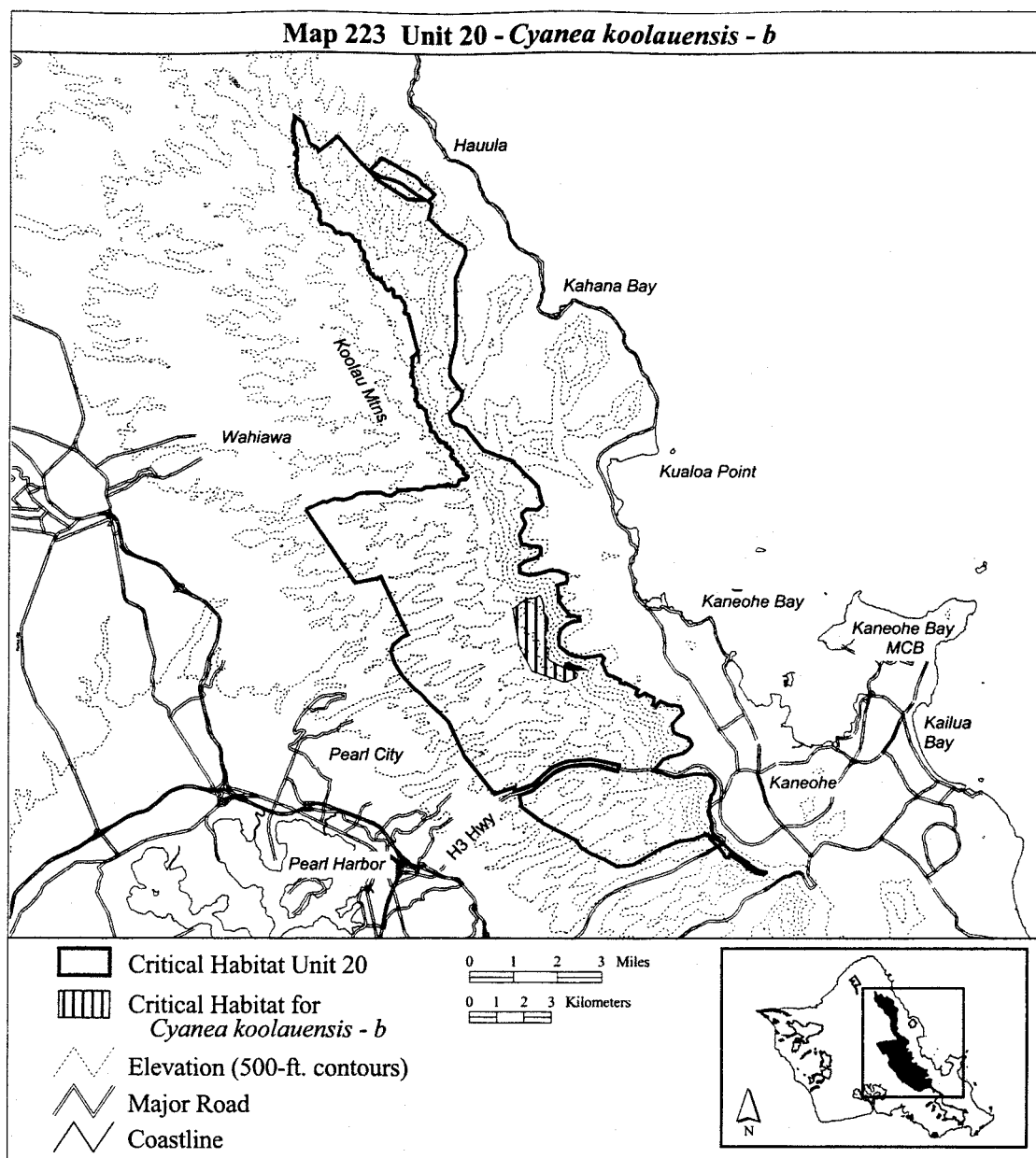
(223) Oahu 20—*Cyanea koolauensis*—b
(323 ha; 799 ac)

(i) Unit consists of the following 27 boundary points: Start at 615702, 2371729; 615731, 2371775; 615655, 2371857; 615426, 2373195; 615942,

2373592; 616024, 2373566; 616250, 2373608; 616405, 2373693; 616476, 2373594; 616561, 2373354; 616561, 2373072; 616716, 2372874; 616730, 2372719; 616674, 2372352; 616575, 2372196; 616709, 2371996; 616624, 2371850; 616765, 2371726; 616744,

2371589; 616744, 2371321; 617154, 2371109; 617493, 2370954; 617687, 2370912; 617848, 2370771; 617757, 2370634; 617338, 2370493; 616146, 2370893; return to starting point.

(ii) **Note:** Map 223 follows:



(224) Oahu 20—*Cyanea st.-johnii*—a
(697 ha; 1,723 ac)

(i) Unit consists of the following 515 boundary points: Start at 613751,

2378091; 613747, 2378094; 613746, 2378095; 613718, 2378106; 613711, 2378117; 613691, 2378143; 613660, 2378168; 613602, 2378212; 613593, 2378224; 613586, 2378238; 613583, 2378253; 613583, 2378292; 613583, 2378328; 613583, 2378329; 613568, 2378356; 613556, 2378372; 613524, 2378400; 613517, 2378408; 613476, 2378444; 613462, 2378463; 613462, 2378464; 613447, 2378478; 613424, 2378499; 613386, 2378532; 613364, 2378562; 613346, 2378613; 613330, 2378641; 613265, 2378728; 613248, 2378749; 613247, 2378750; 613232,

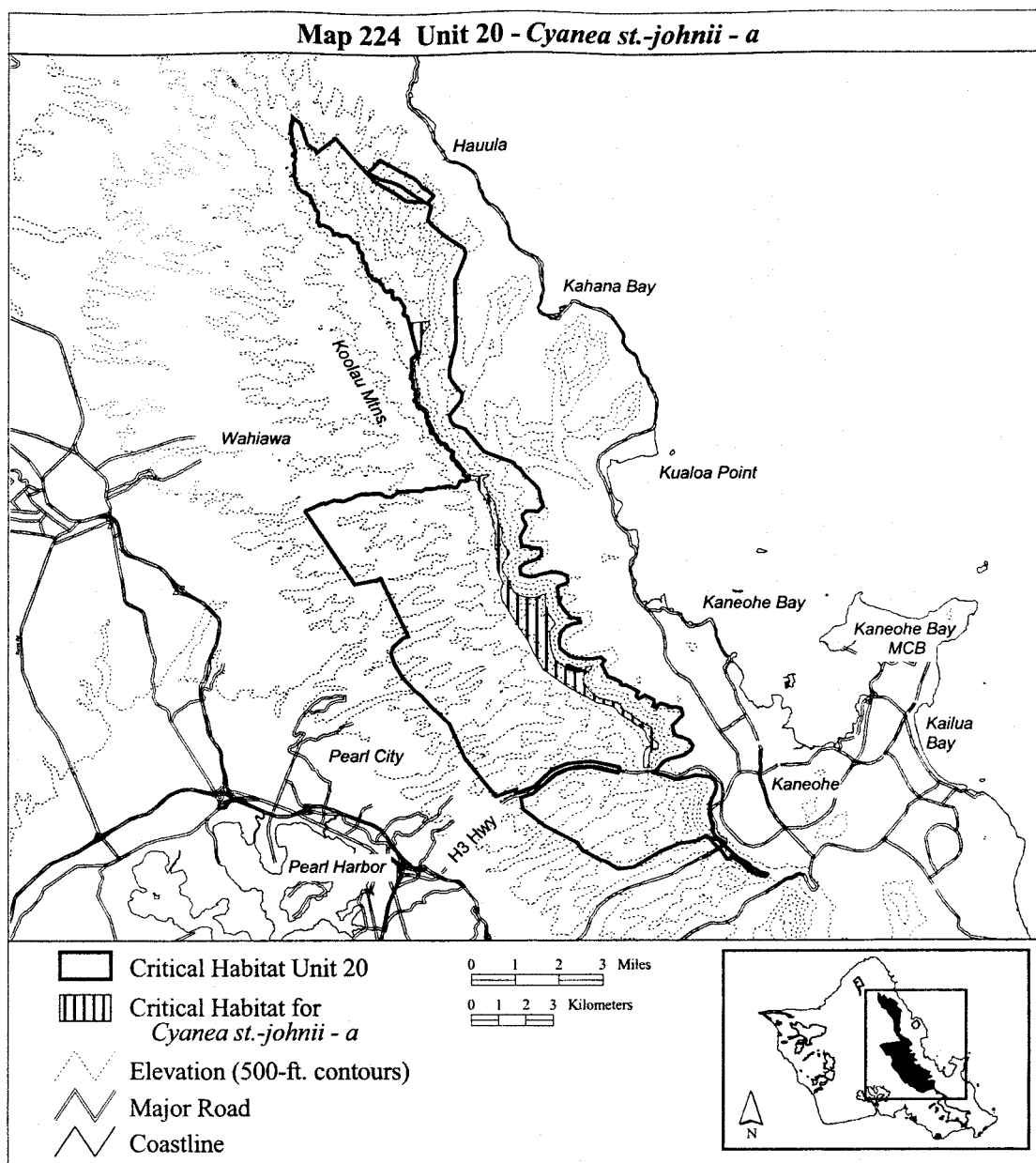
2378759; 613231, 2378759; 613213, 2378764; 613199, 2378769; 613190, 2378778; 613172, 2378818; 613152, 2378848; 613147, 2378859; 613147, 2378860; 613146, 2378860; 613145, 2378860; 613145, 2378861; 613146, 2378862; 613144, 2378873; 613159, 2378951; 613185, 2378998; 613187, 2379004; 613187, 2379005; 613185, 2379019; 613185, 2379020; 613171, 2379040; 613142, 2379072; 613115, 2379100; 613099, 2379113; 613098, 2379113; 613063, 2379127; 612997, 2379166; 612978, 2379188; 612969, 2379215; 612963, 2379226; 612959, 2379247; 612959, 2379248; 612945, 2379276; 612929, 2379297; 612928, 2379298; 612905, 2379314; 612876, 2379327; 612840, 2379337; 612770,

2379350; 612764, 2379355; 612758, 2379364; 612748, 2379389; 612748, 2379390; 612725, 2379410; 612700, 2379424; 612683, 2379441; 612663, 2379470; 612619, 2379529; 612600, 2379563; 612586, 2379618; 612573, 2379650; 612555, 2379679; 612517, 2379716; 612495, 2379729; 612412, 2379753; 612397, 2379761; 612387, 2379798; 612388, 2379851; 612386, 2379928; 612379, 2379961; 612379, 2379962; 612375, 2379970; 612367, 2379981; 612366, 2379982; 612353, 2379991; 612328, 2380018; 612262, 2380145; 612255, 2380163; 612249, 2380199; 612248, 2380233; 612234, 2380304; 612226, 2380334; 612224, 2380337; 612211, 2380367; 612213, 2380397; 612218, 2380419; 612218,

2380420; 612215, 2380452; 612212, 2380464; 612202, 2380506; 612202, 2380507; 612197, 2380516; 612177, 2380539; 612112, 2380593; 612086, 2380625; 612073, 2380644; 612046, 2380669; 612046, 2380670; 612016, 2380686; 611992, 2380690; 611965, 2380687; 611955, 2380689; 611941, 2380693; 611927, 2380702; 611919, 2380710; 611905, 2380743; 611889, 2380825; 611889, 2380826; 611880, 2380839; 611856, 2380862; 611812, 2380892; 611799, 2380905; 611798, 2380918; 611800, 2380925; 611815, 2380943; 611838, 2380960; 611838, 2380961; 611848, 2380980; 611851, 2381022; 611848, 2381067; 611853, 2381081; 611879, 2381118; 611879, 2381119; 611879, 2381131; 611868, 2381149; 611858, 2381155; 611857, 2381155; 611847, 2381160; 611837, 2381167; 611828, 2381178; 611825, 2381193; 611830, 2381214; 611838, 2381223; 611854, 2381250; 611854, 2381251; 611856, 2381258; 611855, 2381265; 611855, 2381266; 611849, 2381285; 611848, 2381285; 611848, 2381286; 611828, 2381312; 611784, 2381363; 611765, 2381383; 611734, 2381424; 611733, 2381424; 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612319, 2383684; 612177, 2383493; 612048, 2383282; 612072, 2383079; 612041, 2382924; 612054, 2382757; 612011, 2382615; 611881, 2382492; 611794, 2382281; 611831, 2381800; 611844, 2381759; 611883, 2381550; 611920, 2381366; 611974, 2381248; 611974, 2381121; 611957, 2381044; 612013, 2380847; 612043, 2380766; 612167, 2380685; 612227, 2380637; 612305, 2380583; 612311, 2380532; 612293, 2380399; 612329, 2380291; 612362, 2380186; 612449, 2380029; 612497, 2379948; 612522, 2379813; 612555, 2379765; 612651, 2379690; 612675, 2379587; 612744, 2379497; 612876, 2379410; 612991, 2379365; 613051, 2379263; 613096, 2379178; 613192, 2379118; 613237, 2379103; 613285, 2379046; 613258, 2378974; 613264, 2378974; 613252, 2378905; 613279, 2378818; 613330, 2378763; 613403, 2378709; 613460, 2378640; 613532, 2378520; 613679, 2378379; 613721, 2378294; 613733, 2378243; 613860, 2378171; 614070, 2378150; 614157, 2378153; 614244, 2378186; 614314, 2378189; 614359, 2378204; 614443, 2378231; 614512, 2378219; 614542, 2378201; 614527, 2378162; 614467, 2378126; 614374, 2378087; 614314, 2378030; 614320, 2377973; 614344, 2377943; 614356, 2377858; 614356, 2377777; 614389, 2377726; 614452, 2377651; 614509, 2377531; 614596, 2377398; 614686, 2377239; 614762, 2377179; 614786, 2377016; 614777, 2376918; 614789, 2376917; 614795, 2376797; 614801, 2376710; 614855, 2376608; 614861, 2376523; 614891, 2376418; 614957, 2376325; 614993, 2376229; 615011, 2376126; 615026, 2375991; 615014, 2375943; 614984, 2375886; 614993, 2375826; 615026, 2375754; 615053, 2375645; 615129, 2375510; 615225, 2375396; 615306, 2375294; 615201, 2375170; 615122, 2375071; 615047, 2374942; 615023, 2374870; 615011, 2374806; 615017, 2374737; 615053, 2374644; 615104, 2374548; 615180, 2374437; 615288, 2374256; 615303, 2374175; 615339, 2374049; 615432, 2373892; 615537, 2373796; 615700, 2373739; 615931, 2373697; 616082, 2373673; 616220, 2373682; 616319, 2373706; 616400, 2373736; 616473, 2373778; 616563, 2373799; 616581, 2373775; 616593, 2373700; 616593, 2373646; 616578, 2373562; 616593, 2373486; 616617, 2373366; 616656, 2373300; 616680, 2373234; 616680, 2373162; 616713, 2373108; 616722, 2373041; 616764, 2372999; 616767, 2372999; 616839, 2372933; 616891, 2372864; 616939, 2372801; 616963, 2372717; 616936, 2372644; 616833, 2372536; 616773, 2372410; 616749, 2372233; 616758, 2372082; 616773, 2371935; 616812, 2371803; 616830, 2371718; 616860, 2371640; 616903, 2371532; 616924, 2371436; 616996, 2371358; 617113, 2371264; 617187, 2371212; 617366, 2371114; 617465, 2371066; 617570, 2371042; 617735, 2371006; 617832, 2371003; 617958, 2371006; 618045, 2371024; 618090, 2371054; 618126, 2371087; 618217, 2371138; 618301, 2371171; 618304, 2371135; 618283, 2371072; 618174, 2370964; 618093, 2370888; 618024, 2370777; 618015, 2370651; 618018, 2370564; 618063, 2370489; 618123, 2370404; 618183, 2370332; 618229, 2370266; 618376, 2370122; 618550, 2370010; 618809, 2369950; 619068, 2369884; 619152, 2369863; 619153, 2369862; 619155, 2369861; 619190, 2369844; 619233, 2369823; 619232, 2369822; 619305, 2369785; 619362, 2369728; 619407, 2369674; 619504, 2369544; 619537, 2369544; 619678, 2369457; 619849, 2369322; 619964, 2369229; 620222, 2369042; 620409, 2368964; 620514, 2368904; 620528, 2368813; 620524, 2368812; 620529, 2368782; 620529, 2368505; 620759, 2368329; 620759, 2368126; 620651, 2368146; 620563, 2368085; 620495, 2368072; 620427, 2367950; 620421, 2367768; 620421, 2367754; 620434, 2367450; 620218, 2367436; 620218, 2367734; 620231, 2367815; 620238, 2367984; 620285, 2368085; 620488, 2368295; 620427, 2368356; 620387, 2368457; 620312, 2368579; 620306, 2368654; 620299, 2368701; 620256, 2368766; 620162, 2368850; 620063, 2368937; 620003, 2368961; 619858, 2369045; 619708, 2369181; 619504, 2369310; 619335, 2369406; 619293, 2369445; 619278, 2369490; 619203, 2369580; 619154, 2369626; 619084, 2369686; 619074, 2369695; 619063, 2369697; 618991, 2369709; 618992, 2369710; 618770, 2369752; 618505, 2369812; 618361, 2369893; 618211, 2369986; 618200, 2370000; 618057, 2370054; 617376, 2370435; 616571, 2370993; 616536, 2370993; 616468, 2371125; 616182, 2371624; 615965, 2372069; 615583, 2372682; 615302, 2373118; 615020, 2373603; 614961, 2373916; 615044, 2374217; 615011, 2374283; 614948, 2374431; 614870, 2374599; 614819, 2374755; 614819, 2374861; 614816, 2374861; 614810, 2374936; 614828, 2375020; 614861, 2375104; 614852, 2375185; 614861, 2375303; 614825, 2375375; 614765, 2375465; 614762, 2375564; 614762, 2375687; 614756, 2375832; 614777, 2375979; 614762, 2376138; 614723, 2376259; 614641, 2376349; 614641, 2376391; 614641, 2376550; 614617, 2376653; 614590, 2376791; 614602, 2376929; 614602, 2376932; 614530, 2377068; 614482, 2377179; 614434, 2377242; 614365, 2377350; 614323, 2377431; 614211, 2377594; 614115, 2377753; 614115, 2377816; 614088, 2377922; 614031, 2378000; 613935, 2378000; 613833, 2377985; 613763, 2378008; 613771, 2378068; 613764,

2378090; 613757, 2378093; 613753,
2378093; return to starting point.

(ii) Note: Map 224 follows:



(225) Oahu 20—*Cyanea truncata*—a
(2,031 ha; 5,020 ac)

(i) Unit consists of the following 164 boundary points: Start at 613602, 2386551; 613659, 2386389; 613631, 2386210; 613273, 2385353; 613273, 2385352; 613274, 2385331; 613268, 2385140; 613280, 2384981; 613312, 2383180; 613250, 2382818; 613195, 2382609; 613088, 2382144; 613082, 2381829; 613080, 2381820; 613080, 2381819; 613080, 2381818; 613087, 2381810; 613208, 2381606; 613344, 2381440; 613533, 2381229; 613545, 2381214; 613505, 2380936; 613087,

2380405; 613087, 2380404; 613089, 2380400; 613115, 2380198; 613237, 2380056; 613239, 2380052; 613240, 2380051; 613646, 2379898; 614360, 2379039; 614361, 2379039; 615437, 2378644; 615510, 2378505; 615637, 2378424; 615841, 2378182; 616058, 2377995; 616346, 2377691; 616360, 2377561; 616377, 2377455; 616437, 2377260; 616441, 2377261; 616504, 2377029; 616326, 2376847; 615911, 2376866; 615753, 2376724; 615753, 2376601; 615853, 2376412; 615876, 2376331; 615830, 2376217; 615657, 2375913; 615739, 2375583; 616002, 2375545; 616017, 2375521; 616413,

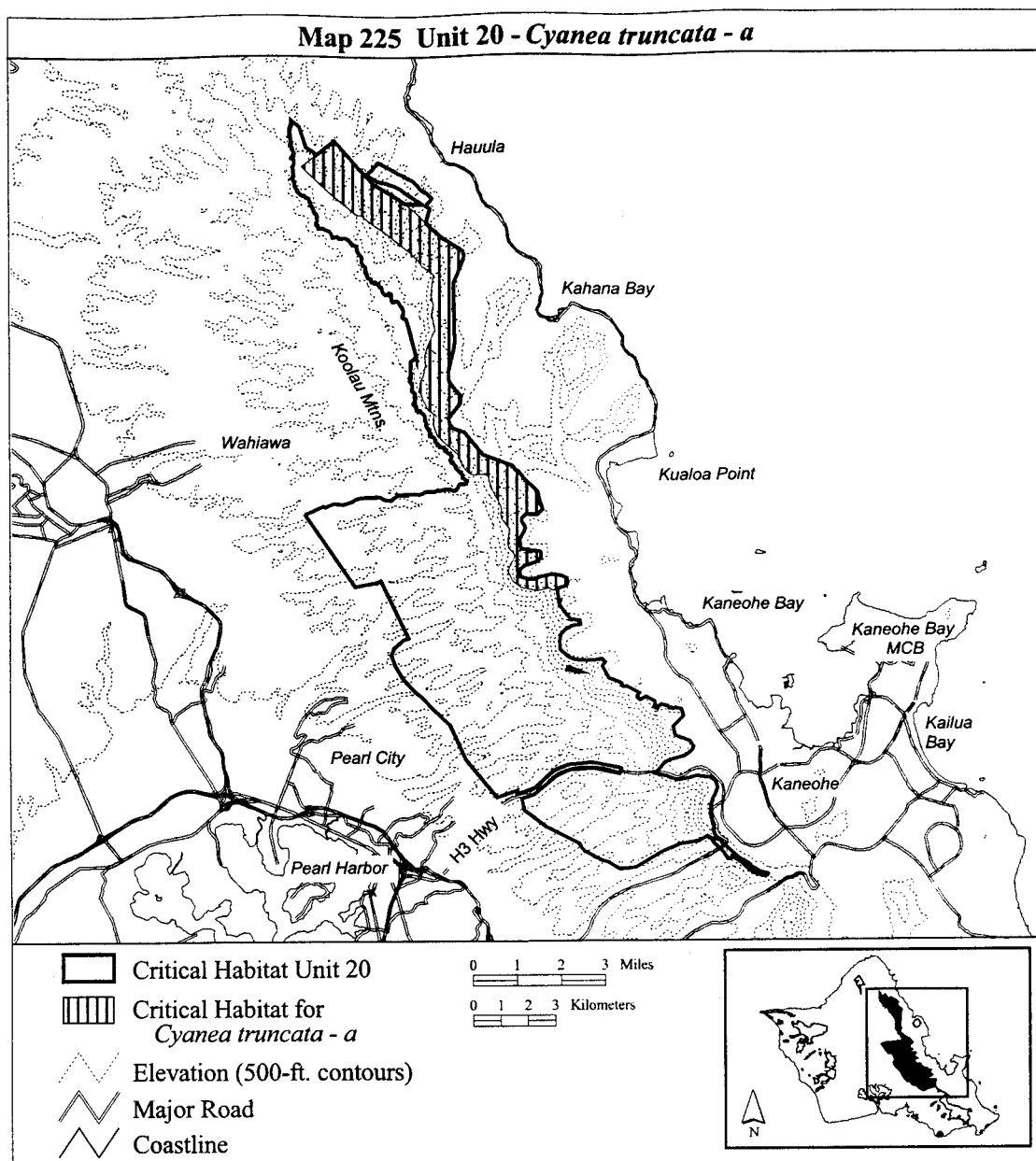
2375487; 616454, 2375432; 616454, 2375239; 616289, 2375088; 615849, 2374937; 615671, 2374785; 615684, 2374538; 615946, 2374455; 616023, 2374455; 616049, 2374426; 616159, 2374455; 616248, 2374455; 616439, 2374528; 616726, 2374601; 616815, 2374624; 617102, 2374594; 617234, 2374550; 617314, 2374524; 617376, 2374469; 617417, 2374318; 617399, 2374230; 617371, 2374191; 617349, 2374168; 616881, 2374029; 616743, 2374112; 616317, 2374015; 615712, 2374125; 615423, 2374373; 615244, 2374758; 615423, 2375102; 615506, 2375280; 615437, 2375432; 615285,

2375569; 615230, 2375789; 615285,
2376119; 615313, 2376298; 615024,
2376669; 614997, 2376876; 615008,
2376903; 615004, 2376902; 615004,
2377060; 615012, 2377060; 614982,
2377187; 614914, 2377340; 614783,
2377557; 614642, 2377825; 614574,
2378084; 614549, 2378258; 614426,
2378318; 614251, 2378322; 614034,
2378297; 613920, 2378322; 613822,
2378390; 613724, 2378496; 613603,
2378652; 613593, 2378644; 613400,
2379102; 613148, 2379328; 612882,
2379547; 612663, 2379793; 612550,

2380098; 612544, 2380510; 612504,
2380603; 612338, 2380690; 612112,
2381181; 612005, 2381507; 612035,
2381508; 612032, 2381533; 612065,
2381752; 612152, 2381899; 612238,
2382324; 612225, 2382682; 612311,
2383041; 612457, 2383320; 612603,
2383626; 612477, 2384230; 612510,
2384449; 612524, 2384602; 612477,
2384755; 612492, 2384755; 612444,
2384881; 612484, 2385393; 612550,
2385652; 612371, 2385824; 612105,
2386004; 611959, 2386210; 611640,
2386522; 610743, 2387233; 610272,

2387538; 609900, 2387837; 609904,
2387847; 609747, 2387864; 608963,
2388475; 608611, 2388774; 607704,
2389609; 608907, 2390579; 609714,
2389657; 610232, 2389126; 610338,
2389006; 611095, 2388548; 611693,
2388143; 611952, 2387903; 612284,
2387567; 612284, 2387566; 612285,
2387565; 612291, 2387560; 612457,
2387392; 612749, 2387140; 612955,
2386960; 613489, 2386638; return to
starting point.

(ii) **Note:** Map 225 follows:



(226) Oahu 20—*Cyrtandra subumbellata*—a (830 ha; 2,050 ac)

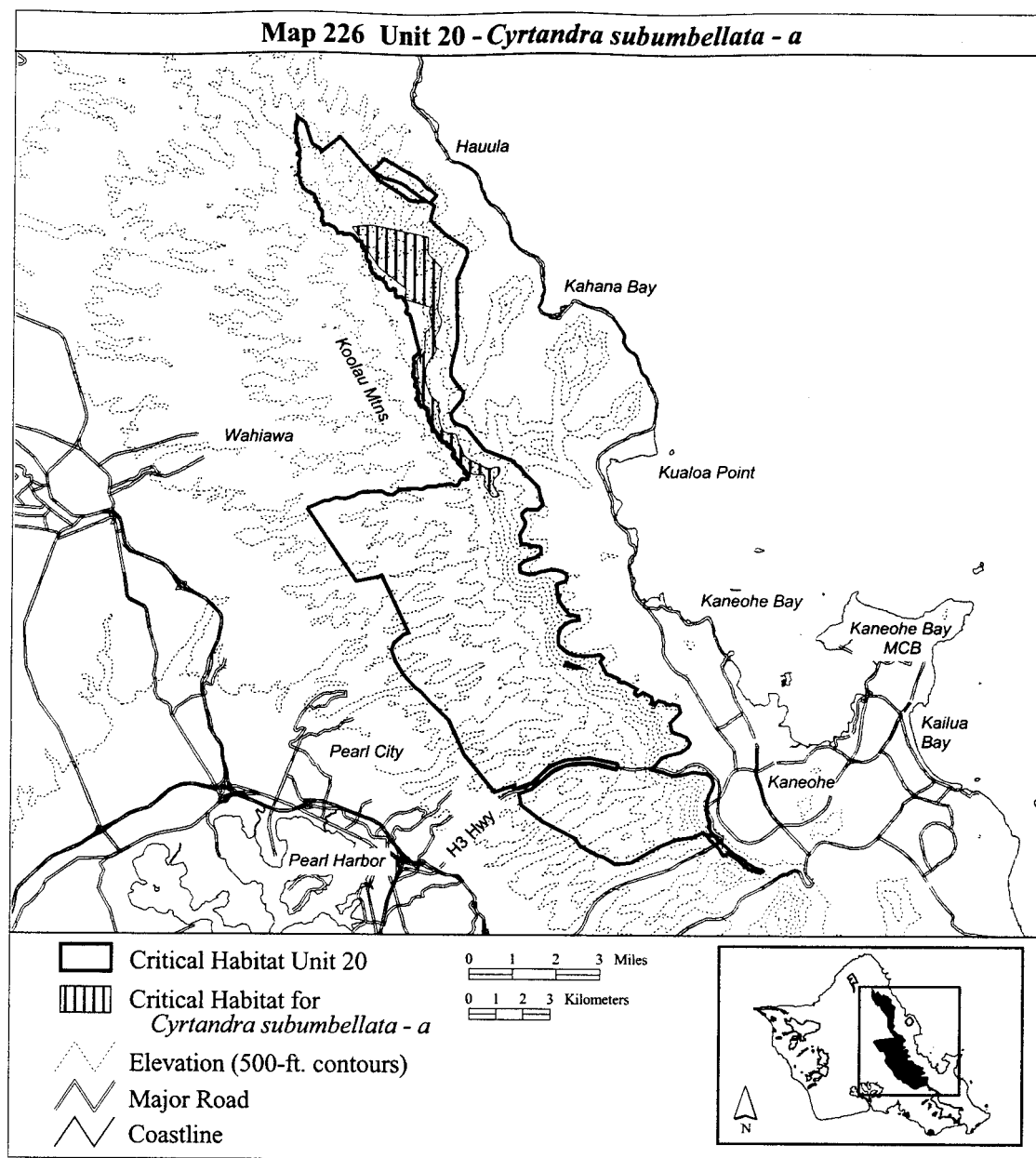
(i) Unit consists of the following 166 boundary points: Start at 610061,

2387358; 610074, 2387344; 612191, 2386940; 612201, 2386326; 612707, 2385810; 612654, 2385392; 612653, 2385389; 612646, 2385275; 612642, 2385124; 612646, 2384946; 612642, 2384870; 612638, 2384783; 612612, 2384688; 612600, 2384564; 612585, 2384291; 612604, 2384128; 612634, 2384037; 612702, 2383897; 612706, 2383784; 612691, 2383663; 612627, 2383458; 612490, 2383243; 612479, 2383242; 612483, 2383042; 612498, 2382947; 612517, 2382800; 612502, 2382671; 612426, 2382550; 612335, 2382448; 612267, 2382361; 612188, 2382232; 612150, 2382099; 612127, 2381956; 612123, 2381634; 612165, 2381445; 612226, 2381301; 612328, 2381089; 612438, 2380960; 612547, 2380854; 612623, 2380794; 612627, 2380684; 612634, 2380597; 612661, 2380585; 612691, 2380521; 612691, 2380445; 612638, 2380366; 612623, 2380309; 612653, 2380169; 612684, 2380044; 612718, 2379942; 612767,

2379851; 612805, 2379794; 612858, 2379726; 612907, 2379696; 613005, 2379685; 613092, 2379669; 613187, 2379662; 613263, 2379632; 613319, 2379545; 613346, 2379442; 613384, 2379336; 613448, 2379223; 613501, 2379109; 613505, 2379044; 613577, 2378882; 613713, 2378742; 613993, 2378602; 614266, 2378454; 614425, 2378386; 614534, 2378371; 614674, 2378405; 614765, 2378435; 614815, 2378435; 614868, 2378428; 614902, 2378401; 614902, 2378356; 614902, 2378269; 614879, 2378182; 614799, 2378095; 614720, 2378008; 614671, 2377917; 614674, 2377845; 614682, 2377754; 614720, 2377667; 614780, 2377569; 614856, 2377463; 614898, 2377395; 614875, 2377364; 614849, 2377349; 614777, 2377311; 614678, 2377304; 614640, 2377342; 614572, 2377417; 614478, 2377554; 614413, 2377641; 614338, 2377766; 614341, 2377883; 614349, 2378019; 614349, 2378114; 614311, 2378136; 614186, 2378148; 614046, 2378159; 613861, 2378178; 613755, 2378216; 613641, 2378371; 613554, 2378492; 613509, 2378507; 613441, 2378636; 613255, 2378854; 613244, 2378848; 613248,

2378863; 613248, 2378864; 613278, 2378965; 613248, 2379064; 613149, 2379177; 613047, 2379242; 613001, 2379325; 612865, 2379393; 612759, 2379465; 612695, 2379594; 612596, 2379753; 612562, 2379783; 612517, 2379828; 612468, 2379881; 612468, 2379968; 612362, 2380116; 612294, 2380309; 612309, 2380434; 612309, 2380555; 612256, 2380608; 612123, 2380710; 612051, 2380790; 612044, 2380790; 611998, 2380900; 612006, 2381002; 611968, 2381142; 611874, 2381346; 611851, 2381566; 611858, 2381774; 611832, 2381910; 611802, 2382096; 611805, 2382277; 611813, 2382330; 611855, 2382440; 611998, 2382573; 612112, 2382705; 612101, 2382891; 612089, 2383008; 612112, 2383140; 612130, 2383239; 612127, 2383239; 612116, 2383299; 612138, 2383405; 612244, 2383492; 612335, 2383651; 612335, 2383765; 612305, 2383954; 612252, 2384136; 612286, 2384272; 612313, 2384344; 611321, 2384616; 611381, 2384995; 610379, 2385786; 610036, 2386268; 610037, 2386293; 609373, 2387267; return to starting point.

(ii) **Note:** Map 226 follows:



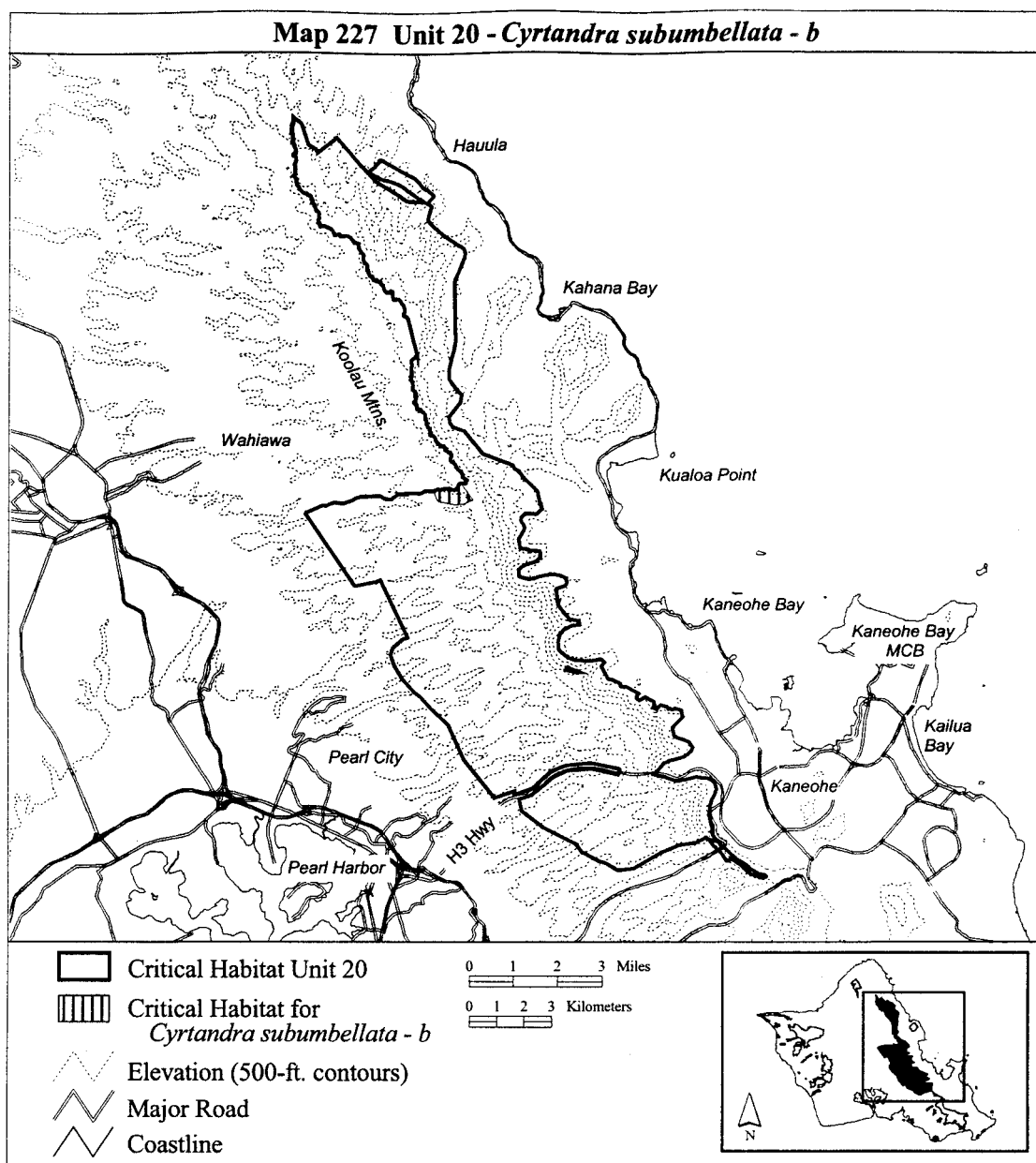
(227) Oahu 20—*Cyrtandra subumbellata*—b (67 ha; 167 ac)

(i) Unit consists of the following 40 boundary points: Start at 612671, 2377303; 612526, 2377691; 612575, 2377698; 612576, 2377698; 612596, 2377708; 612604, 2377703; 612630, 2377702; 612668, 2377720; 612688,

2377749; 612686, 2377751; 612705, 2377757; 612764, 2377738; 612765, 2377738; 612794, 2377742; 612814, 2377728; 612853, 2377742; 612870, 2377747; 613040, 2377760; 613059, 2377772; 613059, 2377774; 613085, 2377777; 613154, 2377768; 613224, 2377738; 613264, 2377728; 613265, 2377728; 613335, 2377738; 613336,

2377738; 613359, 2377752; 613368, 2377747; 613413, 2377754; 613415, 2377755; 613449, 2377784; 613454, 2377825; 613460, 2377881; 613497, 2377929; 613544, 2377969; 613986, 2377373; 613635, 2377208; 613308, 2377183; 612870, 2377274; return to starting point.

(ii) **Note:** Map 227 follows:



(228) Oahu 20—*Cyrtandra viridiflora*—a
(782 ha; 1,932 ac)

(i) Unit consists of the following 517
boundary points: Start at 613555,

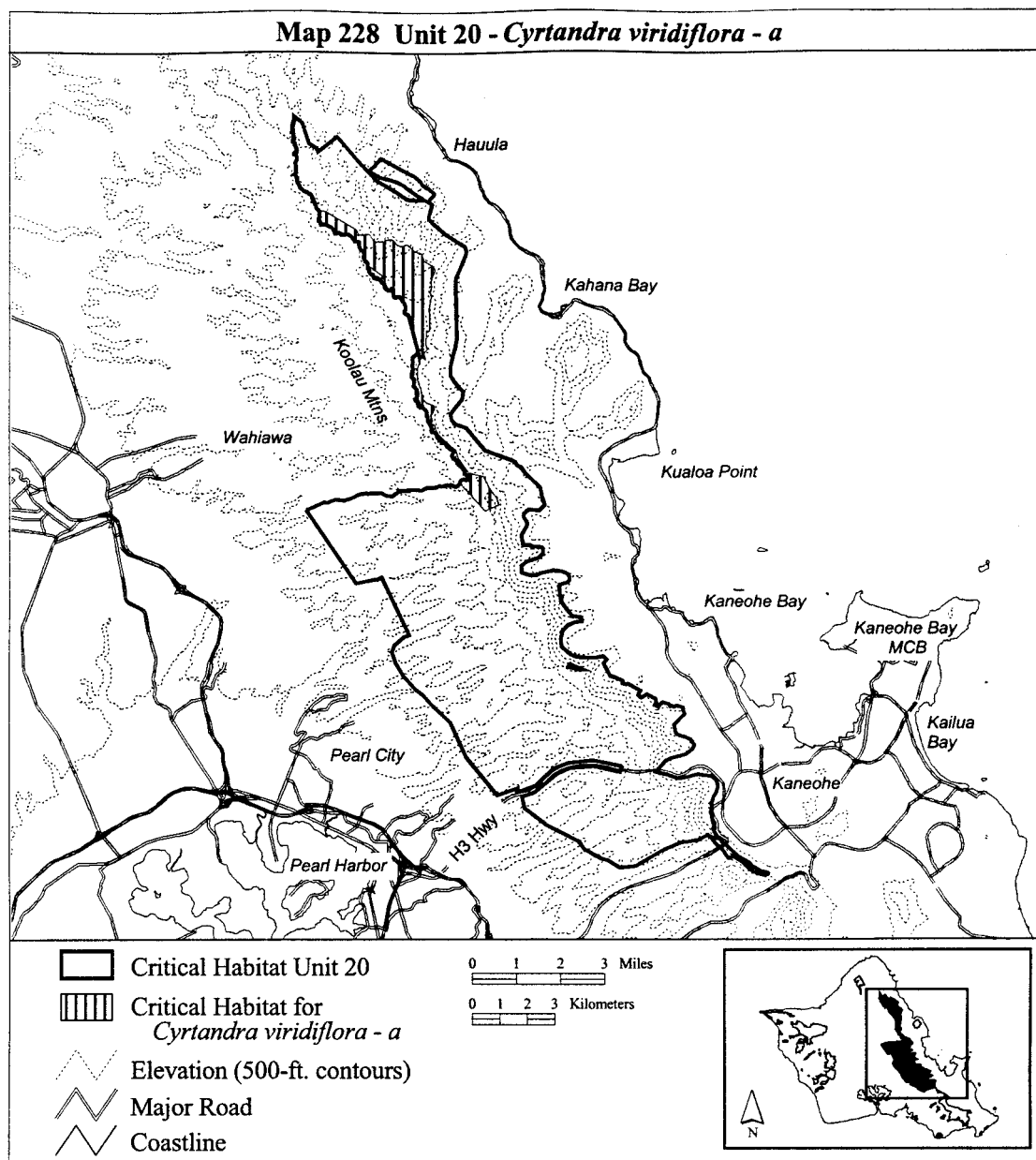
2377987; 613674, 2377978; 613675,
2377978; 613694, 2377988; 613721,
2377976; 613733, 2377976; 613762,
2378001; 613771, 2378068; 613764,
2378090; 613757, 2378093; 613753,
2378093; 613751, 2378091; 613747,
2378094; 613746, 2378095; 613718,
2378106; 613711, 2378117; 613711,
2378118; 613691, 2378143; 613660,
2378168; 613602, 2378212; 613593,
2378224; 613586, 2378238; 613583,
2378253; 613583, 2378292; 613583,
2378328; 613583, 2378329; 613568,
2378356; 613568, 2378357; 613556,

2378372; 613524, 2378400; 613517,
2378408; 613476, 2378444; 613462,
2378463; 613462, 2378464; 613447,
2378478; 613424, 2378499; 613386,
2378532; 613364, 2378562; 613346,
2378613; 613330, 2378641; 613265,
2378728; 613248, 2378749; 613247,
2378750; 613232, 2378759; 613231,
2378759; 613213, 2378764; 613199,
2378769; 613190, 2378778; 613172,
2378818; 613172, 2378819; 613152,
2378848; 613147, 2378859; 613147,
2378860; 613146, 2378860; 613145,
2378860; 613145, 2378861; 613146,
2378862; 613145, 2378862; 613144,
2378873; 613159, 2378951; 613185,
2378998; 613187, 2379004; 613187,
2379005; 613185, 2379019; 613185,
2379020; 613171, 2379040; 613142,

2379072; 613115, 2379100; 613099,
2379113; 613098, 2379113; 613063,
2379127; 612997, 2379166; 612978,
2379188; 612969, 2379215; 612963,
2379226; 612959, 2379247; 612959,
2379248; 612945, 2379276; 612945,
2379277; 612929, 2379297; 612928,
2379298; 612905, 2379314; 612876,
2379327; 612840, 2379337; 612770,
2379350; 612764, 2379355; 612758,
2379364; 612748, 2379389; 612748,
2379390; 612725, 2379410; 612700,
2379424; 612683, 2379441; 612663,
2379470; 612619, 2379529; 612600,
2379563; 612586, 2379618; 612573,
2379650; 612555, 2379679; 612517,
2379716; 612495, 2379729; 612412,
2379753; 612397, 2379761; 612387,
2379798; 612388, 2379851; 612386,

2379928; 612379, 2379961; 612379, 2379962; 612375, 2379970; 612367, 2379981; 612366, 2379981; 612366, 2379982; 612353, 2379991; 612328, 2380018; 612262, 2380145; 612255, 2380163; 612249, 2380199; 612248, 2380233; 612234, 2380304; 612226, 2380334; 612225, 2380334; 612224, 2380337; 612211, 2380367; 612213, 2380397; 612218, 2380419; 612218, 2380420; 612215, 2380452; 612212, 2380464; 612202, 2380506; 612202, 2380507; 612197, 2380516; 612177, 2380539; 612112, 2380593; 612086, 2380625; 612073, 2380644; 612046, 2380669; 612046, 2380670; 612016, 2380686; 611992, 2380690; 611965, 2380687; 611955, 2380689; 611941, 2380693; 611927, 2380702; 611919, 2380710; 611905, 2380743; 611889, 2380825; 611889, 2380826; 611880, 2380839; 611856, 2380862; 611812, 2380892; 611799, 2380905; 611798, 2380918; 611800, 2380925; 611815, 2380943; 611838, 2380960; 611838, 2380961; 611848, 2380980; 611851, 2381022; 611848, 2381067; 611853, 2381081; 611879, 2381118; 611879, 2381119; 611879, 2381131; 611879, 2381132; 611868, 2381149; 611858, 2381155; 611857, 2381155; 611847, 2381160; 611837, 2381167; 611828, 2381178; 611825, 2381193; 611830, 2381214; 611838, 2381223; 611854, 2381250; 611854, 2381251; 611856, 2381258; 611855, 2381265; 611855, 2381266; 611849, 2381285; 611848, 2381286; 611828, 2381312; 611784, 2381363; 611765, 2381383; 611734, 2381424; 611733, 2381424; 611730, 2381426; 611737, 2381446; 611745, 2381514; 611746, 2381550; 611748, 2381618; 611748, 2381619; 611739, 2381669; 611736, 2381680; 611736, 2381681; 611727, 2381699; 611727, 2381700; 611726, 2381700; 611673, 2381758; 611666, 2381774; 611666, 2381794; 611670, 2381810; 611702, 2381865; 611712, 2381882; 611712, 2381883; 611712, 2381915; 611712, 2381916; 611710, 2381923; 611687, 2381955; 611687, 2381978; 611695, 2381990; 611702, 2382013; 611702, 2382014; 611700, 2382058; 611694, 2382120; 611695, 2382225; 611701, 2382278; 611701, 2382279; 611699, 2382320; 611695, 2382360; 611693, 2382433; 611692, 2382455; 611698, 2382473; 611744, 2382512; 611805, 2382557; 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611165, 2384698; 611119, 2384696; 611082, 2384690; 611081, 2384690; 611065, 2384682; 611064, 2384681; 611058, 2384675; 611046, 2384674; 611039, 2384675; 611028, 2384688; 611014, 2384713; 610994, 2384778; 610981, 2384838; 610976, 2384927; 610973, 2384941; 610973, 2384942; 610965, 2384959; 610965, 2384960; 610957, 2384969; 610957, 2384970; 610934, 2384987; 610933, 2384987; 610909, 2384993; 610908, 2384993; 610888, 2384986; 610839, 2384956; 610825, 2384951; 610590, 2385486; 610034, 2385898; 610035, 2385901; 610035, 2385902; 610035, 2385943; 610035, 2385944; 610029, 2385956; 610029, 2385957; 610003, 2385991; 609994, 2386004; 609993, 2386004; 609993, 2386005; 609971, 2386017; 609955, 2386025; 609948, 2386031; 609929, 2386085; 609909, 2386112; 609908, 2386113; 609898, 2386121; 609887, 2386134; 609883, 2386146; 609884, 2386168; 609879, 2386204; 609884, 2386223; 609905, 2386254; 609905, 2386255; 609909, 2386278; 609909, 2386279; 609907, 2386291; 609881, 2386354; 609880, 2386355; 609858, 2386384; 609834, 2386404; 609797, 2386443; 609790, 2386450; 609769, 2386468; 609748, 2386495; 609737, 2386524; 609719, 2386644; 609711, 2386719; 609711, 2386720; 609705, 2386737; 609704, 2386737; 609704, 2386738; 609693, 2386745; 609692, 2386745; 609595, 2386759; 609570, 2386766; 609560, 2386772; 609536, 2386797; 609481, 2386863; 609461, 2386894; 609449, 2386918; 609449, 2386919; 609439, 2386933; 609438, 2386934; 609425, 2386943; 609379, 2386966; 609323, 2387005; 609308, 2387012; 609269, 2387020; 609248, 2387021; 609184, 2387014; 609134, 2387001; 609078, 2386982; 609074, 2386984; 609062, 2387000; 609048, 2387031; 609047, 2387032; 609025, 2387051; 609024, 2387051; 608989, 2387068; 608988, 2387068; 608975, 2387068; 608974, 2387068; 608905, 2387055; 608862, 2387042; 608856, 2387043; 608849, 2387049; 608810, 2387121; 608794, 2387150; 608776, 2387175; 608736, 2387223; 608719, 2387246; 608718, 2387246; 608718, 2387247; 608693, 2387265; 608692, 2387265; 608643, 2387281; 608604, 2387303; 608558, 2387325; 608497, 2387362; 608496, 2387362; 608459, 2387369; 608435, 2387371; 608434, 2387371; 608410, 2387366; 608377, 2387354; 608355, 2387351; 608336, 2387351; 608316, 2387358; 608308, 2387366; 608294, 2387395; 608292, 2387413; 608300, 2387459; 608299, 2387471; 608298, 2387472; 608298, 2387473; 608289, 2387479; 608252, 2387489; 608234, 2387501; 608228, 2387506; 608223, 2387520; 608230, 2387572; 608232, 2387576; 608238, 2387590; 608252, 2387607; 608267, 2387627; 608267, 2387628; 608272, 2387642; 608275, 2387670; 608275, 2387671; 608273, 2387689; 608258, 2387739; 608257, 2387765; 608259, 2387774; 608270, 2387794; 608274, 2387812; 608274, 2387813; 608254, 2387851; 608254, 2387852; 608236, 2387874; 608519, 2387842; 608527, 2387829; 608529, 2387826; 608531, 2387827; 609623, 2387185; 609716, 2386981; 610090, 2387020; 610286, 2386745; 610680, 2386745; 610684, 2386799; 610857, 2386830; 610857, 2386824; 610975, 2386824; 611132, 2386607; 611289, 2386568; 611486, 2386627; 611489, 2386638; 611798, 2386378; 611798, 2386379; 611800, 2386372; 611801, 2386371; 611801, 2386372; 612019, 2386288; 612115, 2386037; 612351, 2385899; 612454, 2385841; 612532, 2385647; 612489, 2385585; 612391, 2385349; 612391, 2385034; 612332, 2384857; 612390, 2384704; 612301, 2384256; 612322, 2383968; 612322, 2383520; 612322, 2383461; 612194, 2383461; 612194, 2383225; 612174, 2382969; 612214, 2382851; 612214, 2382753; 612115, 2382635; 612174, 2382399; 612037, 2382477; 611958, 2382399; 611958, 2382300; 611879, 2382104; 611873, 2381627; 611997, 2381297; 612076, 2381002; 612165, 2380842; 612166, 2380830; 612173, 2380827; 612174, 2380825; 612177, 2380826; 612489, 2380708; 612489, 2380530; 612391, 2380314; 612430, 2380157; 612391, 2380019; 612489, 2380019; 612548, 2379862; 612664, 2379648; 613047, 2379270; 613270, 2379091; 613355, 2378810; 613751, 2378218; 614289, 2378090; 614502, 2377694; 614779, 2377295; 614837, 2377041; 614349,

2376831; 613456, 2377841; 613460,

2377881; 613497, 2377929; 613554,
2377977; return to starting point.(ii) **Note:** Map 228 follows:

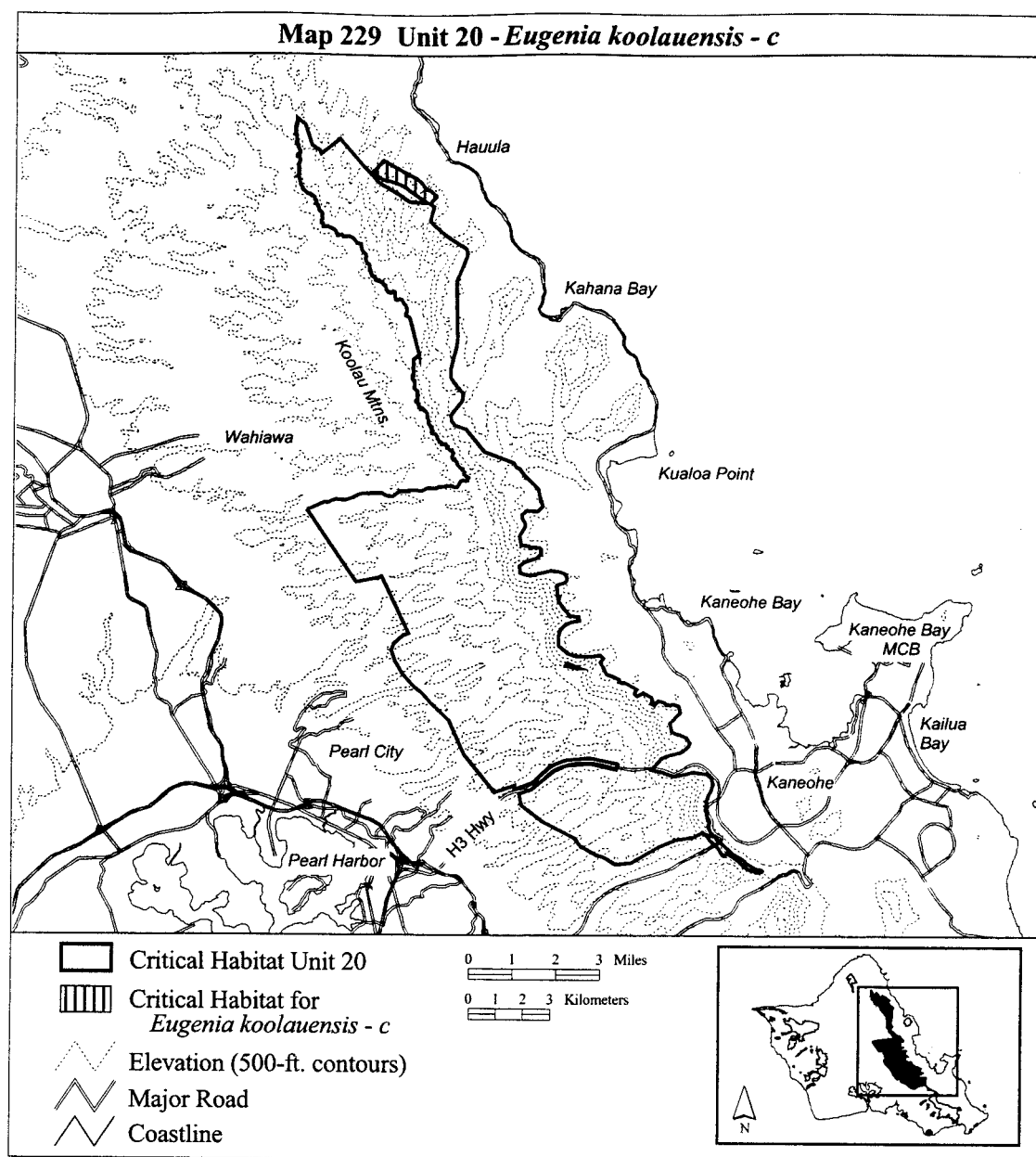
(229) Oahu 20—*Eugenia koolauensis*—c
(122 ha; 302 ac)

(i) Unit consists of the following 36
boundary points: Start at 611208,
2389430; 611266, 2389383; 611444,
2389300; 611596, 2389220; 611731,
2389154; 611780, 2389128; 611947,
2388975; 611980, 2388930; 612046,

2388843; 612180, 2388738; 612269,
2388680; 612483, 2388484; 612482,
2388480; 612415, 2388361; 612328,
2388285; 612260, 2388187; 612169,
2388237; 612024, 2388350; 611904,
2388419; 611745, 2388520; 611498,
2388687; 611339, 2388803; 611125,
2388923; 610817, 2389017; 610610,

2389071; 610476, 2389111; 610189,
2389274; 610106, 2389336; 610200,
2389448; 610287, 2389514; 610320,
2389543; 610334, 2389594; 610403,
2389630; 610447, 2389724; 610483,
2389760; 610536, 2389785; return to
starting point.

(ii) **Note:** Map 229 follows:



(230) Oahu 20—*Gardenia mannii*—b
(206 ha; 510 ac)

(i) Unit consists of the following 302 boundary points: Start at 607315, 2391304; 607614, 2391084; 607875, 2390295; 608495, 2388072; 608540, 2387990; 608535, 2387978; 608688, 2387309; 608637, 2387285; 608604, 2387303; 608558, 2387325; 608497, 2387362; 608496, 2387362; 608459, 2387369; 608458, 2387369; 608435, 2387371; 608434, 2387371; 608410, 2387366; 608377, 2387354; 608355, 2387351; 608336, 2387351; 608316, 2387358; 608308, 2387366; 608294, 2387395; 608292, 2387413; 608300, 2387459; 608299, 2387471; 608298, 2387472; 608298, 2387473; 608289,

2387479; 608252, 2387489; 608234, 2387501; 608228, 2387506; 608223, 2387520; 608230, 2387572; 608232, 2387576; 608238, 2387590; 608252, 2387607; 608267, 2387627; 608267, 2387628; 608272, 2387642; 608275, 2387670; 608275, 2387671; 608273, 2387689; 608258, 2387739; 608257, 2387765; 608259, 2387774; 608270, 2387794; 608274, 2387812; 608274, 2387813; 608254, 2387851; 608254, 2387852; 608227, 2387885; 608190, 2387914; 608165, 2387924; 608146, 2387938; 608143, 2387944; 608141, 2387956; 608156, 2388000; 608156, 2388001; 608156, 2388002; 608152, 2388015; 608129, 2388052; 608116, 2388066; 608100, 2388105; 608092,

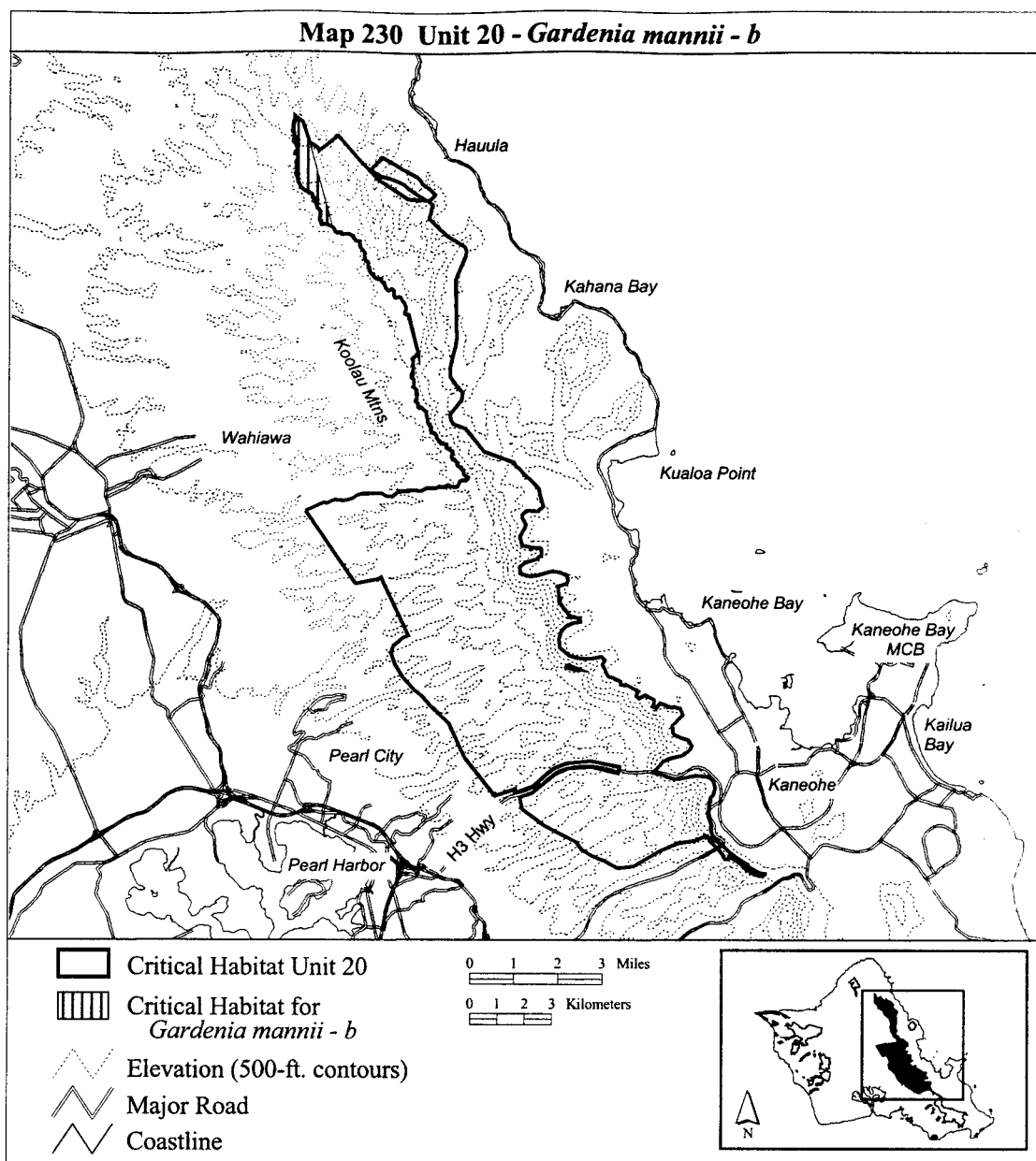
2388136; 608092, 2388137; 608082, 2388155; 608034, 2388210; 608029, 2388227; 608037, 2388262; 608037, 2388263; 608034, 2388274; 608017, 2388312; 608011, 2388328; 608011, 2388329; 607997, 2388340; 607987, 2388344; 607980, 2388349; 607975, 2388357; 607973, 2388367; 607974, 2388406; 607974, 2388407; 607972, 2388420; 607965, 2388446; 607964, 2388447; 607956, 2388457; 607956, 2388458; 607898, 2388494; 607897, 2388494; 607887, 2388497; 607865, 2388499; 607855, 2388502; 607821, 2388528; 607809, 2388537; 607808, 2388537; 607783, 2388550; 607782, 2388550; 607736, 2388557; 607735, 2388557; 607719, 2388559; 607692,

2388571; 607666, 2388594; 607654,
2388609; 607653, 2388609; 607613,
2388646; 607567, 2388681; 607550,
2388690; 607540, 2388696; 607534,
2388706; 607532, 2388717; 607534,
2388752; 607534, 2388761; 607534,
2388762; 607514, 2388795; 607461,
2388853; 607451, 2388878; 607448,
2388911; 607450, 2388923; 607446,
2388944; 607426, 2388990; 607425,
2389020; 607427, 2389043; 607427,
2389044; 607417, 2389071; 607411,
2389083; 607404, 2389108; 607378,
2389157; 607359, 2389185; 607358,
2389186; 607353, 2389189; 607357,
2389208; 607364, 2389224; 607376,
2389239; 607389, 2389258; 607389,
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2389307; 607400, 2389308; 607399,
2389308; 607397, 2389348; 607395,
2389372; 607394, 2389386; 607393,
2389394; 607394, 2389406; 607393,
2389417; 607393, 2389426; 607393,
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2389450; 607412, 2389462; 607414,
2389476; 607414, 2389477; 607407,
2389492; 607407, 2389493; 607406,
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2389503; 607387, 2389514; 607387,
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2389548; 607384, 2389549; 607371,
2389581; 607369, 2389599; 607385,
2389636; 607406, 2389684; 607426,
2389734; 607434, 2389770; 607432,
2389795; 607432, 2389796; 607420,

2389826; 607409, 2389850; 607411,
2389869; 607411, 2389870; 607405,
2389887; 607404, 2389887; 607404,
2389888; 607379, 2389900; 607356,
2389911; 607349, 2389914; 607342,
2389918; 607333, 2389926; 607328,
2389936; 607326, 2389947; 607329,
2389962; 607336, 2389972; 607346,
2389983; 607357, 2389993; 607367,
2389999; 607380, 2390009; 607391,
2390014; 607403, 2390020; 607403,
2390021; 607414, 2390032; 607424,
2390046; 607424, 2390047; 607430,
2390064; 607430, 2390065; 607434,
2390084; 607434, 2390085; 607433,
2390100; 607433, 2390101; 607428,
2390118; 607428, 2390119; 607419,
2390135; 607409, 2390145; 607400,
2390154; 607394, 2390162; 607392,
2390167; 607390, 2390179; 607389,
2390182; 607381, 2390212; 607375,
2390258; 607374, 2390279; 607374,
2390280; 607373, 2390281; 607356,
2390292; 607344, 2390301; 607342,
2390305; 607340, 2390316; 607340,
2390317; 607335, 2390330; 607334,
2390330; 607329, 2390335; 607318,
2390344; 607310, 2390354; 607301,
2390366; 607291, 2390380; 607285,
2390388; 607284, 2390398; 607288,
2390414; 607293, 2390428; 607300,
2390440; 607306, 2390450; 607306,
2390451; 607312, 2390461; 607316,
2390467; 607316, 2390468; 607319,
2390483; 607317, 2390493; 607315,

2390509; 607310, 2390525; 607305,
2390543; 607301, 2390562; 607296,
2390582; 607294, 2390602; 607294,
2390620; 607295, 2390636; 607297,
2390651; 607295, 2390665; 607295,
2390666; 607291, 2390680; 607285,
2390699; 607284, 2390699; 607275,
2390711; 607274, 2390711; 607265,
2390720; 607261, 2390731; 607261,
2390744; 607258, 2390760; 607266,
2390773; 607273, 2390789; 607280,
2390802; 607283, 2390814; 607283,
2390815; 607279, 2390828; 607275,
2390842; 607270, 2390855; 607265,
2390869; 607263, 2390883; 607260,
2390899; 607259, 2390914; 607260,
2390927; 607261, 2390939; 607265,
2390951; 607268, 2390959; 607268,
2390960; 607269, 2390971; 607271,
2390983; 607271, 2390997; 607270,
2391013; 607270, 2391025; 607278,
2391038; 607286, 2391053; 607292,
2391065; 607297, 2391078; 607302,
2391095; 607307, 2391111; 607312,
2391127; 607312, 2391128; 607315,
2391144; 607319, 2391156; 607322,
2391172; 607325, 2391188; 607325,
2391203; 607324, 2391216; 607324,
2391229; 607324, 2391243; 607323,
2391259; 607322, 2391271; 607321,
2391284; 607317, 2391297; return to
starting point.

(ii) **Note:** Map 230 follows:



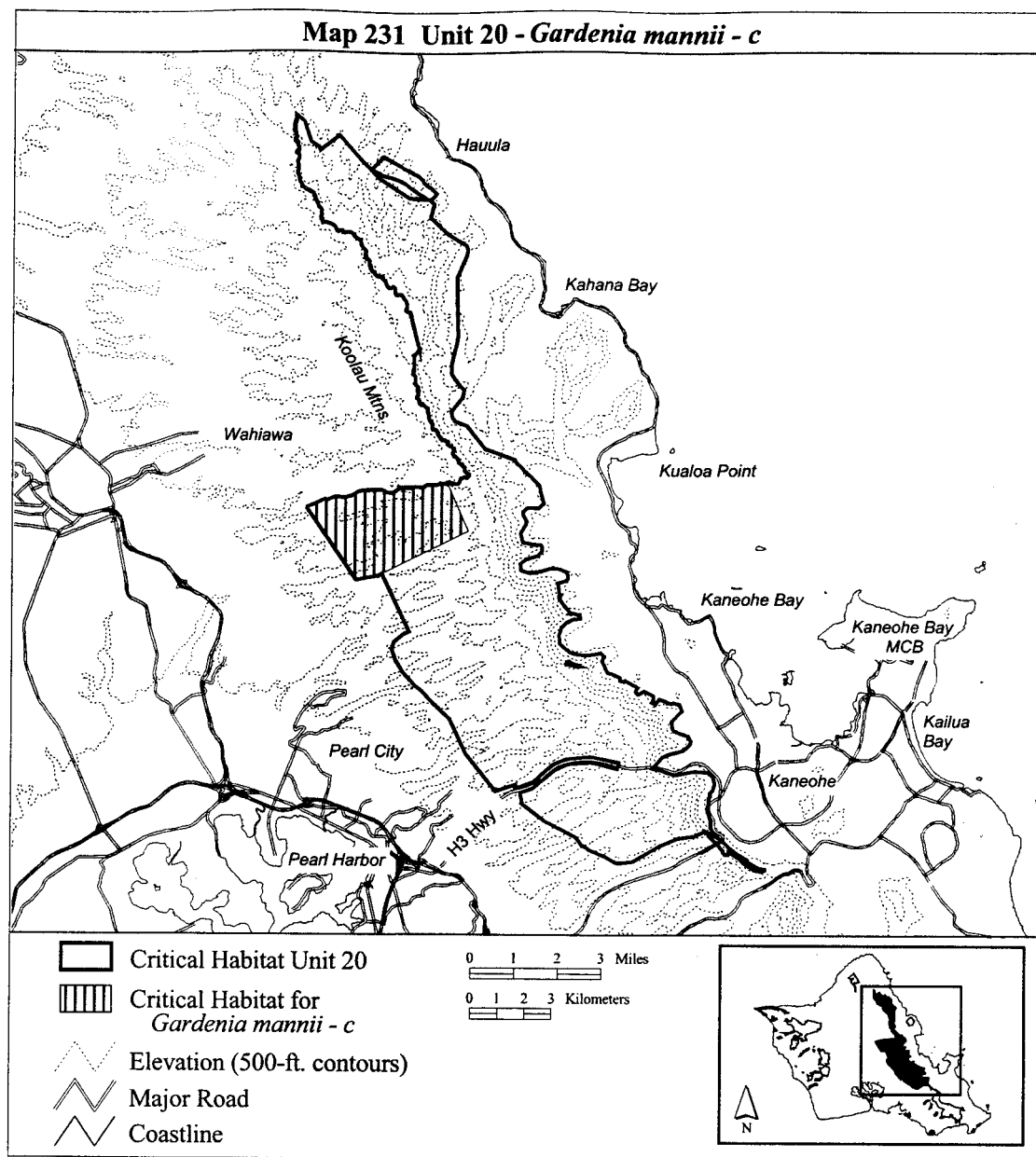
(231) Oahu 20—*Gardenia mannii*—c
(1,311 ha; 3,239 ac)

(i) Unit consists of the following 70 boundary points: Start at 610084, 2377493; 610560, 2377510; 610747, 2377396; 610965, 2377385; 611183, 2377541; 611328, 2377562; 611806, 2377593; 612055, 2377562; 612081, 2377577; 612103, 2377583; 612103, 2377584; 612166, 2377617; 612168, 2377619; 612169, 2377619; 612210, 2377654; 612263, 2377686; 612414, 2377680; 612432, 2377673; 612468,

2377676; 612472, 2377678; 612533, 2377676; 612613, 2377702; 612630, 2377702; 612668, 2377720; 612669, 2377721; 612720, 2377738; 612793, 2377718; 612845, 2377739; 612853, 2377742; 612870, 2377747; 612960, 2377754; 613728, 2375972; 610456, 2374325; 609627, 2374155; 607793, 2376879; 607838, 2376897; 607901, 2376922; 607901, 2376921; 607907, 2376916; 607913, 2376915; 607935, 2376919; 607956, 2376931; 607962, 2376938; 607962, 2376945; 608077, 2376990; 608090, 2376996; 608098,

2376990; 608118, 2376996; 608134, 2377006; 608141, 2377013; 608141, 2377021; 608440, 2377167; 608565, 2377136; 608700, 2377209; 608866, 2377271; 609188, 2377229; 609224, 2377240; 609224, 2377239; 609234, 2377232; 609243, 2377236; 609245, 2377246; 609500, 2377323; 609656, 2377416; 609843, 2377489; 609967, 2377489; 610035, 2377491; 610041, 2377483; 610051, 2377480; 610079, 2377484; 610084, 2377489; return to starting point.

(ii) **Note:** Map 231 follows:



(232) Oahu 20—*Hesperomannia arborescens*—b (590 ha; 1,457 ac)

(i) Unit consists of the following 187 boundary points: Start at 609226,

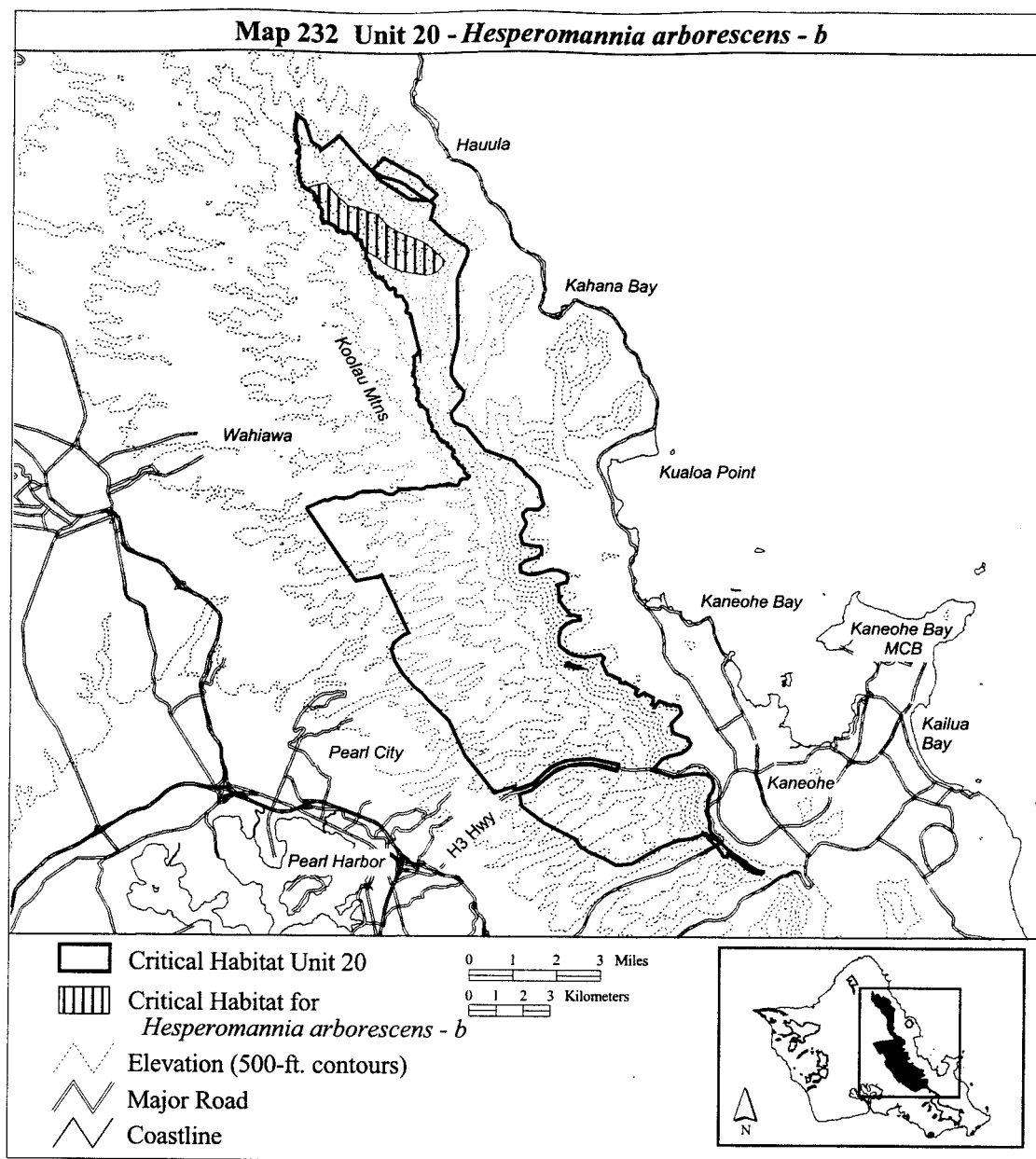
2388010; 609538, 2387950; 609766, 2387880; 610114, 2387759; 610304, 2387704; 610480, 2387518; 610619, 2387365; 610800, 2387217; 611092, 2387073; 611417, 2386957; 611798, 2386818; 612081, 2386678; 612401, 2386414; 612749, 2386112; 612800, 2386052; 612744, 2385862; 612544, 2385616; 612349, 2385540; 612125, 2385498; 611748, 2385522; 611214, 2385619; 610899, 2385710; 610601, 2385862; 610340, 2386080; 610097, 2386238; 609924, 2386325; 609905, 2386410; 609865, 2386375; 609858, 2386384; 609834, 2386404; 609797, 2386443; 609797, 2386444; 609790, 2386450; 609769, 2386468; 609748, 2386495; 609737, 2386524; 609719, 2386644; 609711, 2386719; 609711, 2386720; 609705, 2386737; 609704, 2386737; 609704, 2386738; 609693, 2386745; 609692, 2386745; 609595, 2386759; 609570, 2386766; 609560, 2386772; 609536, 2386797; 609481, 2386863; 609461, 2386894; 609449, 2386918; 609449, 2386919; 609439, 2386933; 609438, 2386934; 609425, 2386943; 609379, 2386966; 609323, 2387005; 609322, 2387005; 609308, 2387012; 609269, 2387020; 609248, 2387021; 609184, 2387014; 609134, 2387001; 609078, 2386982; 609074, 2386984; 609062, 2387000; 609048, 2387031; 609047, 2387032; 609025, 2387051; 609024, 2387051; 608989, 2387068; 608988, 2387068; 608975, 2387068; 608974, 2387068; 608905, 2387055; 608862, 2387042; 608856, 2387043; 608849, 2387049; 608810, 2387121; 608794, 2387150; 608794, 2387151; 608776, 2387175; 608736, 2387223; 608719, 2387246; 608718, 2387246; 608718, 2387247; 608693, 2387265; 608692, 2387265; 608643, 2387281; 608604, 2387303; 608558, 2387325; 608497, 2387362; 608496, 2387362; 608459, 2387369; 608458, 2387369; 608435, 2387371; 608434, 2387371; 608410, 2387366; 608377, 2387354; 608355, 2387351; 608336, 2387351; 608316, 2387358; 608308, 2387366; 608294, 2387395; 608292, 2387413; 608300, 2387459; 608299,

2387471; 608298, 2387472; 608298,
2387473; 608289, 2387479; 608252,
2387489; 608234, 2387501; 608228,
2387506; 608223, 2387520; 608230,
2387572; 608232, 2387576; 608238,
2387590; 608252, 2387607; 608267,
2387627; 608267, 2387628; 608272,
2387642; 608275, 2387670; 608275,
2387671; 608273, 2387689; 608258,
2387739; 608257, 2387765; 608259,
2387774; 608270, 2387794; 608274,
2387812; 608274, 2387813; 608254,
2387851; 608254, 2387852; 608227,
2387885; 608190, 2387914; 608165,

2387924; 608146, 2387938; 608143,
2387944; 608141, 2387956; 608156,
2388000; 608156, 2388001; 608156,
2388002; 608152, 2388015; 608129,
2388052; 608116, 2388066; 608100,
2388105; 608092, 2388136; 608092,
2388137; 608082, 2388155; 608034,
2388210; 608029, 2388227; 608037,
2388262; 608037, 2388263; 608034,
2388274; 608017, 2388312; 608011,
2388328; 608011, 2388329; 607997,
2388340; 607987, 2388344; 607980,
2388349; 607975, 2388357; 607973,
2388367; 607974, 2388406; 607974,

2388407; 607972, 2388420; 607965,
2388446; 607964, 2388447; 607956,
2388457; 607956, 2388458; 607898,
2388494; 607897, 2388494; 607887,
2388497; 607865, 2388499; 607855,
2388502; 607821, 2388528; 607809,
2388537; 607808, 2388537; 607783,
2388550; 607782, 2388550; 607736,
2388557; 607719, 2388559; 607692,
2388571; 607666, 2388594; 607654,
2388609; 607653, 2388609; 607650,
2388612; 608396, 2388827; 608778,
2388404; return to starting point.

(ii) Note: Map 232 follows:



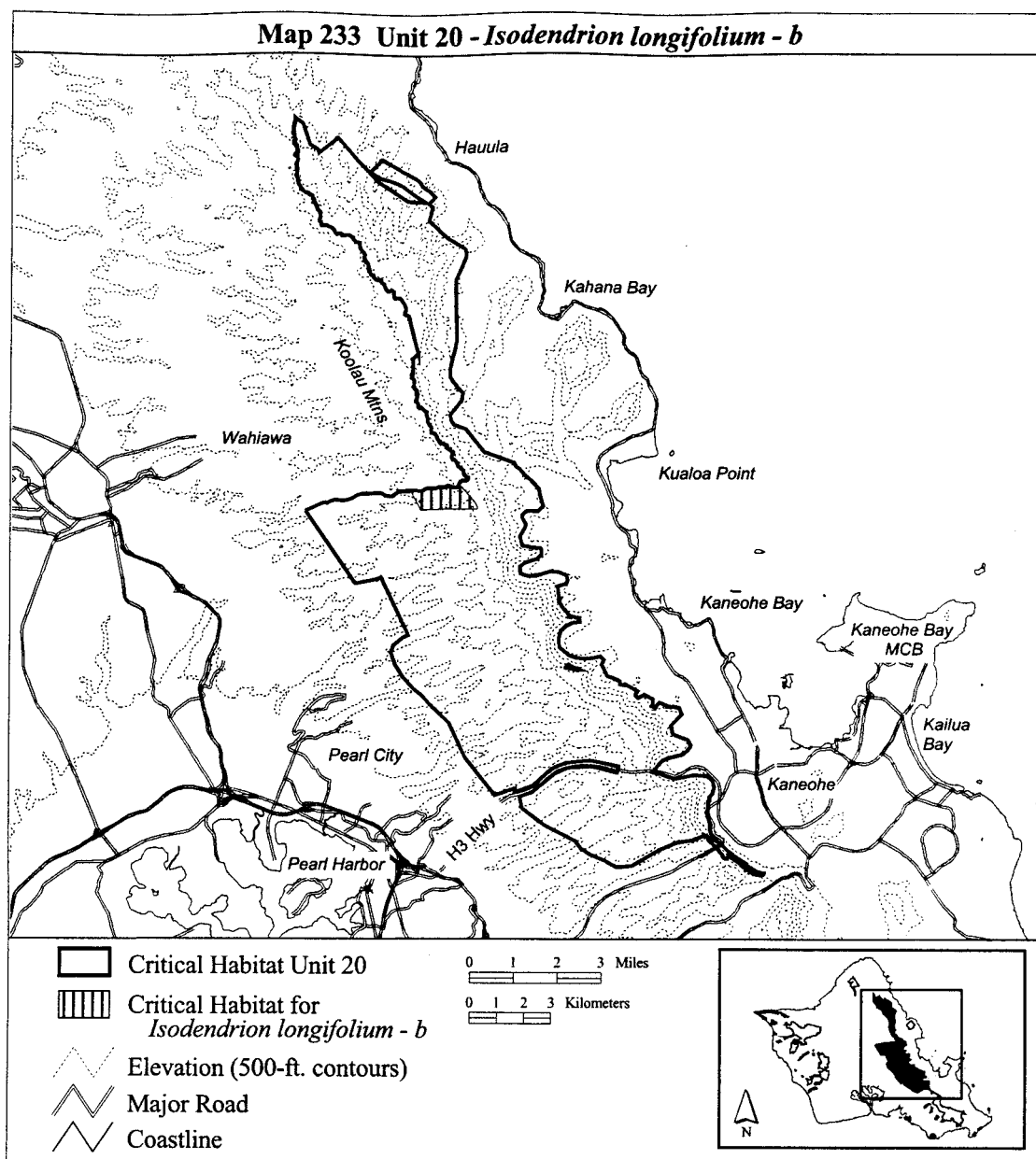
(233) Oahu 20—*Isodendron longifolium*—b (162 ha; 399 ac)

(i) Unit consists of the following 73 boundary points: Start at 613455, 2377836; 613487, 2377807; 613820, 2377415; 614019, 2377187; 614101, 2377012; 614098, 2376925; 612988, 2376944; 612008, 2376886; 611978, 2376959; 611656, 2377538; 611616, 2377608; 611620, 2377608; 611632, 2377597; 611636, 2377596; 611663, 2377589; 611666, 2377588; 611685, 2377589; 611731, 2377598; 611739, 2377608; 611845, 2377608; 612012,

2377589; 612011, 2377588; 612012, 2377584; 612038, 2377574; 612066, 2377574; 612069, 2377574; 612103, 2377583; 612103, 2377584; 612166, 2377617; 612168, 2377619; 612169, 2377619; 612247, 2377687; 612247, 2377695; 612255, 2377697; 612402, 2377690; 612402, 2377689; 612403, 2377685; 612432, 2377673; 612468, 2377676; 612482, 2377684; 612483, 2377688; 612505, 2377688; 612575, 2377698; 612576, 2377698; 612596, 2377708; 612604, 2377703; 612630, 2377702; 612668, 2377720; 612688,

2377749; 612686, 2377751; 612705, 2377757; 612764, 2377738; 612765, 2377738; 612794, 2377742; 612814, 2377728; 612853, 2377742; 612870, 2377747; 613040, 2377760; 613059, 2377772; 613059, 2377774; 613085, 2377777; 613154, 2377768; 613224, 2377738; 613264, 2377728; 613265, 2377728; 613335, 2377738; 613336, 2377738; 613359, 2377752; 613368, 2377747; 613413, 2377754; 613415, 2377755; 613449, 2377784; 613454, 2377825; return to starting point.

(ii) Note: Map 233 follows:



(234) Oahu 20—*Labordia cyrtandrae*—b
(595 ha; 1,471 ac)

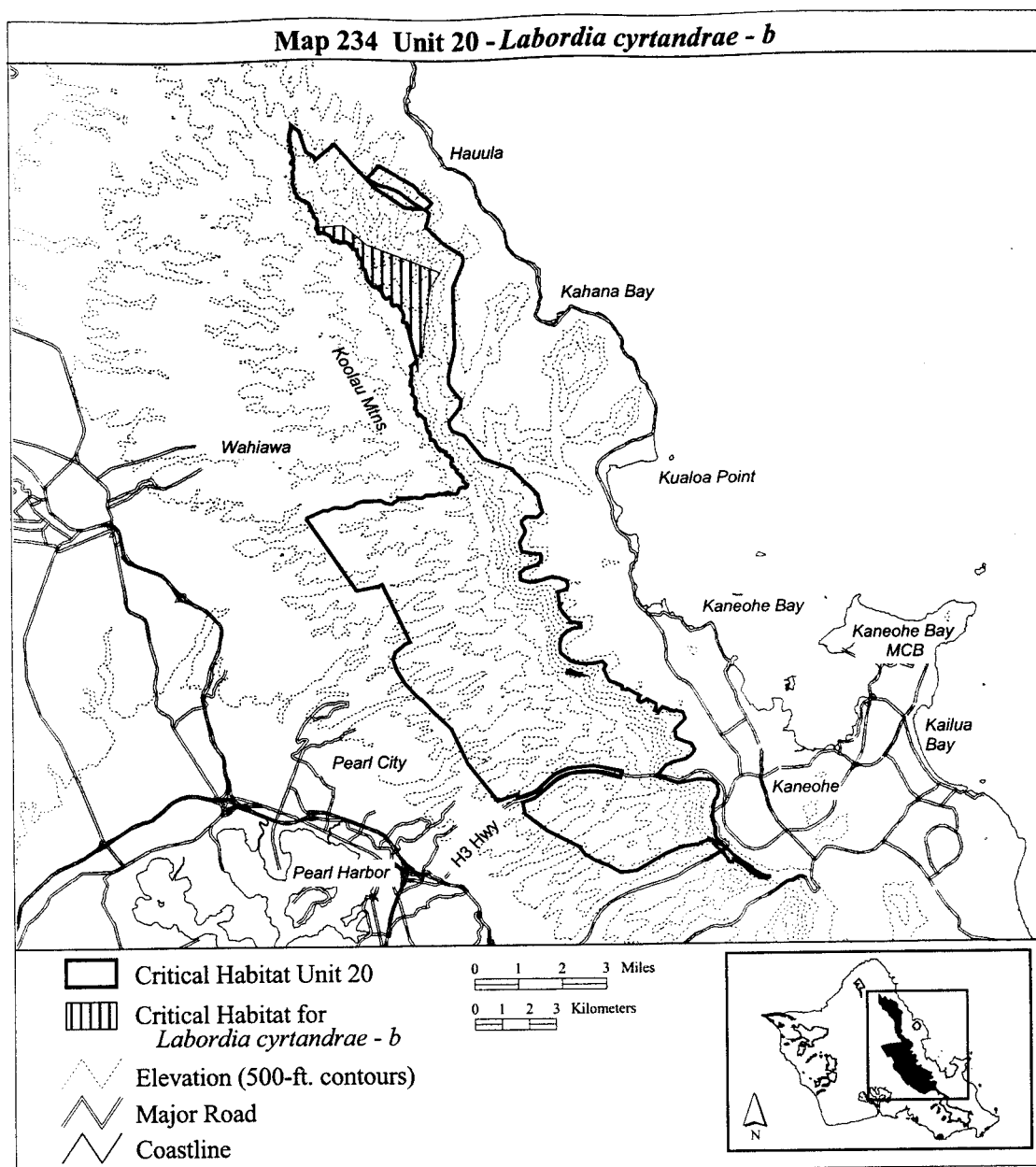
(i) Unit consists of the following 254
boundary points: Start at 608229,

2387567; 609230, 2387634; 610071,
2386913; 612807, 2385912; 612446,
2385365; 612366, 2384991; 612326,
2384471; 612219, 2383924; 612113,
2382763; 611821, 2382957; 611795,
2383056; 611597, 2383822; 611567,
2383939; 611567, 2383940; 611561,
2383949; 611537, 2384020; 611536,
2384020; 611525, 2384040; 611515,
2384051; 611495, 2384064; 611460,
2384078; 611430, 2384082; 611404,
2384097; 611396, 2384120; 611393,
2384150; 611397, 2384172; 611413,
2384204; 611422, 2384233; 611428,
2384263; 611435, 2384302; 611435,
2384321; 611429, 2384356; 611429,
2384357; 611417, 2384382; 611394,
2384464; 611387, 2384476; 611374,
2384488; 611374, 2384489; 611358,
2384501; 611334, 2384524; 611326,
2384536; 611302, 2384584; 611257,
2384667; 611256, 2384667; 611245,
2384680; 611244, 2384681; 611224,
2384695; 611223, 2384695; 611203,
2384703; 611202, 2384704; 611192,
2384704; 611191, 2384703; 611165,
2384698; 611119, 2384696; 611118,
2384696; 611082, 2384690; 611081,
2384690; 611065, 2384682; 611064,
2384681; 611058, 2384675; 611046,
2384674; 611039, 2384675; 611028,
2384688; 611014, 2384713; 610994,
2384778; 610981, 2384838; 610976,
2384927; 610973, 2384941; 610973,
2384942; 610965, 2384959; 610965,
2384960; 610957, 2384969; 610957,
2384970; 610934, 2384987; 610933,
2384987; 610909, 2384993; 610908,
2384993; 610888, 2384986; 610839,
2384956; 610809, 2384945; 610780,

2384942; 610766, 2384942; 610749,
2384953; 610709, 2384995; 610692,
2385014; 610679, 2385041; 610630,
2385180; 610616, 2385205; 610606,
2385215; 610606, 2385216; 610598,
2385220; 610558, 2385236; 610543,
2385248; 610533, 2385266; 610516,
2385329; 610509, 2385341; 610509,
2385342; 610508, 2385342; 610497,
2385351; 610496, 2385351; 610454,
2385362; 610440, 2385362; 610394,
2385362; 610370, 2385370; 610333,
2385392; 610292, 2385406; 610280,
2385413; 610261, 2385429; 610248,
2385449; 610237, 2385473; 610222,
2385512; 610222, 2385513; 610214,
2385522; 610206, 2385531; 610206,
2385532; 610187, 2385540; 610166,
2385544; 610134, 2385558; 610129,
2385561; 610122, 2385580; 610119,
2385604; 610119, 2385605; 610112,
2385620; 610111, 2385621; 610093,
2385637; 610078, 2385652; 610077,
2385659; 610090, 2385687; 610097,
2385698; 610098, 2385699; 610098,
2385700; 610097, 2385705; 610097,
2385706; 610081, 2385734; 610054,
2385762; 610039, 2385790; 610028,
2385816; 610024, 2385839; 610027,
2385873; 610035, 2385901; 610035,
2385902; 610035, 2385943; 610035,
2385944; 610029, 2385956; 610029,
2385957; 610003, 2385991; 609994,
2386004; 609993, 2386004; 609993,
2386005; 609971, 2386017; 609955,
2386025; 609948, 2386031; 609929,
2386085; 609909, 2386112; 609908,
2386113; 609898, 2386121; 609887,
2386134; 609883, 2386146; 609884,
2386168; 609879, 2386204; 609884,
2386223; 609905, 2386254; 609905,
2386255; 609909, 2386278; 609909,
2386279; 609907, 2386291; 609881,
2386354; 609880, 2386355; 609858,
2386384; 609834, 2386404; 609797,

2386443; 609797, 2386444; 609790,
2386450; 609769, 2386468; 609748,
2386495; 609737, 2386524; 609719,
2386644; 609711, 2386719; 609711,
2386720; 609705, 2386737; 609704,
2386737; 609704, 2386738; 609693,
2386745; 609692, 2386745; 609595,
2386759; 609570, 2386766; 609560,
2386772; 609536, 2386797; 609481,
2386863; 609461, 2386894; 609449,
2386918; 609449, 2386919; 609439,
2386933; 609438, 2386934; 609425,
2386943; 609379, 2386966; 609323,
2387005; 609308, 2387012; 609269,
2387020; 609248, 2387021; 609184,
2387014; 609134, 2387001; 609078,
2386982; 609074, 2386984; 609062,
2387000; 609048, 2387031; 609047,
2387032; 609025, 2387051; 609024,
2387051; 608989, 2387068; 608988,
2387068; 608975, 2387068; 608975,
2387069; 608974, 2387068; 608905,
2387055; 608862, 2387042; 608856,
2387043; 608849, 2387049; 608810,
2387121; 608794, 2387150; 608794,
2387151; 608776, 2387175; 608736,
2387223; 608719, 2387246; 608718,
2387246; 608718, 2387247; 608693,
2387265; 608692, 2387265; 608643,
2387281; 608604, 2387303; 608558,
2387325; 608497, 2387362; 608496,
2387362; 608459, 2387369; 608458,
2387369; 608435, 2387371; 608434,
2387371; 608410, 2387366; 608377,
2387354; 608355, 2387351; 608336,
2387351; 608316, 2387358; 608308,
2387366; 608294, 2387395; 608292,
2387413; 608300, 2387459; 608299,
2387471; 608298, 2387472; 608298,
2387473; 608289, 2387479; 608252,
2387489; 608234, 2387501; 608228,
2387506; 608223, 2387520; return to
starting point.

(ii) **Note:** Map 234 follows:



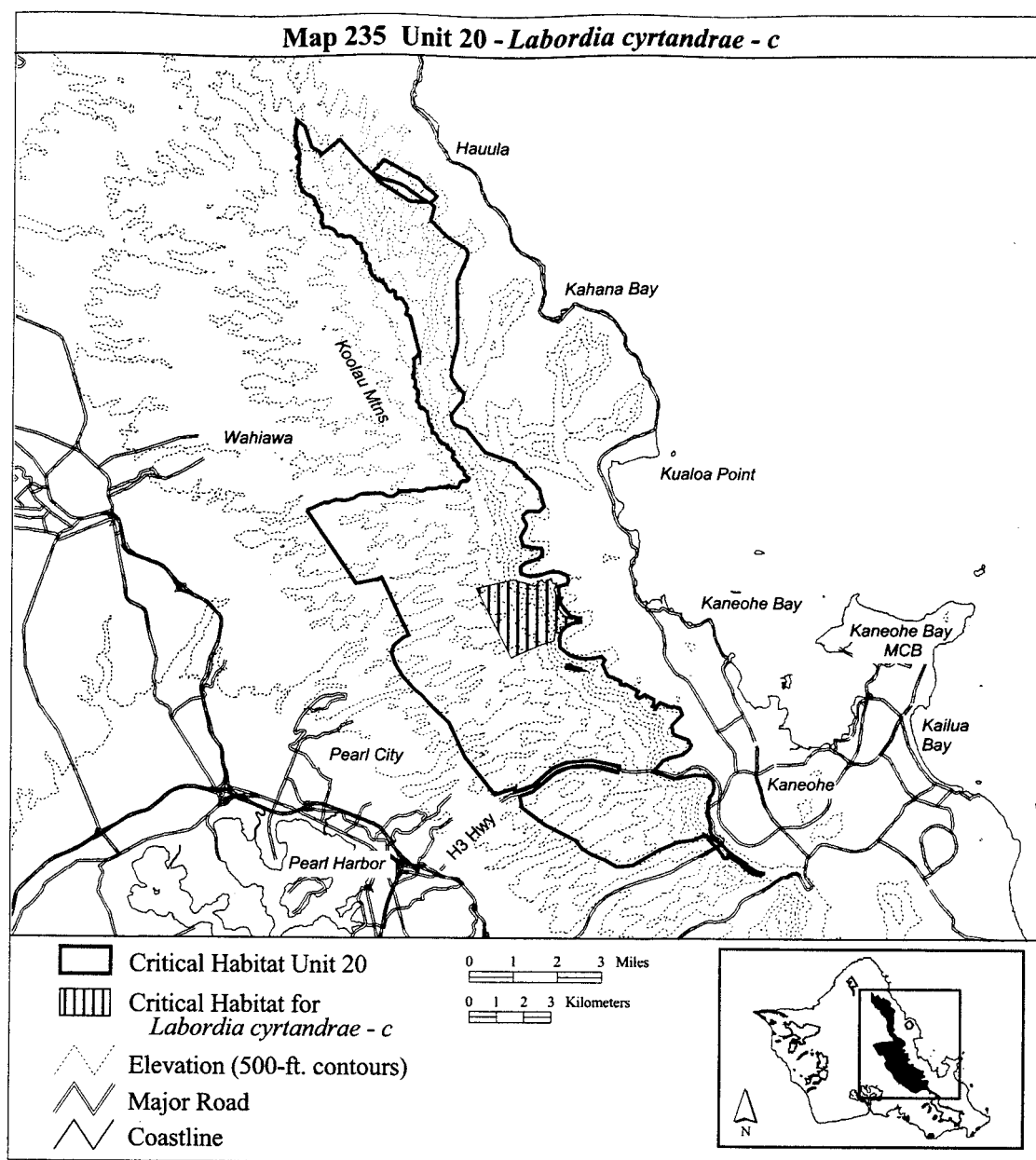
(235) Oahu 20—*Labordia cyrtandrae*—c
(618 ha; 1,526 ac)

(i) Unit consists of the following 27 boundary points: Start at 614062, 2373984; 615409, 2374312; 615975, 2374135; 616187, 2374082; 616434,

2374312; 616522, 2374206; 616787, 2374365; 616840, 2374188; 616999, 2374206; 616893, 2373940; 616999, 2373728; 616999, 2373622; 617159, 2373640; 617088, 2373446; 617070, 2373251; 617282, 2372986; 617583, 2372898; 617883, 2372810; 617883,

2372757; 617477, 2372704; 617353, 2372615; 617106, 2372562; 617176, 2372386; 616929, 2372350; 616911, 2372067; 616452, 2371908; 615356, 2371420; return to starting point.

(ii) **Note:** Map 235 follows:



(236) Oahu 20—*Lobelia gaudichaudii* ssp. *koolauensis*—a (926 ha; 2,287 ac)

(i) Unit consists of the following 591 boundary points: Start at 613751,

2378091; 613747, 2378094; 613746, 2378095; 613718, 2378106; 613711, 2378117; 613691, 2378143; 613660, 2378168; 613602, 2378212; 613593, 2378224; 613586, 2378238; 613583, 2378253; 613583, 2378292; 613583, 2378328; 613583, 2378329; 613568, 2378356; 613568, 2378357; 613556, 2378372; 613524, 2378400; 613517, 2378408; 613476, 2378444; 613462, 2378463; 613447, 2378478; 613424, 2378499; 613386, 2378532; 613364, 2378562; 613346, 2378613; 613330, 2378641; 613265, 2378728; 613248, 2378749; 613247, 2378750; 613232,

2378759; 613213, 2378764; 613199, 2378769; 613190, 2378778; 613172, 2378818; 613172, 2378819; 613152, 2378848; 613147, 2378859; 613147, 2378860; 613146, 2378860; 613145, 2378860; 613145, 2378861; 613146, 2378862; 613144, 2378873; 613159, 2378951; 613185, 2378998; 613187, 2379004; 613187, 2379005; 613185, 2379019; 613185, 2379020; 613171, 2379040; 613142, 2379072; 613115, 2379100; 613099, 2379113; 613098, 2379113; 613063, 2379127; 612997, 2379166; 612978, 2379188; 612969, 2379215; 612963, 2379226; 612959, 2379247; 612959, 2379248; 612945, 2379276; 612945, 2379277; 612929, 2379297; 612928, 2379298; 612905, 2379314; 612876, 2379327; 612840,

2379337; 612770, 2379350; 612764, 2379355; 612758, 2379364; 612748, 2379389; 612748, 2379390; 612725, 2379410; 612700, 2379424; 612683, 2379441; 612663, 2379470; 612619, 2379529; 612600, 2379563; 612586, 2379618; 612573, 2379650; 612555, 2379679; 612517, 2379716; 612495, 2379729; 612412, 2379753; 612397, 2379761; 612387, 2379798; 612388, 2379851; 612386, 2379928; 612379, 2379961; 612379, 2379962; 612375, 2379970; 612367, 2379981; 612366, 2379981; 612366, 2379982; 612353, 2379991; 612328, 2380018; 612262, 2380145; 612255, 2380163; 612249, 2380199; 612248, 2380233; 612234, 2380304; 612226, 2380334; 612225, 2380334; 612224, 2380337; 612211,

2380367; 612213, 2380397; 612218,
2380419; 612218, 2380420; 612215,
2380452; 612212, 2380464; 612202,
2380506; 612202, 2380507; 612197,
2380516; 612177, 2380539; 612112,
2380593; 612086, 2380625; 612073,
2380644; 612046, 2380669; 612046,
2380670; 612016, 2380686; 611992,
2380690; 611965, 2380687; 611955,
2380689; 611941, 2380693; 611927,
2380702; 611919, 2380710; 611905,
2380743; 611889, 2380825; 611889,
2380826; 611880, 2380839; 611856,
2380862; 611812, 2380892; 611799,
2380905; 611798, 2380918; 611800,
2380925; 611815, 2380943; 611838,
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2380980; 611851, 2381022; 611848,
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2381758; 611666, 2381774; 611666,
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2382013; 611702, 2382014; 611700,
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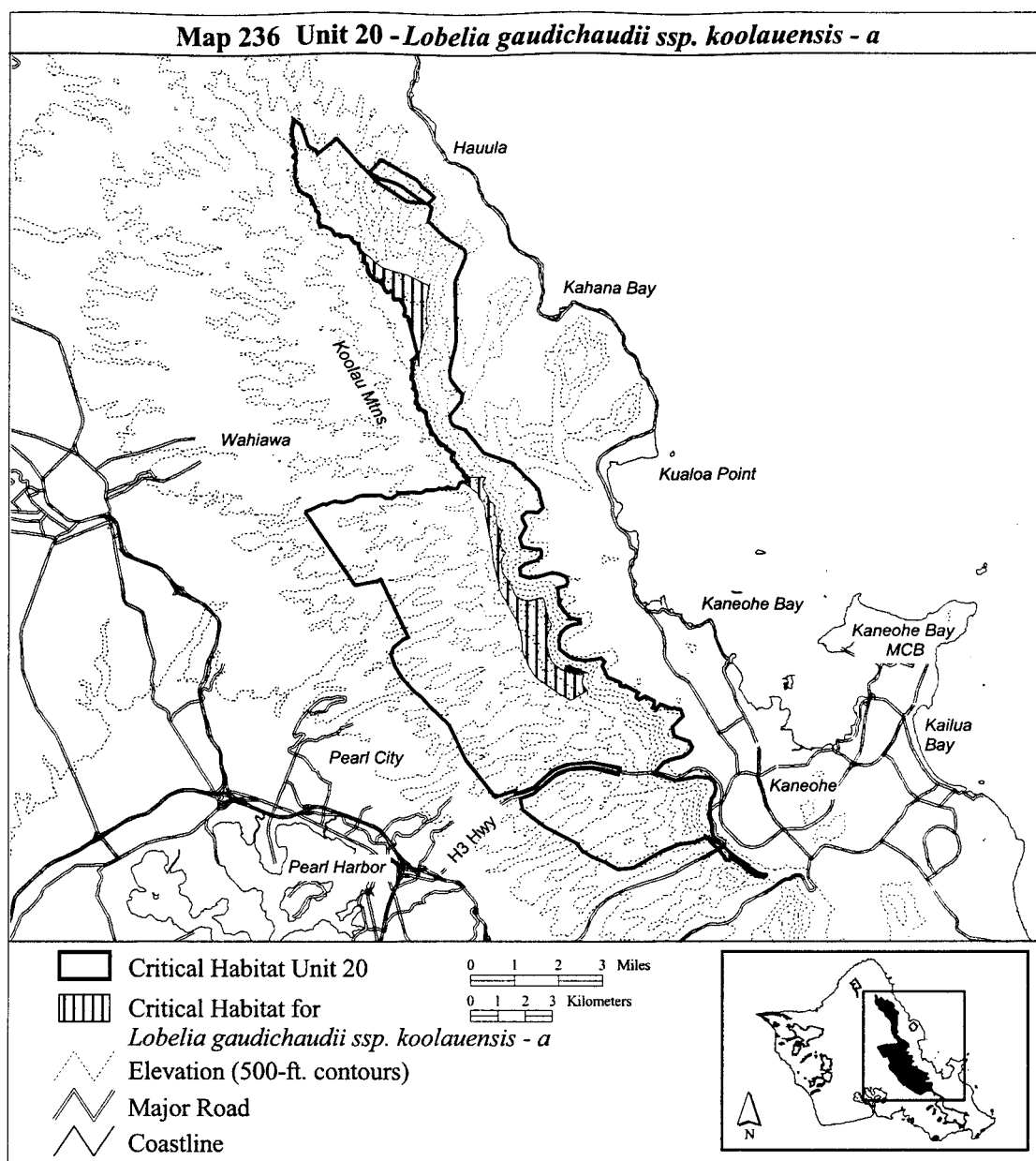
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2378093; return to starting point.

(ii) **Note:** Map 236 follows:



(237) Oahu 20—*Lobelia oahuensis*—a (493 ha; 1,218 ac)

(i) Unit consists of the following 649 boundary points: Start at 613751,

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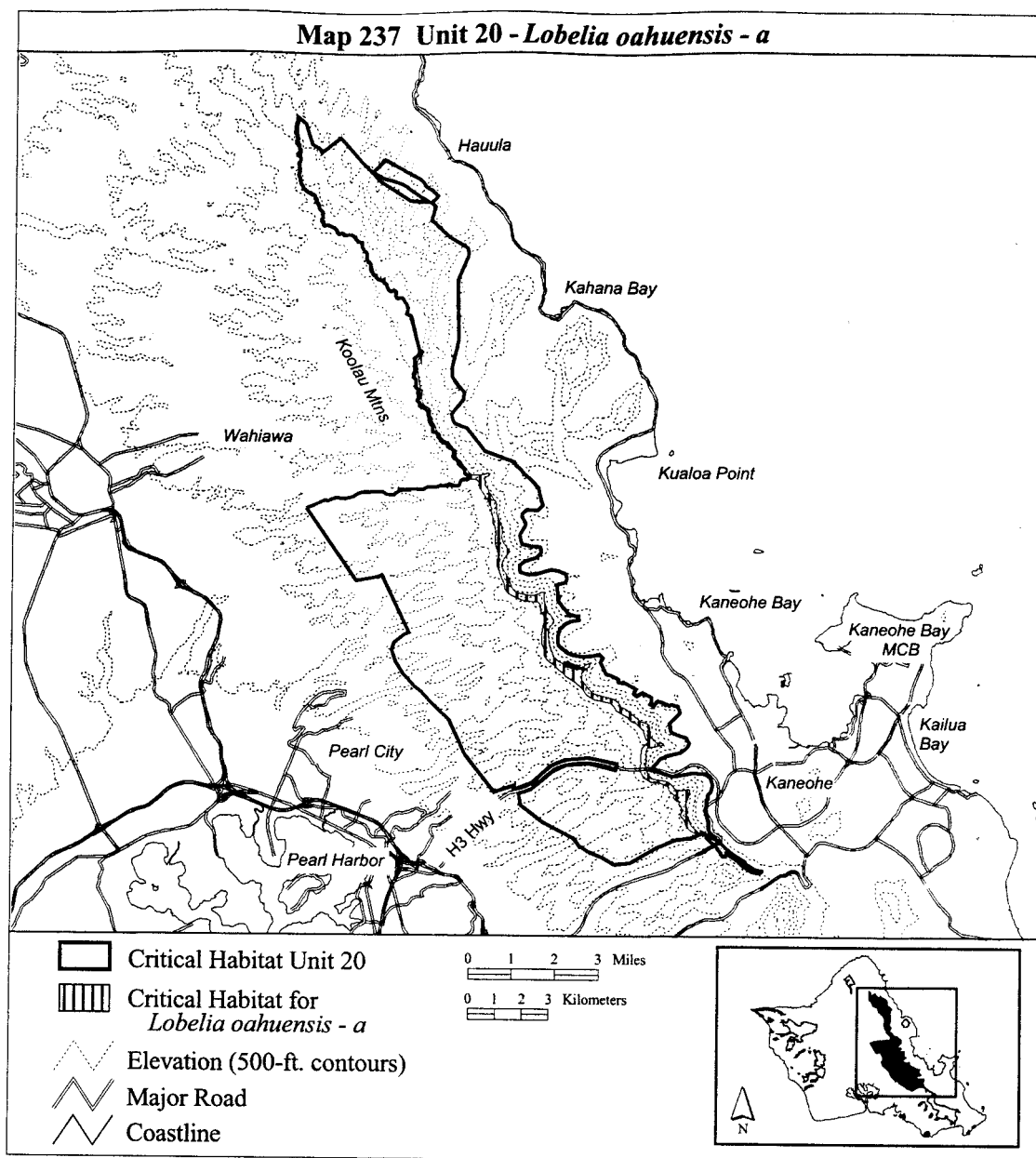
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2372389; 616542, 2372464; 616563,
2372560; 616593, 2372629; 616575,
2372762; 616572, 2372891; 616548,
2372969; 616494, 2373008; 616500,
2373008; 616458, 2373086; 616446,
2373195; 616452, 2373324; 616415,
2373372; 616364, 2373429; 616112,
2373444; 615814, 2373492; 615601,
2373556; 615360, 2373664; 615201,
2373787; 615116, 2373928; 615104,
2374055; 615068, 2374169; 615011,
2374283; 614948, 2374431; 614870,
2374599; 614819, 2374755; 614819,
2374861; 614816, 2374861; 614810,
2374936; 614828, 2375020; 614861,
2375104; 614852, 2375185; 614861,
2375303; 614825, 2375375; 614765,
2375465; 614762, 2375564; 614762,
2375687; 614756, 2375832; 614777,
2375979; 614762, 2376138; 614723,
2376259; 614641, 2376349; 614641,
2376391; 614641, 2376550; 614617,
2376653; 614590, 2376791; 614602,
2376929; 614602, 2376932; 614530,
2377068; 614482, 2377179; 614434,
2377242; 614365, 2377350; 614323,
2377431; 614211, 2377594; 614115,
2377753; 614115, 2377816; 614088,
2377922; 614031, 2378000; 613935,
2378000; 613833, 2377985; 613763,
2378008; 613771, 2378068; 613764,
2378090; 613757, 2378093; 613753,
2378093; return to starting point.

(ii) **Note:** Map 237 follows:



(238) Oahu 20—*Lysimachia filifolia*—a
(1,514 ha; 3,741 ac)

(i) Unit consists of the following 333 boundary points: Start at 622547, 2364906; 622392, 2365018; 622231, 2365150; 622133, 2365305; 622037, 2365661; 622013, 2365661; 622019, 2365874; 622064, 2366138; 622093, 2366310; 622156, 2366460; 622128, 2366563; 622082, 2366649; 621950, 2366718; 621645, 2366708; 621496, 2366708; 621369, 2366748; 621214, 2366817; 621053, 2366892; 620818, 2366989; 620582, 2367122; 620553, 2367236; 620553, 2367363; 620542, 2367512; 620571, 2367673; 620663, 2367845; 620743, 2367966; 620898, 2368127; 621042, 2368236; 621082, 2368305; 621053, 2368409; 620910,

2368518; 620818, 2368690; 620720, 2369000; 620617, 2369178; 620462, 2369276; 620345, 2369363; 620061, 2369535; 619852, 2369805; 619545, 2370014; 619336, 2370051; 618992, 2370088; 618685, 2370149; 618414, 2370321; 618242, 2370567; 618193, 2370752; 618107, 2370924; 617996, 2370960; 617578, 2371133; 617050, 2371477; 616829, 2371821; 616902, 2372362; 617038, 2372718; 617025, 2373050; 616853, 2373505; 616607, 2373923; 616030, 2373911; 615648, 2374021; 615403, 2374181; 615317, 2374501; 615329, 2374771; 615403, 2375078; 615415, 2375324; 615267, 2375619; 615292, 2375841; 615317, 2376025; 615317, 2376234; 615009, 2376603; 615009, 2376620; 615004,

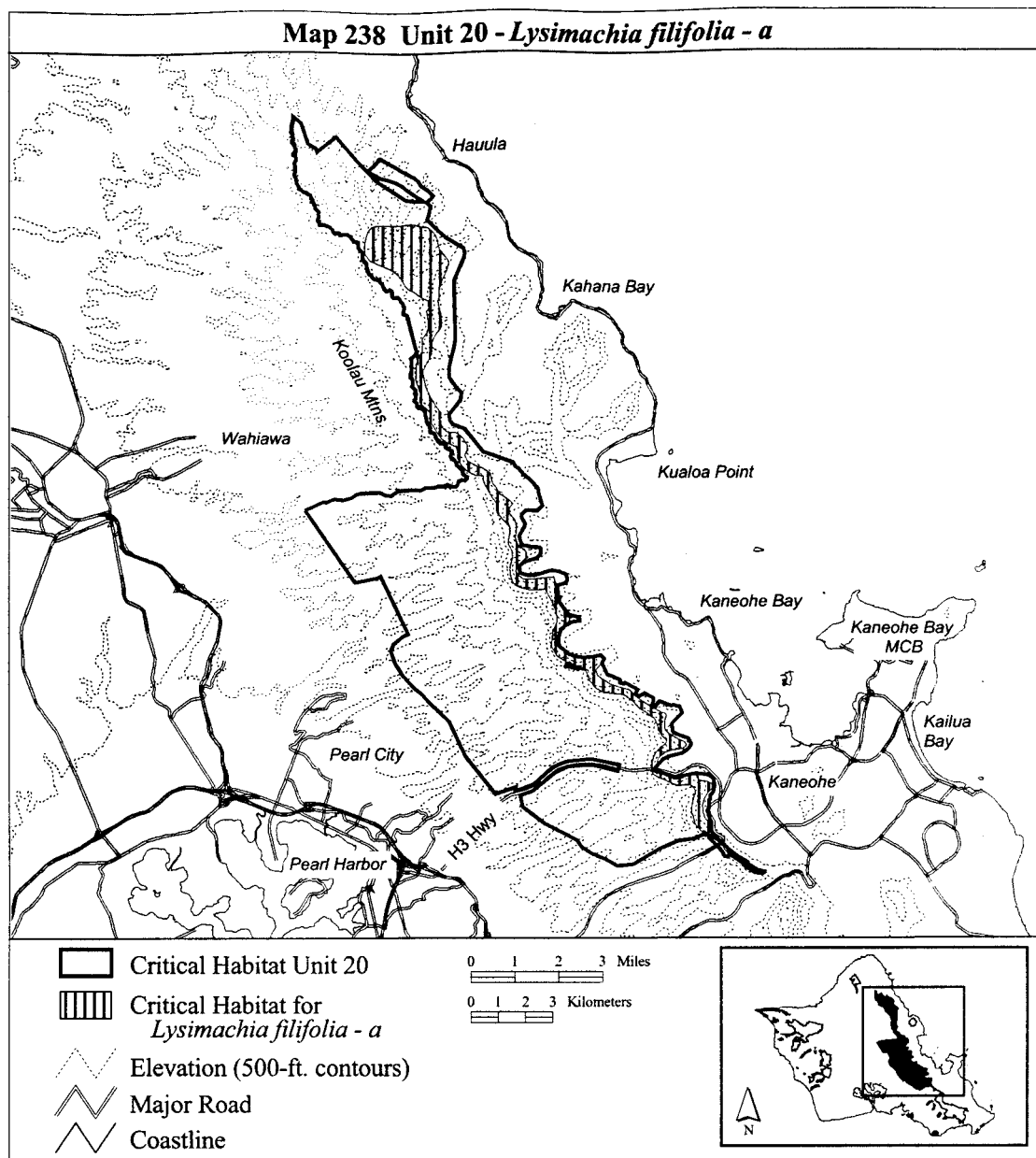
2376613; 614843, 2376808; 614825, 2377015; 614825, 2377136; 614670, 2377337; 614492, 2377664; 614372, 2377888; 614331, 2378038; 614349, 2378147; 614084, 2378170; 613740, 2378336; 613533, 2378572; 613401, 2378825; 613429, 2379003; 613326, 2379210; 613016, 2379371; 612780, 2379543; 612648, 2379727; 612487, 2379997; 612372, 2380152; 612372, 2380284; 612408, 2380419; 612389, 2380468; 612286, 2380594; 612039, 2380784; 611999, 2380916; 612033, 2381169; 611918, 2381508; 611855, 2381692; 611867, 2381829; 611872, 2381985; 611872, 2382180; 611930, 2382444; 611976, 2382576; 612102, 2382714; 612114, 2382789; 612114, 2382996; 612114, 2383174; 612160,

2383289; 612298, 2383444; 612315, 2383593; 612326, 2383817; 612303, 2384007; 612252, 2384169; 612246, 2384168; 612251, 2384174; 612240, 2384208; 612280, 2384215; 612320, 2384271; 612338, 2384392; 612309, 2384604; 612091, 2384714; 611803, 2384892; 611602, 2385012; 611464, 2385122; 611361, 2385311; 611200, 2385558; 610970, 2385719; 610482, 2385920; 610160, 2386070; 609988, 2386294; 609948, 2386569; 610011, 2386880; 610063, 2387104; 610246, 2387282; 610488, 2387345; 610942, 2387333; 611125, 2387333; 611390, 2387368; 611711, 2387420; 611987, 2387356; 612286, 2387310; 612510, 2387144; 612648, 2386874; 612671, 2386644; 612757, 2386454; 612947, 2386230; 613033, 2386098; 613062, 2385989; 612970, 2385679; 612884, 2385478; 612797, 2385294; 612728, 2385047; 612728, 2384783; 612682, 2384604; 612700, 2384426; 612746, 2384260; 612737, 2384258; 612780, 2384070; 612797, 2383817; 612797, 2383634; 612636, 2383421; 612499, 2383208; 612435, 2383013; 612441, 2382783; 612435, 2382622; 612372, 2382496; 612257, 2382260; 612125, 2382002; 612148, 2381784; 612234, 2381410; 612418, 2381014; 612579, 2380767; 612786, 2380474; 612779, 2380473; 612734, 2380198; 612780, 2380054; 612872, 2379888; 612993, 2379790; 613113, 2379744; 613268, 2379744; 613406, 2379721; 613590, 2379566; 613768, 2379290; 613768, 2379106; 613676, 2378905; 613757,

2378710; 614079, 2378526; 614360, 2378423; 614596, 2378250; 614636, 2378078; 614682, 2377888; 614814, 2377710; 614940, 2377492; 615193, 2377325; 615354, 2377210; 615394, 2377131; 615427, 2377131; 615304, 2376959; 615304, 2376750; 615489, 2376504; 615562, 2376295; 615562, 2376049; 615513, 2375853; 615599, 2375595; 615907, 2375324; 615943, 2375115; 615636, 2374808; 615538, 2374611; 615624, 2374451; 615808, 2374304; 616128, 2374304; 616546, 2374341; 616915, 2374402; 617050, 2374034; 617111, 2373505; 617296, 2373222; 617431, 2373075; 617517, 2372964; 617480, 2372718; 617185, 2372423; 617111, 2372153; 617124, 2371821; 617480, 2371538; 617714, 2371440; 618045, 2371415; 618377, 2371428; 618648, 2371489; 618771, 2371366; 618648, 2371145; 618476, 2370936; 618525, 2370776; 618660, 2370641; 619041, 2370420; 619508, 2370260; 619705, 2370211; 620012, 2369916; 620467, 2369633; 620811, 2369436; 620810, 2369436; 620933, 2369379; 621036, 2369345; 621082, 2369265; 621025, 2369104; 621013, 2368897; 621019, 2368788; 621088, 2368690; 621197, 2368592; 621312, 2368535; 621530, 2368403; 621737, 2368305; 621817, 2368201; 621771, 2368104; 621593, 2368041; 621341, 2368012; 621053, 2367926; 620835, 2367765; 620743, 2367604; 620743, 2367424; 620604, 2367260; 620603, 2367259; 620604, 2367258; 620865, 2367188; 621059, 2367041; 621398,

2366932; 621484, 2366920; 621691, 2366984; 621800, 2367063; 621978, 2367103; 622093, 2367103; 622151, 2367103; 622260, 2367023; 622271, 2366891; 622398, 2366868; 622593, 2366862; 622760, 2366759; 622765, 2366632; 622765, 2366581; 622639, 2366454; 622484, 2366224; 622421, 2365960; 622449, 2365662; 622467, 2365661; 622478, 2365541; 622576, 2365431; 622668, 2365391; 622745, 2365350; 622721, 2365226; 622702, 2365179; 622708, 2365159; 622707, 2365156; 622714, 2365138; 622737, 2365058; 622775, 2364977; 622782, 2364959; 622783, 2364959; 622946, 2364800; 623041, 2364696; 623146, 2364605; 623414, 2364344; 623432, 2364332; 623639, 2364167; 623880, 2364018; 623982, 2363952; 624084, 2363881; 624075, 2363840; 624185, 2363777; 624483, 2363599; 624661, 2363558; 624694, 2363558; 624716, 2363547; 624725, 2363518; 624702, 2363484; 624592, 2363467; 624437, 2363495; 624253, 2363576; 624041, 2363691; 623869, 2363863; 623736, 2363966; 623432, 2364156; 623328, 2364259; 623260, 2364323; 623179, 2364455; 623030, 2364610; 622926, 2364708; 622789, 2364820; 622726, 2364839; 622749, 2364824; 622714, 2364840; 622716, 2364842; 622576, 2364886; 622555, 2364901; 622550, 2364906; 622549, 2364907; 622548, 2364907; return to starting point.

(ii) **Note:** Map 238 follows:



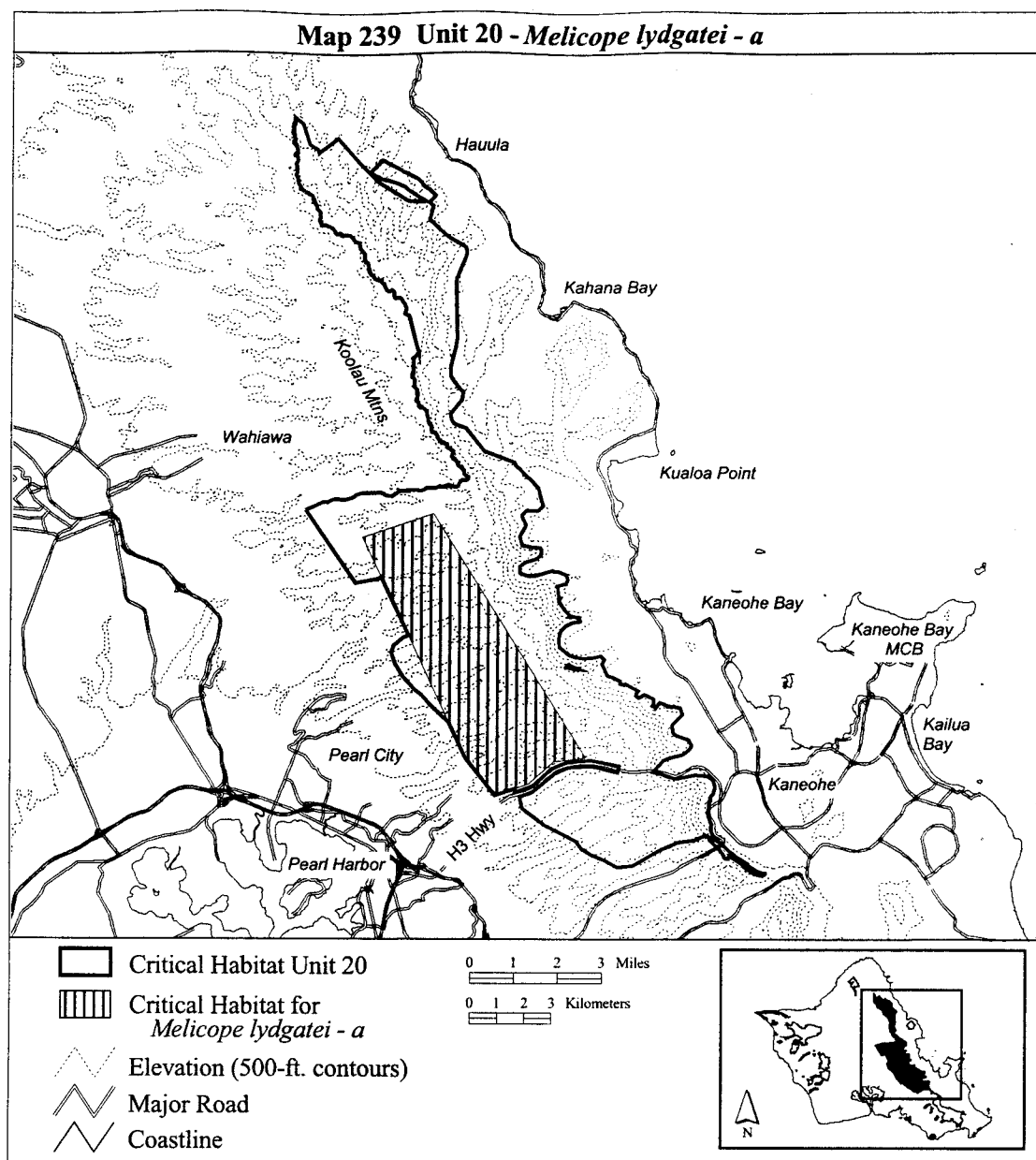
(239) Oahu 20—*Melicope lydgatei*—a
(3,499 ha; 8,646 ac)

(i) Unit consists of the following 11
boundary points: Start at 610585,

2374351; 609877, 2375857; 612494,
2376750; 618121, 2367756; 616955,
2367642; 616046, 2366818; 614795,
2366392; 613686, 2367756; 610603,

2374312; 610601, 2374322; 610587,
2374351; return to starting point.

(ii) **Note:** Map 239 follows:



(240) Oahu 20—*Myrsine juddii*—a (949 ha; 2,346 ac)

(i) Unit consists of the following 637

boundary points: Start at 611505, 2377599; 611595, 2377608; 611620, 2377608; 611632, 2377597; 611636, 2377596; 611663, 2377589; 611666, 2377588; 611685, 2377589; 611731, 2377598; 611739, 2377608; 611845, 2377608; 612012, 2377589; 612011, 2377588; 612012, 2377584; 612038, 2377574; 612066, 2377574; 612069, 2377574; 612103, 2377583; 612103, 2377584; 612166, 2377617; 612168, 2377619; 612247, 2377687; 612247, 2377695; 612255, 2377697; 612402, 2377690; 612402, 2377689; 612403, 2377685; 612432, 2377673; 612468, 2377676; 612482, 2377684; 612483,

2377688; 612505, 2377688; 612575, 2377698; 612596, 2377708; 612604, 2377703; 612630, 2377702; 612668, 2377720; 612688, 2377749; 612686, 2377751; 612705, 2377757; 612764, 2377738; 612765, 2377738; 612794, 2377742; 612814, 2377728; 612853, 2377742; 612870, 2377747; 613040, 2377760; 613059, 2377772; 613059, 2377774; 613085, 2377777; 613154, 2377768; 613224, 2377738; 613264, 2377728; 613265, 2377728; 613335, 2377738; 613336, 2377738; 613359, 2377752; 613368, 2377747; 613413, 2377754; 613415, 2377755; 613449, 2377784; 613454, 2377825; 613460, 2377881; 613497, 2377929; 613554, 2377977; 613555, 2377987; 613674, 2377978; 613675, 2377978; 613694,

2377988; 613721, 2377976; 613733, 2377976; 613762, 2378001; 613771, 2378068; 613764, 2378090; 613757, 2378093; 613753, 2378093; 613751, 2378091; 613747, 2378094; 613746, 2378095; 613718, 2378106; 613711, 2378117; 613711, 2378118; 613691, 2378143; 613660, 2378168; 613602, 2378212; 613593, 2378224; 613586, 2378238; 613583, 2378253; 613583, 2378292; 613583, 2378328; 613583, 2378329; 613568, 2378356; 613568, 2378357; 613556, 2378372; 613524, 2378400; 613517, 2378408; 613476, 2378444; 613462, 2378463; 613462, 2378464; 613447, 2378478; 613424, 2378499; 613386, 2378532; 613364, 2378562; 613346, 2378613; 613330, 2378641; 613265, 2378728; 613248,

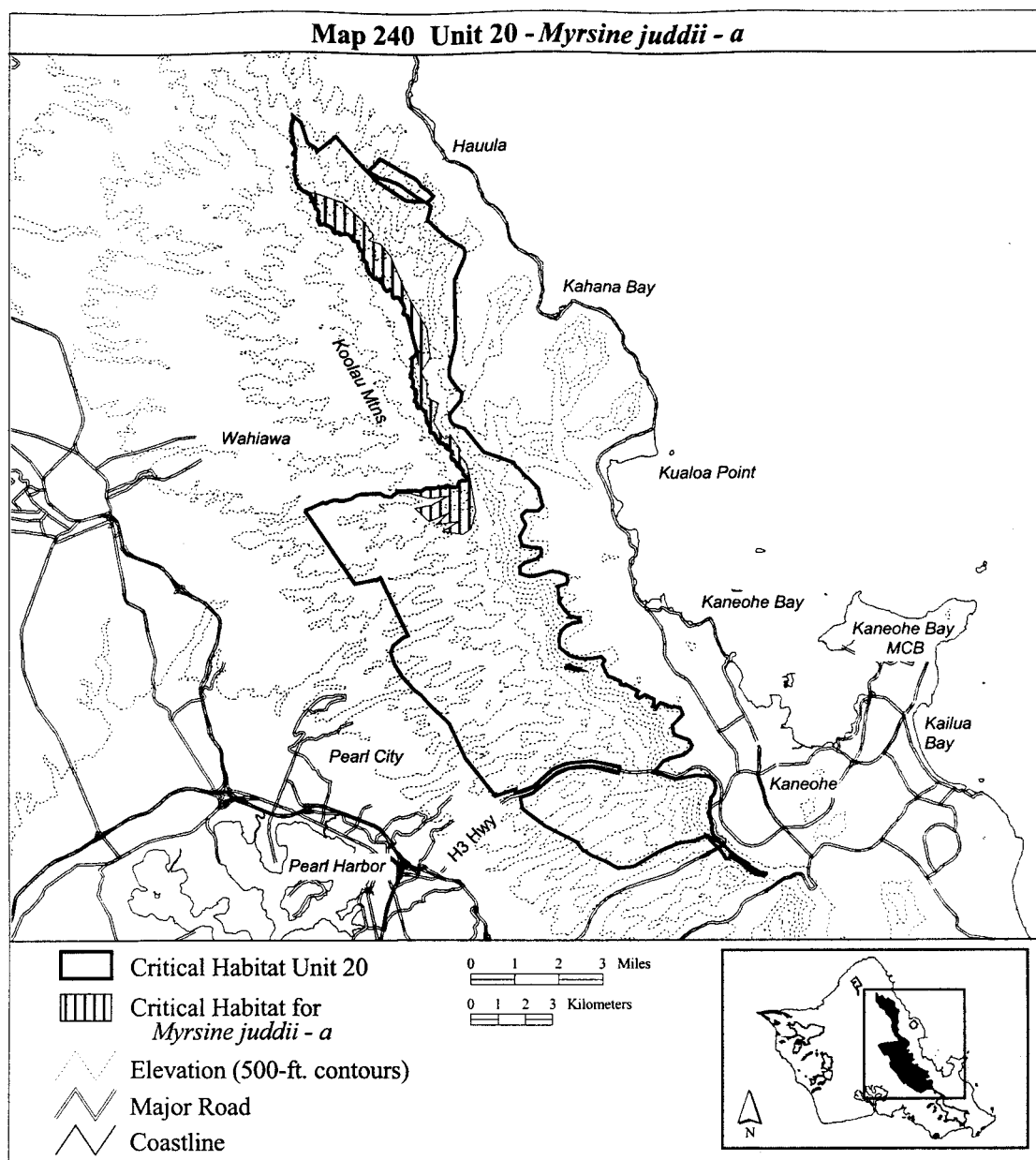
2378749; 613247, 2378750; 613232, 2378759; 613213, 2378764; 613199, 2378769; 613190, 2378778; 613172, 2378818; 613152, 2378848; 613147, 2378859; 613147, 2378860; 613146, 2378860; 613145, 2378860; 613145, 2378861; 613146, 2378862; 613145, 2378862; 613144, 2378873; 613159, 2378951; 613185, 2378998; 613187, 2379004; 613187, 2379005; 613185, 2379019; 613185, 2379020; 613171, 2379040; 613142, 2379072; 613115, 2379100; 613099, 2379113; 613098, 2379113; 613063, 2379127; 612997, 2379166; 612978, 2379188; 612969, 2379215; 612963, 2379226; 612959, 2379247; 612959, 2379248; 612945, 2379276; 612945, 2379277; 612929, 2379297; 612928, 2379298; 612905, 2379314; 612876, 2379327; 612840, 2379337; 612770, 2379350; 612764, 2379355; 612758, 2379364; 612748, 2379389; 612748, 2379390; 612725, 2379410; 612700, 2379424; 612683, 2379441; 612663, 2379470; 612619, 2379529; 612600, 2379563; 612586, 2379618; 612573, 2379650; 612555, 2379679; 612517, 2379716; 612495, 2379729; 612412, 2379753; 612397, 2379761; 612387, 2379798; 612388, 2379851; 612386, 2379928; 612379, 2379961; 612379, 2379962; 612375, 2379970; 612367, 2379981; 612366, 2379981; 612366, 2379982; 612353, 2379991; 612328, 2380018; 612262, 2380145; 612255, 2380163; 612249, 2380199; 612248, 2380233; 612234, 2380304; 612226, 2380334; 612225, 2380334; 612224, 2380337; 612211, 2380367; 612213, 2380397; 612218, 2380419; 612218, 2380420; 612215, 2380452; 612212, 2380464; 612202, 2380506; 612202, 2380507; 612197, 2380516; 612177, 2380539; 612112, 2380593; 612086, 2380625; 612073, 2380644; 612046, 2380669; 612046, 2380670; 612016, 2380686; 611992, 2380690; 611965, 2380687; 611955, 2380689; 611941, 2380693; 611927, 2380702; 611919, 2380710; 611905, 2380743; 611889, 2380825; 611889, 2380826; 611880, 2380839; 611856, 2380862; 611812, 2380892; 611799, 2380905; 611798, 2380918; 611800, 2380925; 611815, 2380943; 611838, 2380960; 611838, 2380961; 611848, 2380980; 611851, 2381022; 611848, 2381067; 611853, 2381081; 611879, 2381118; 611879, 2381119; 611879, 2381131; 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610206, 2385532; 610187, 2385540; 610166, 2385544; 610134, 2385558; 610129, 2385561; 610122, 2385580; 610119, 2385604; 610119, 2385605; 610112, 2385620; 610111, 2385621; 610093, 2385637; 610078, 2385652; 610077, 2385659; 610090, 2385687; 610097, 2385698; 610098, 2385699; 610098, 2385700; 610097, 2385705; 610097, 2385706; 610081, 2385734; 610054, 2385762; 610039, 2385790; 610028, 2385816; 610024, 2385839; 610027, 2385873; 610035, 2385901; 610035, 2385902; 610035, 2385943; 610035, 2385944; 610029, 2385956; 610029, 2385957; 610003, 2385991; 609994, 2386004; 609993, 2386004; 609993, 2386005; 609971, 2386017; 609955, 2386025; 609948, 2386031; 609929, 2386085; 609909, 2386112; 609908, 2386113; 609898, 2386121; 609887, 2386134; 609883, 2386146; 609884, 2386168; 609879, 2386204; 609884, 2386223; 609905, 2386254; 609905, 2386255; 609909, 2386278; 609909, 2386279; 609907, 2386291; 609881, 2386354; 609880, 2386355; 609858, 2386384; 609834, 2386404; 609797, 2386443; 609790, 2386450; 609769, 2386468; 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2388407; 607972, 2388420; 607965,
2388446; 607964, 2388447; 607956,
2388457; 607956, 2388458; 607898,
2388494; 607897, 2388494; 607887,
2388497; 607865, 2388499; 607857,
2388502; 607917, 2388542; 608246,

2388476; 609165, 2388148; 609953,
2387458; 610314, 2386966; 610117,
2386801; 610544, 2386670; 610905,
2386243; 611496, 2384897; 612252,
2383584; 612383, 2382500; 612055,
2381975; 612252, 2381581; 612252,
2381023; 612678, 2380826; 612514,
2380136; 612908, 2379512; 613138,
2379644; 613499, 2379118; 613434,
2378954; 613663, 2378691; 613828,
2378232; 614057, 2376853; 613893,
2376196; 613598, 2375999; 612843,
2376098; 613434, 2376459; 612613,
2376360; 613040, 2376754; 612350,
2376459; 611825, 2376951; 612449,
2377083; 613040, 2377411; 612383,
2377312; 611339, 2377581; 611385,
2377588; 611439, 2377593; 611444,
2377584; 611472, 2377585; 611503,
2377590; return to starting point.

(ii) **Note:** Map 240 follows:



(241) Oahu 20—*Phlegmariurus nutans*—a (1,624 ha; 4,014 ac)

(i) Unit consists of the following 518

boundary points: Start at 612247, 2377695; 612255, 2377697; 612402, 2377690; 612402, 2377689; 612403, 2377685; 612432, 2377673; 612468, 2377676; 612482, 2377684; 612483, 2377688; 612505, 2377688; 612575, 2377698; 612596, 2377708; 612604, 2377703; 612630, 2377702; 612668, 2377720; 612688, 2377749; 612686, 2377751; 612705, 2377757; 612764, 2377738; 612765, 2377738; 612794, 2377742; 612814, 2377728; 612853, 2377742; 612870, 2377747; 613040, 2377760; 613059, 2377772; 613059, 2377774; 613085, 2377777; 613154, 2377768; 613224, 2377738; 613264,

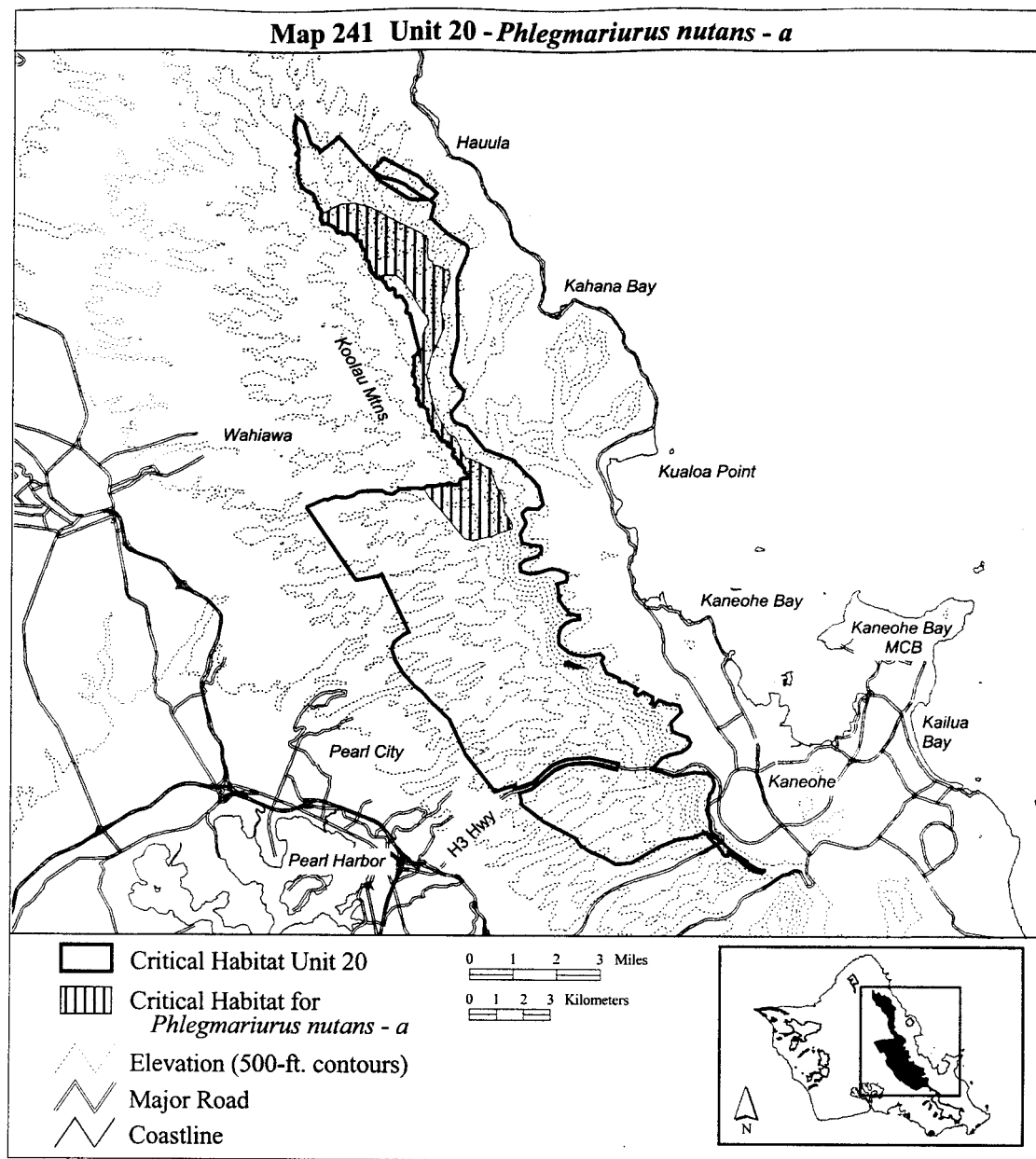
2377728; 613265, 2377728; 613335, 2377738; 613336, 2377738; 613359, 2377752; 613368, 2377747; 613413, 2377754; 613415, 2377755; 613449, 2377784; 613454, 2377825; 613460, 2377881; 613497, 2377929; 613554, 2377977; 613555, 2377987; 613674, 2377978; 613675, 2377978; 613694, 2377988; 613721, 2377976; 613733, 2377976; 613762, 2378001; 613771, 2378068; 613764, 2378090; 613757, 2378093; 613753, 2378093; 613751, 2378091; 613747, 2378094; 613746, 2378095; 613718, 2378106; 613711, 2378117; 613711, 2378118; 613691, 2378143; 613660, 2378168; 613602, 2378212; 613593, 2378224; 613586, 2378238; 613583, 2378253; 613583, 2378292; 613583, 2378328; 613583,

2378329; 613568, 2378356; 613568, 2378357; 613556, 2378372; 613524, 2378400; 613517, 2378408; 613476, 2378444; 613462, 2378463; 613462, 2378464; 613447, 2378478; 613424, 2378499; 613386, 2378532; 613364, 2378562; 613346, 2378613; 613330, 2378641; 613265, 2378728; 613248, 2378749; 613247, 2378750; 613232, 2378759; 613231, 2378759; 613213, 2378764; 613199, 2378769; 613190, 2378778; 613172, 2378818; 613172, 2378819; 613152, 2378848; 613147, 2378859; 613147, 2378860; 613146, 2378860; 613145, 2378860; 613145, 2378861; 613146, 2378862; 613145, 2378862; 613144, 2378873; 613159, 2378951; 613185, 2378998; 613187, 2379004; 613187, 2379005; 613185,

2379019; 613185, 2379020; 613171, 2379040; 613142, 2379072; 613115, 2379100; 613099, 2379113; 613098, 2379113; 613063, 2379127; 612997, 2379166; 612978, 2379188; 612969, 2379215; 612963, 2379226; 612959, 2379247; 612959, 2379248; 612945, 2379276; 612945, 2379277; 612929, 2379297; 612928, 2379298; 612905, 2379314; 612876, 2379327; 612840, 2379337; 612770, 2379350; 612764, 2379355; 612758, 2379364; 612748, 2379389; 612748, 2379390; 612725, 2379410; 612700, 2379424; 612683, 2379441; 612663, 2379470; 612619, 2379529; 612600, 2379563; 612586, 2379618; 612573, 2379650; 612555, 2379679; 612517, 2379716; 612495, 2379729; 612412, 2379753; 612397, 2379761; 612387, 2379798; 612388, 2379851; 612388, 2379852; 612386, 2379928; 612379, 2379961; 612379, 2379962; 612375, 2379970; 612367, 2379981; 612366, 2379981; 612366, 2379982; 612353, 2379991; 612328, 2380018; 612262, 2380145; 612255, 2380163; 612249, 2380199; 612248, 2380233; 612234, 2380304; 612226, 2380334; 612224, 2380337; 612211, 2380367; 612213, 2380397; 612218, 2380419; 612218, 2380420; 612215, 2380452; 612212, 2380464; 612202, 2380506; 612202, 2380507; 612197, 2380516; 612177, 2380539; 612112, 2380593; 612086, 2380625; 612073, 2380644; 612046, 2380669; 612046, 2380670; 612016, 2380686; 611992, 2380690; 611965, 2380687; 611955, 2380689; 611941, 2380693; 611927, 2380702; 611919, 2380710; 611905, 2380743; 611889, 2380825; 611889, 2380826; 611880, 2380839; 611856, 2380862; 611812, 2380892; 611799, 2380905; 611798, 2380918; 611800, 2380925; 611815, 2380943; 611838, 2380960; 611838, 2380961; 611848, 2380980; 611851, 2381022; 611848, 2381067; 611853, 2381081; 611879, 2381118; 611879, 2381119; 611879, 2381131; 611879, 2381132; 611868, 2381149; 611858, 2381155; 611857, 2381155; 611847, 2381160; 611837, 2381167; 611828, 2381178; 611825, 2381193; 611830, 2381214; 611838, 2381223; 611854, 2381250; 611854, 2381251; 611856, 2381258; 611855, 2381265; 611849, 2381285; 611848, 2381286; 611828, 2381312; 611784, 2381363; 611765, 2381383; 611734, 2381424; 611733, 2381424; 611730, 2381426; 611737, 2381446; 611745, 2381514; 611746, 2381550; 611748, 2381618; 611748, 2381619; 611739, 2381669; 611736, 2381680; 611736, 2381681; 611727, 2381699; 611727, 2381700; 611673, 2381758; 611666, 2381774; 611666, 2381794; 611670, 2381810; 611702, 2381865; 611712, 2381882; 611712, 2381883; 611712, 2381915; 611712, 2381916; 611710, 2381923; 611687, 2381955; 611687, 2381978; 611695, 2381990; 611702, 2382013; 611702, 2382014; 611700, 2382058; 611694, 2382120; 611695, 2382225; 611701, 2382278; 611701, 2382279; 611699, 2382320; 611697, 2382339; 611722, 2382329; 611752, 2382479; 611931, 2382659; 612029, 2382853; 612029, 2383033; 612029, 2383265; 612074, 2383438; 612171, 2383602; 612231, 2383760; 612186, 2383909; 611976, 2384164; 611729, 2384584; 611624, 2384741; 611652, 2384737; 611227, 2385310; 611018, 2385490; 610538, 2385497; 610367, 2385372; 610333, 2385392; 610292, 2385406; 610280, 2385413; 610261, 2385429; 610248, 2385449; 610237, 2385473; 610222, 2385512; 610222, 2385513; 610214, 2385522; 610206, 2385531; 610206, 2385532; 610187, 2385540; 610166, 2385544; 610134, 2385558; 610129, 2385561; 610122, 2385580; 610119, 2385604; 610119, 2385605; 610112, 2385620; 610111, 2385621; 610093, 2385637; 610078, 2385652; 610077, 2385659; 610090, 2385687; 610097, 2385698; 610098, 2385699; 610098, 2385700; 610097, 2385705; 610097, 2385706; 610081, 2385734; 610054, 2385762; 610039, 2385790; 610028, 2385816; 610024, 2385839; 610027, 2385873; 610035, 2385901; 610035, 2385902; 610035, 2385943; 610035, 2385944; 610029, 2385956; 610029, 2385957; 610003, 2385991; 609994, 2386004; 609993, 2386004; 609993, 2386005; 609971, 2386017; 609955, 2386025; 609948, 2386031; 609929, 2386085; 609909, 2386112; 609898, 2386121; 609887, 2386134; 609883, 2386146; 609884, 2386168; 609879, 2386204; 609884, 2386223; 609905, 2386254; 609905, 2386255; 609909, 2386278; 609909, 2386279; 609907, 2386291; 609881, 2386354; 609880, 2386355; 609858, 2386384; 609834, 2386404; 609797, 2386443; 609790, 2386450; 609769, 2386468; 609748, 2386495; 609737, 2386524; 609719, 2386644; 609711, 2386719; 609711, 2386720; 609705, 2386737; 609704, 2386737; 609704, 2386738; 609693, 2386745; 609692, 2386745; 609595, 2386759; 609570, 2386766; 609560, 2386772; 609536, 2386797; 609481, 2386863; 609461, 2386894; 609449, 2386918; 609449, 2386919; 609439, 2386933; 609438, 2386934; 609425, 2386943; 609379, 2386966; 609323, 2387005; 609308, 2387012; 609269, 2387020; 609248, 2387021; 609184, 2387014; 609134, 2387001; 609078, 2386982; 609074, 2386984; 609062, 2387000; 609048, 2387031; 609047, 2387032; 609025, 2387051; 608989, 2387068; 608988, 2387068; 608975, 2387068; 608974, 2387068; 608905, 2387055; 608862, 2387042; 608856, 2387043; 608849, 2387049; 608810, 2387121; 608794, 2387150; 608794, 2387151; 608776, 2387175; 608736, 2387223; 608719, 2387246; 608718, 2387246; 608718, 2387247; 608693, 2387265; 608643, 2387281; 608604, 2387303; 608558, 2387325; 608497, 2387362; 608496, 2387362; 608459, 2387369; 608458, 2387369; 608435, 2387371; 608434, 2387371; 608410, 2387366; 608377, 2387354; 608355, 2387351; 608336, 2387351; 608316, 2387358; 608308, 2387366; 608294, 2387395; 608292, 2387413; 608300, 2387459; 608299, 2387471; 608298, 2387472; 608298, 2387473; 608289, 2387479; 608252, 2387489; 608234, 2387501; 608228, 2387506; 608223, 2387520; 608230, 2387572; 608232, 2387576; 608238, 2387590; 608252, 2387607; 608267, 2387627; 608267, 2387628; 608272, 2387642; 608275, 2387670; 608275, 2387671; 608274, 2387677; 608306, 2387729; 608673, 2387954; 608988, 2388096; 609475, 2388141; 610074, 2387984; 610396, 2387812; 610793, 2387602; 611355, 2387302; 611827, 2387093; 612066, 2386950; 612149, 2386845; 612164, 2386741; 612164, 2386613; 612164, 2386441; 612164, 2386276; 612186, 2386082; 612313, 2385992; 612433, 2385827; 612439, 2385780; 612456, 2385849; 612605, 2385782; 612710, 2385759; 612748, 2385700; 612965, 2385610; 612987, 2385340; 612890, 2385010; 612860, 2384823; 612755, 2384613; 612673, 2384329; 612695, 2384044; 612815, 2383685; 612815, 2383497; 612695, 2383318; 612576, 2382996; 612456, 2382726; 612321, 2382426; 612276, 2382209; 612164, 2381767; 612253, 2381453; 612291, 2381153; 612433, 2380719; 612486, 2380501; 612673, 2380134; 612815, 2379940; 612890, 2379775; 612987, 2379618; 613242, 2379498; 613362, 2379296; 613467, 2379071; 613542, 2378876; 613639, 2378749; 613954, 2378644; 613987, 2378588; 613976, 2378636; 614575, 2378337; 614613, 2378157; 614748, 2377790; 614845, 2377580; 614965, 2377423; 615025, 2377228; 615070, 2377034; 615070, 2376854; 615077, 2376741; 615220, 2376562; 615354, 2376352; 615392, 2376150; 615369, 2376105; 615070, 2375992; 614860, 2375933; 614673, 2375835; 614515, 2375820; 614313, 2375775; 614143, 2375726; 614103, 2375700; 613969, 2375655; 613789, 2375678; 613587, 2375738; 613070, 2376389; 612576, 2376966; 612306, 2377266; 612089, 2377580; 612103, 2377583; 612103,

2377584; 612166, 2377617; 612168,

2377619; 612247, 2377687; return to starting point.

(ii) **Note:** Map 241 follows:

(242) Oahu 20—*Phyllostegia hirsuta*—d
(1,005 ha; 2,483 ac)

(i) Unit consists of the following 365 boundary points: Start at 608181, 2387918; 608609, 2387992; 609066, 2387923; 609648, 2387838; 610294, 2387723; 610699, 2387638; 611287, 2387529; 611887, 2387381; 612047, 2387289; 612218, 2387158; 612275, 2387009; 612218, 2386810; 612138, 2386495; 612077, 2386335; 612081, 2386336; 612173, 2386170; 612258, 2386084; 612418, 2385987; 612561, 2385919; 612607, 2385873; 612607, 2385791; 612489, 2383611; 612441,

2383240; 612407, 2383075; 612333, 2382778; 612235, 2382526; 612127, 2382349; 612121, 2382349; 612098, 2382264; 612030, 2382069; 612001, 2381847; 611990, 2381692; 612041, 2381550; 612121, 2381395; 612156, 2381312; 611855, 2381263; 611855, 2381265; 611855, 2381266; 611849, 2381285; 611848, 2381285; 611848, 2381286; 611828, 2381312; 611784, 2381363; 611765, 2381383; 611734, 2381424; 611733, 2381424; 611730, 2381426; 611737, 2381446; 611745, 2381514; 611746, 2381550; 611748, 2381618; 611748, 2381619; 611739,

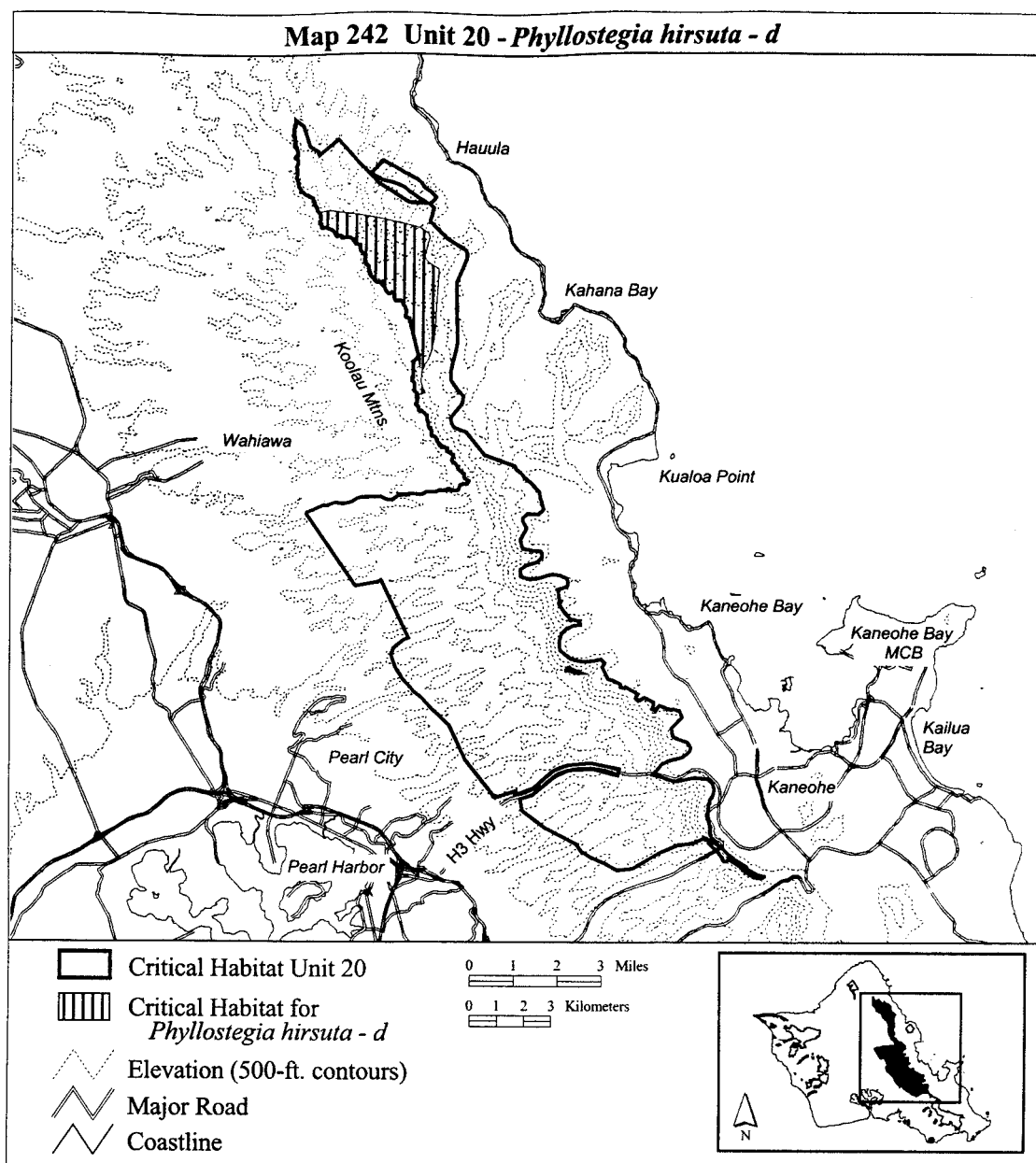
2381669; 611736, 2381680; 611736, 2381681; 611727, 2381699; 611727, 2381700; 611726, 2381700; 611673, 2381758; 611666, 2381774; 611666, 2381794; 611670, 2381810; 611702, 2381865; 611712, 2381882; 611712, 2381883; 611712, 2381915; 611712, 2381916; 611710, 2381923; 611687, 2381955; 611687, 2381978; 611695, 2381990; 611702, 2382013; 611702, 2382014; 611700, 2382058; 611694, 2382120; 611695, 2382225; 611701, 2382278; 611701, 2382279; 611699, 2382320; 611695, 2382360; 611693, 2382433; 611692, 2382455; 611698,

2382473; 611744, 2382512; 611805,
2382557; 611831, 2382588; 611844,
2382604; 611844, 2382605; 611850,
2382621; 611874, 2382653; 611896,
2382683; 611896, 2382684; 611903,
2382704; 611903, 2382705; 611903,
2382706; 611902, 2382707; 611901,
2382707; 611900, 2382707; 611900,
2382706; 611899, 2382706; 611892,
2382686; 611891, 2382684; 611795,
2383056; 611597, 2383822; 611567,
2383939; 611567, 2383940; 611561,
2383949; 611537, 2384020; 611536,
2384020; 611525, 2384040; 611515,
2384051; 611495, 2384064; 611460,
2384078; 611430, 2384082; 611404,
2384097; 611396, 2384120; 611393,
2384150; 611397, 2384172; 611413,
2384204; 611422, 2384233; 611428,
2384263; 611435, 2384302; 611435,
2384321; 611429, 2384356; 611429,
2384357; 611417, 2384382; 611394,
2384464; 611387, 2384476; 611374,
2384488; 611374, 2384489; 611358,
2384501; 611334, 2384524; 611326,
2384536; 611302, 2384584; 611257,
2384667; 611256, 2384667; 611245,
2384680; 611244, 2384681; 611224,
2384695; 611223, 2384695; 611203,
2384703; 611202, 2384704; 611192,
2384704; 611191, 2384703; 611165,
2384698; 611119, 2384696; 611118,
2384696; 611082, 2384690; 611081,
2384690; 611065, 2384682; 611064,
2384681; 611058, 2384675; 611046,
2384674; 611039, 2384675; 611028,
2384688; 611014, 2384713; 610994,
2384778; 610981, 2384838; 610976,
2384927; 610973, 2384941; 610973,
2384942; 610965, 2384959; 610965,
2384960; 610957, 2384969; 610957,
2384970; 610934, 2384987; 610933,
2384987; 610909, 2384993; 610908,
2384993; 610888, 2384986; 610839,
2384956; 610809, 2384945; 610780,
2384942; 610766, 2384942; 610749,
2384953; 610709, 2384995; 610692,
2385014; 610679, 2385041; 610630,

2385180; 610616, 2385205; 610606,
2385215; 610606, 2385216; 610598,
2385220; 610558, 2385236; 610543,
2385248; 610533, 2385266; 610516,
2385329; 610509, 2385341; 610509,
2385342; 610508, 2385342; 610497,
2385351; 610496, 2385351; 610454,
2385362; 610440, 2385362; 610394,
2385362; 610370, 2385370; 610333,
2385392; 610292, 2385406; 610280,
2385413; 610261, 2385429; 610248,
2385449; 610237, 2385473; 610222,
2385512; 610222, 2385513; 610214,
2385522; 610206, 2385531; 610206,
2385532; 610187, 2385540; 610166,
2385544; 610134, 2385558; 610129,
2385561; 610122, 2385580; 610119,
2385604; 610119, 2385605; 610112,
2385620; 610111, 2385621; 610093,
2385637; 610078, 2385652; 610077,
2385659; 610090, 2385687; 610097,
2385698; 610098, 2385699; 610098,
2385700; 610097, 2385705; 610097,
2385706; 610081, 2385734; 610054,
2385762; 610039, 2385790; 610028,
2385816; 610024, 2385839; 610027,
2385873; 610035, 2385901; 610035,
2385902; 610035, 2385943; 610035,
2385944; 610029, 2385956; 610029,
2385957; 610003, 2385991; 609994,
2386004; 609993, 2386004; 609993,
2386005; 609971, 2386017; 609955,
2386025; 609948, 2386031; 609929,
2386085; 609909, 2386112; 609908,
2386113; 609898, 2386121; 609887,
2386134; 609883, 2386146; 609884,
2386168; 609879, 2386204; 609884,
2386223; 609905, 2386254; 609905,
2386255; 609909, 2386278; 609909,
2386279; 609907, 2386291; 609881,
2386354; 609880, 2386355; 609858,
2386384; 609834, 2386404; 609797,
2386443; 609797, 2386444; 609790,
2386450; 609769, 2386468; 609748,
2386495; 609737, 2386524; 609719,
2386644; 609711, 2386719; 609711,
2386720; 609705, 2386737; 609704,
2386737; 609704, 2386738; 609693,

2386745; 609692, 2386745; 609595,
2386759; 609570, 2386766; 609560,
2386772; 609536, 2386797; 609481,
2386863; 609461, 2386894; 609449,
2386918; 609449, 2386919; 609439,
2386933; 609438, 2386934; 609425,
2386943; 609379, 2386966; 609323,
2387005; 609308, 2387012; 609269,
2387020; 609248, 2387021; 609184,
2387014; 609134, 2387001; 609078,
2386982; 609074, 2386984; 609062,
2387000; 609048, 2387031; 609047,
2387032; 609025, 2387051; 609024,
2387051; 608989, 2387068; 608988,
2387068; 608975, 2387068; 608974,
2387068; 608905, 2387055; 608862,
2387042; 608856, 2387043; 608849,
2387049; 608810, 2387121; 608794,
2387150; 608794, 2387151; 608776,
2387175; 608736, 2387223; 608719,
2387246; 608718, 2387246; 608718,
2387247; 608693, 2387265; 608692,
2387265; 608643, 2387281; 608604,
2387303; 608558, 2387325; 608497,
2387362; 608496, 2387362; 608459,
2387369; 608458, 2387369; 608435,
2387371; 608434, 2387371; 608410,
2387366; 608377, 2387354; 608355,
2387351; 608336, 2387351; 608316,
2387358; 608308, 2387366; 608294,
2387395; 608292, 2387413; 608300,
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2387472; 608298, 2387473; 608289,
2387479; 608252, 2387489; 608234,
2387501; 608228, 2387506; 608223,
2387520; 608230, 2387572; 608232,
2387576; 608238, 2387590; 608252,
2387607; 608267, 2387627; 608267,
2387628; 608272, 2387642; 608275,
2387670; 608275, 2387671; 608273,
2387689; 608258, 2387739; 608257,
2387765; 608259, 2387774; 608270,
2387794; 608274, 2387812; 608274,
2387813; 608254, 2387851; 608254,
2387852; 608227, 2387885; 608190,
2387914; return to starting point.

(ii) **Note:** Map 242 follows:



(243) Oahu 20—*Phyllostegia parviflora*—d (1,430 ha; 3,534 ac)

(i) Unit consists of the following 536 boundary points: Start at 613555,

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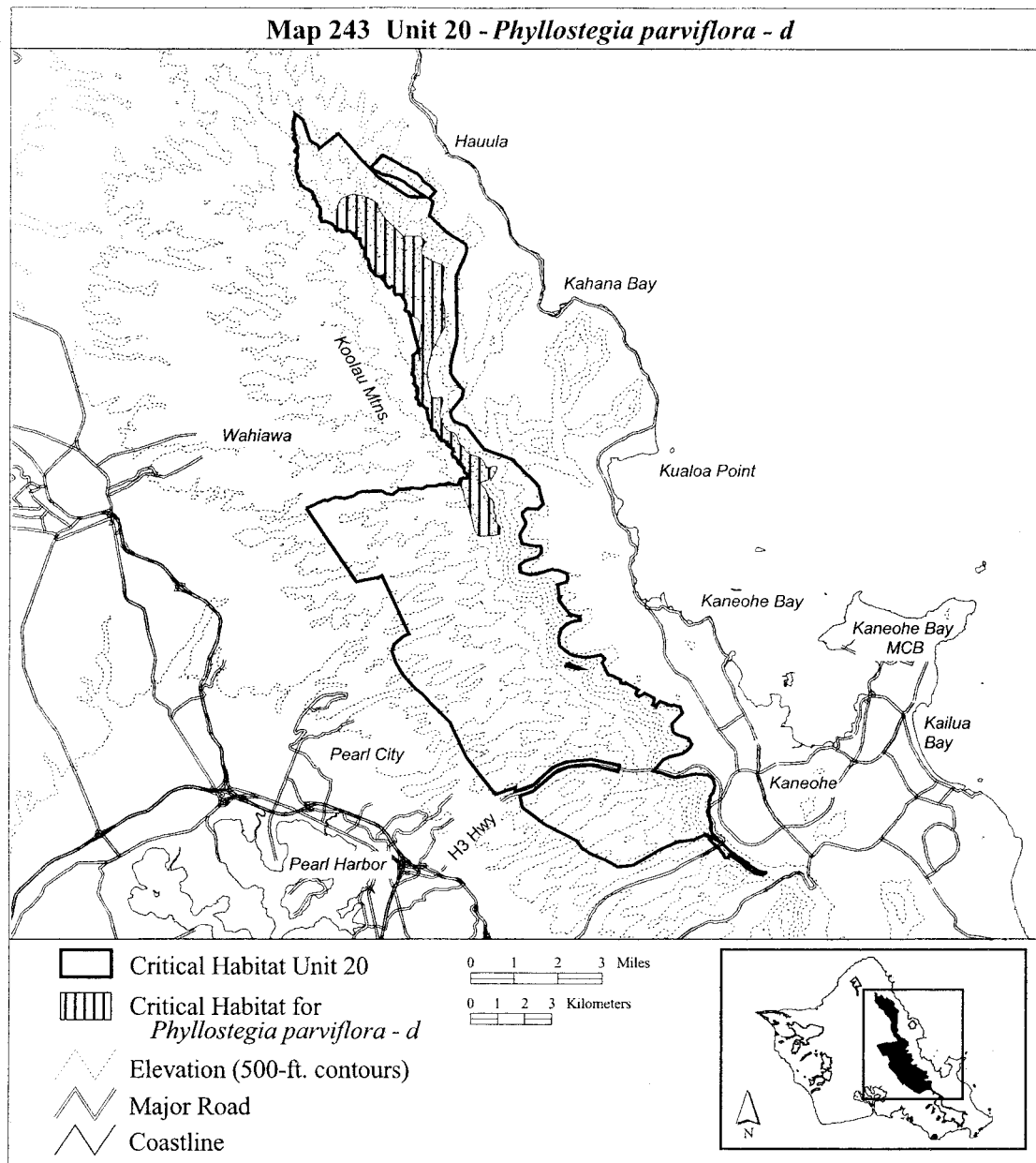
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2376408; 614863, 2376283; 614920,
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2377656; 613466, 2377685; 613447,
2377709; 613498, 2377803; 613503,

2377803; 613531, 2377881; 613547,
2377971; 613554, 2377977; return to
starting point.

(ii) **Note:** Map 243 follows:



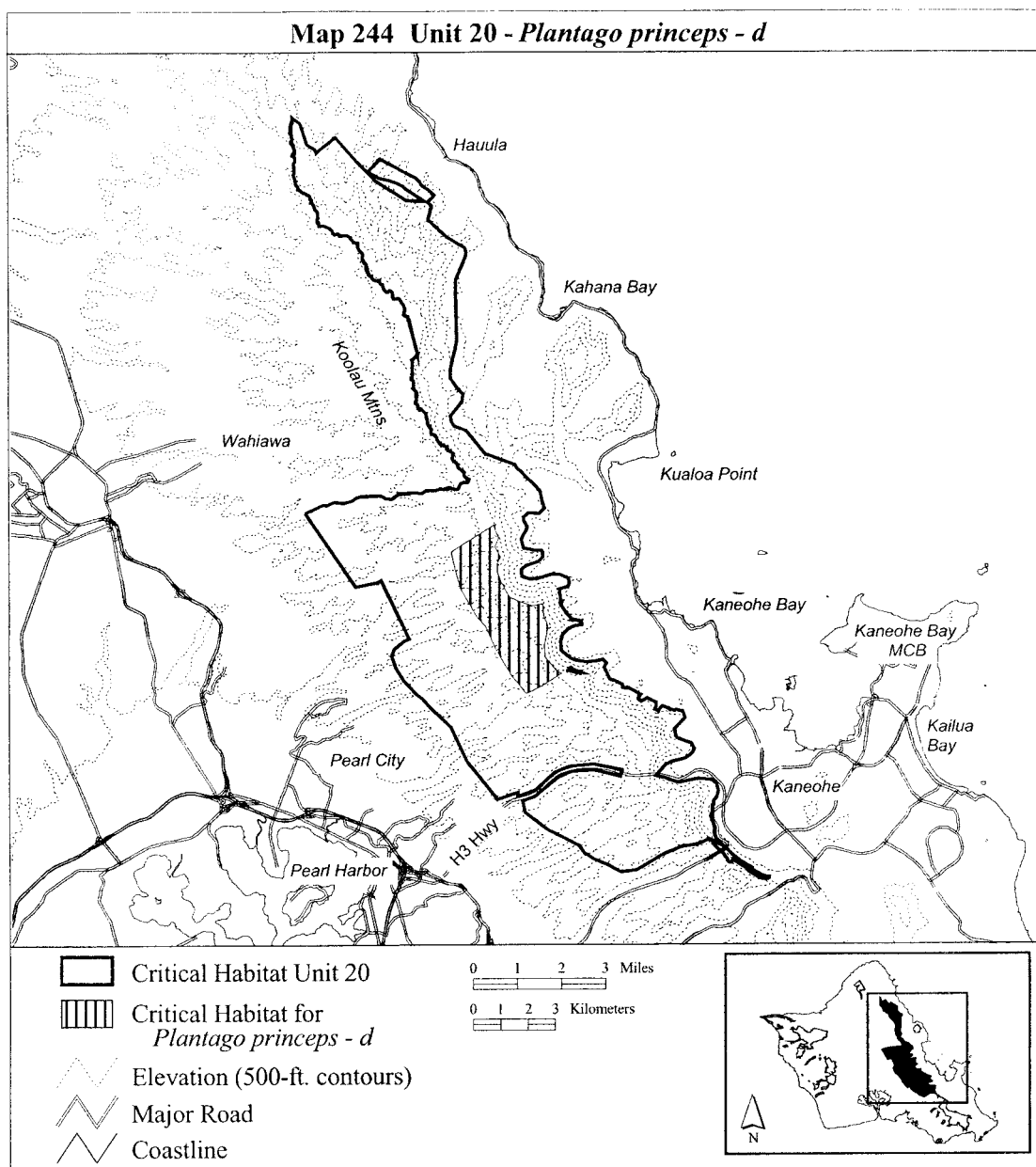
(244) Oahu 20—*Plantago princeps*—d
(992 ha; 2,450 ac)

(i) Unit consists of the following 33
boundary points: Start at 615847,
2370245; 615284, 2370964; 614778,
2371801; 614350, 2372717; 614019,
2373116; 613434, 2374148; 613308,

2374586; 613142, 2375258; 613095,
2375422; 614663, 2376418; 614715,
2376331; 614709, 2376258; 614796,
2376057; 614807, 2376056; 614827,
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2375248; 614797, 2375024; 614797,
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2373788; 615635, 2373603; 616073,

2373466; 616453, 2373525; 616462,
2373252; 616492, 2373077; 616628,
2372765; 616647, 2372609; 616511,
2372025; 616531, 2371607; 616940,
2371110; 617144, 2370985; 616433,
2370522; return to starting point.

(ii) **Note:** Map 244 follows:



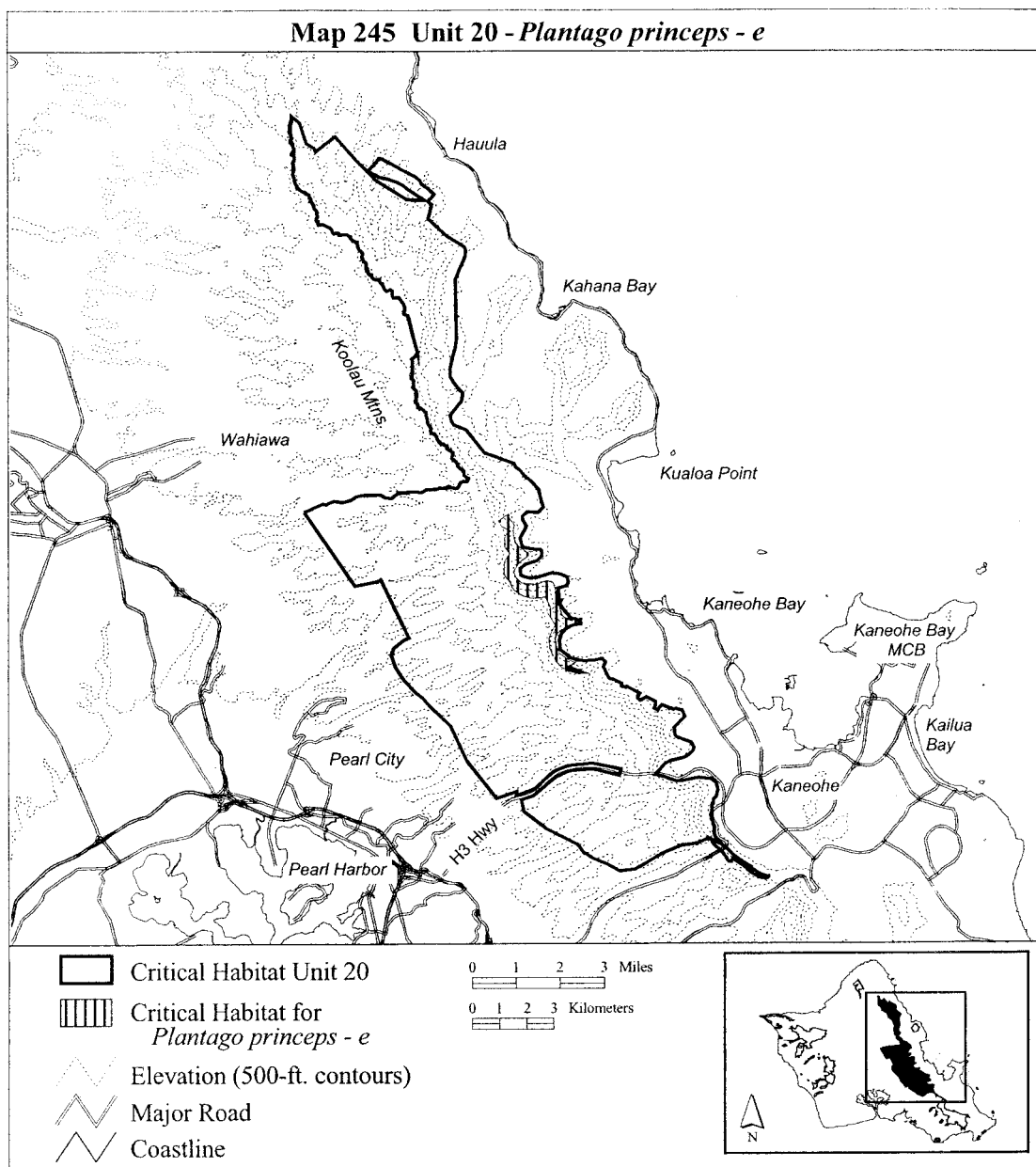
(245) Oahu 20—*Plantago princeps*—e
(295 ha; 730 ac)

(i) Unit consists of the following 93 boundary points: Start at 617328, 2371105; 617214, 2371162; 616969, 2371396; 616855, 2371624; 616752, 2371886; 616730, 2372217; 616758, 2372348; 616832, 2372491; 616935, 2372656; 616941, 2372742; 616747, 2373067; 616781, 2373068; 616775, 2373158; 616775, 2373266; 616764, 2373386; 616724, 2373483; 616690, 2373597; 616593, 2373734; 616479, 2373745; 616217, 2373694; 615983, 2373711; 615783, 2373773; 615595, 2373887; 615447, 2373984; 615361, 2374104; 615310, 2374258; 615230,

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2374674; 615504, 2374475; 615715, 2374275; 616057, 2374224; 616308, 2374230; 616479, 2374292; 616690, 2374355; 616866, 2374281; 616980, 2373950; 617089, 2373471; 617187, 2373089; 617203, 2373089; 617271, 2373004; 617482, 2372958; 617647, 2372947; 617790, 2372913; 617858, 2372901; 617853, 2372821; 617767, 2372776; 617590, 2372719; 617448, 2372639; 617311, 2372616; 617146, 2372525; 617003, 2372337; 616958, 2372189; 617003, 2371921; 617106, 2371687; 617220, 2371596; 617419, 2371465; 617602, 2371362; 617717, 2371359; return to starting point.

(ii) **Note:** Map 245 follows:



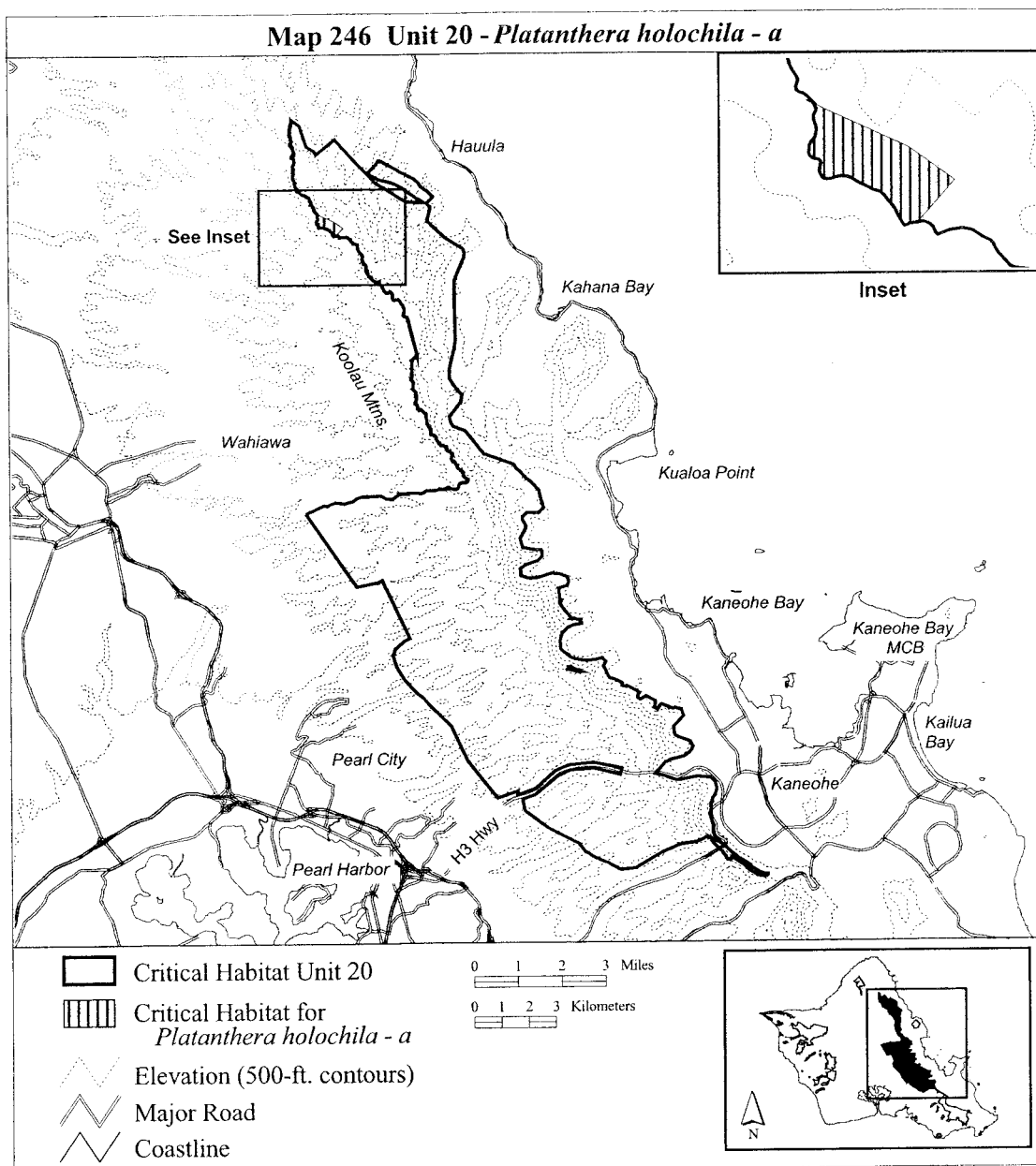
(246) Oahu 20—*Platanthera holochila*—
a (35 ha; 86 ac)

(i) Unit consists of the following 64 boundary points: Start at 608249, 2387857; 608319, 2387816; 608894, 2387555; 609199, 2387341; 608944, 2387062; 608905, 2387055; 608862, 2387042; 608856, 2387043; 608849, 2387049; 608810, 2387121; 608794, 2387150; 608794, 2387151; 608776, 2387175; 608736, 2387223; 608719, 2387246; 608718, 2387246; 608718,

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(ii) **Note:** Map 246 follows:



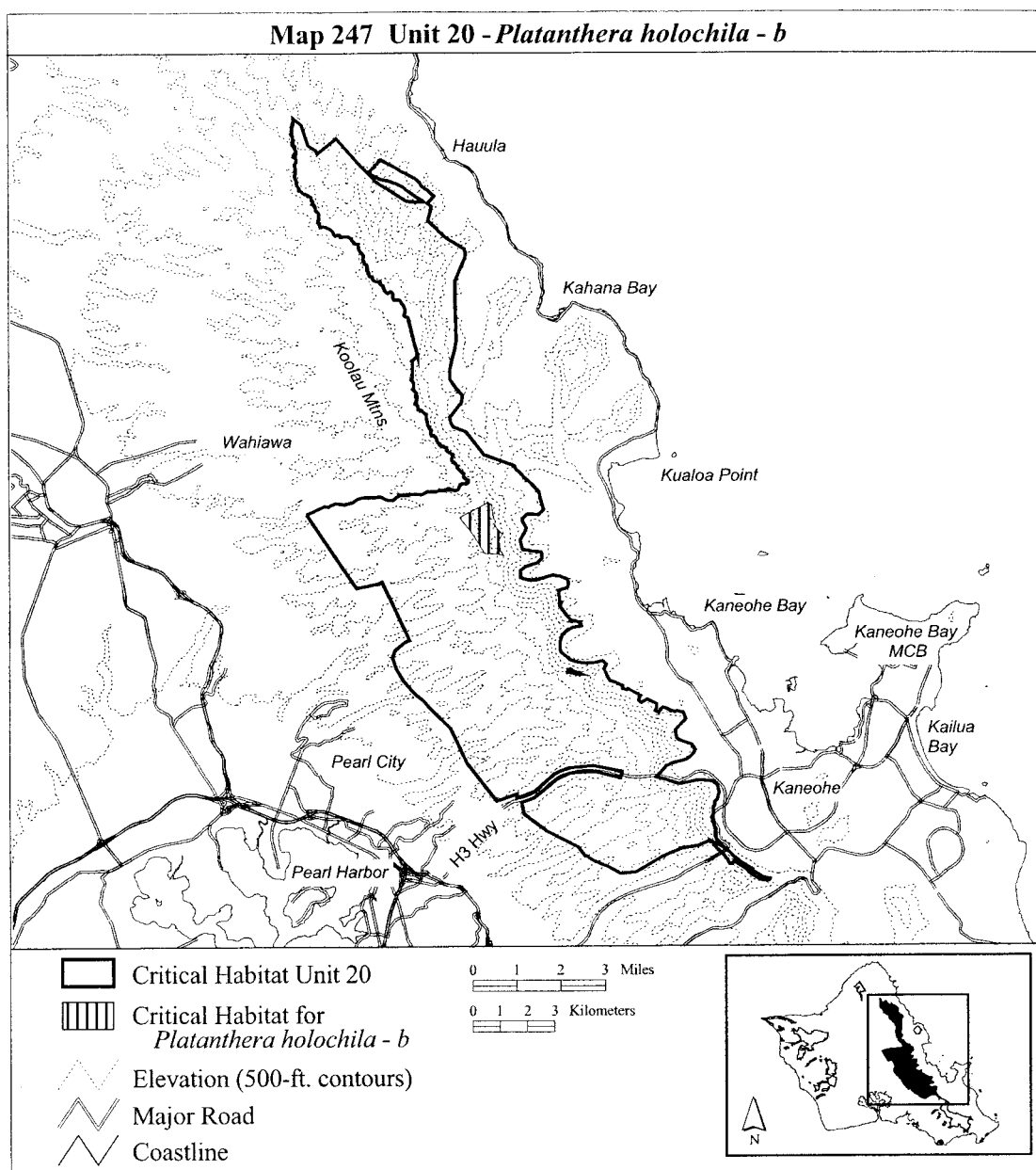
(247) Oahu 20—*Platanthera holochila*—
b (165 ha; 407 ac)

(i) Unit consists of the following 15
boundary points: Start at 614492,

2377295; 614625, 2377208; 614686,
2376742; 614770, 2376592; 614740,
2376486; 614814, 2376331; 615019,
2376154; 614881, 2375865; 614931,
2375554; 615003, 2375471; 615053,

2375377; 614929, 2375380; 614354,
2375432; 613918, 2376130; 613435,
2376741; return to starting point.

(ii) **Note:** Map 247 follows:



(248) Oahu 20—*Pteris lidgatei*—a (1,232 ha; 3,045 ac)

(i) Unit consists of the following 322 boundary points: Start at 607973,

2388394; 608211, 2388424; 608644, 2388424; 609046, 2388411; 609575, 2388347; 609945, 2388296; 610416, 2388239; 610824, 2388099; 611220, 2387844; 611583, 2387595; 611889, 2387334; 611946, 2387232; 612201, 2387104; 612278, 2386970; 612405, 2386817; 612679, 2386550; 612672, 2386543; 612686, 2386543; 612864, 2386352; 613011, 2386084; 613062, 2385823; 613004, 2385523; 612915, 2385294; 612832, 2384975; 612750, 2384688; 612730, 2384542; 612641, 2384216; 612686, 2383974; 612686, 2383624; 612616, 2383120; 612575,

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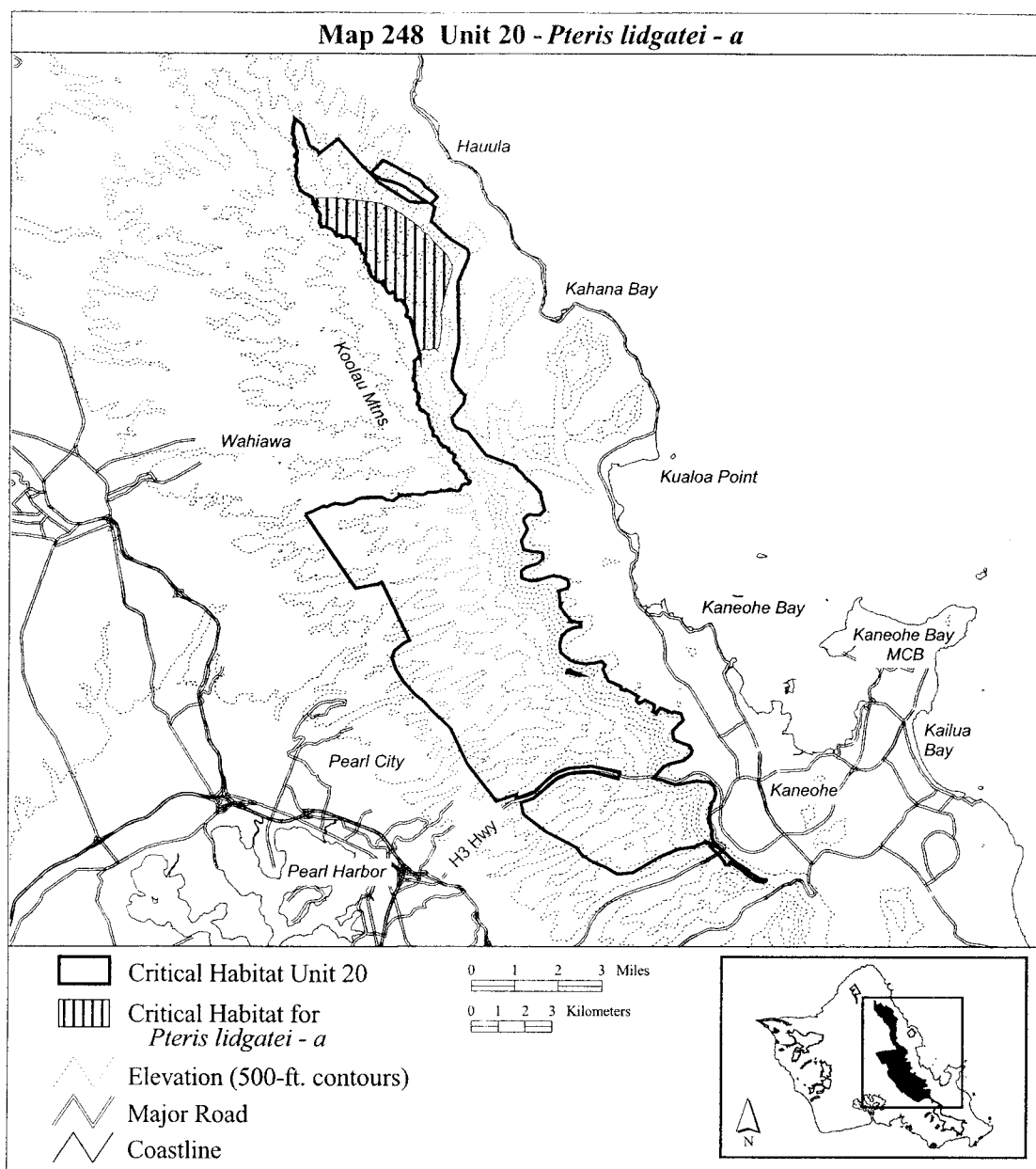
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2388312; 608011, 2388328; 608011,
2388329; 607997, 2388340; 607987,
2388344; 607980, 2388349; 607975,
2388357; 607973, 2388367; return to
starting point.

(ii) **Note:** Map 248 follows:



(249) Oahu 20—*Pteris lidgatei*—b (288 ha; 711 ac)

(i) Unit consists of the following 167 boundary points: Start at 612247, 2377695; 612255, 2377697; 612402, 2377690; 612402, 2377689; 612403, 2377685; 612432, 2377673; 612468, 2377676; 612482, 2377684; 612483, 2377688; 612505, 2377688; 612575, 2377698; 612576, 2377698; 612596, 2377708; 612604, 2377703; 612630, 2377702; 612668, 2377720; 612688, 2377749; 612686, 2377751; 612705, 2377757; 612764, 2377738; 612765, 2377738; 612794, 2377742; 612814, 2377728; 612853, 2377742; 612870, 2377747; 613040, 2377760; 613059, 2377772; 613059, 2377774; 613085, 2377777; 613154, 2377768; 613224,

2377738; 613264, 2377728; 613265, 2377728; 613335, 2377738; 613336, 2377738; 613359, 2377752; 613368, 2377747; 613413, 2377754; 613415, 2377755; 613449, 2377784; 613454, 2377825; 613460, 2377881; 613497, 2377929; 613554, 2377977; 613555, 2377987; 613674, 2377978; 613675, 2377978; 613694, 2377988; 613721, 2377976; 613733, 2377976; 613762, 2378001; 613771, 2378068; 613764, 2378090; 613757, 2378093; 613753, 2378093; 613751, 2378091; 613747, 2378094; 613746, 2378095; 613718, 2378106; 613711, 2378117; 613711, 2378118; 613691, 2378143; 613660, 2378168; 613602, 2378212; 613593, 2378224; 613586, 2378238; 613583, 2378253; 613583, 2378292; 613583,

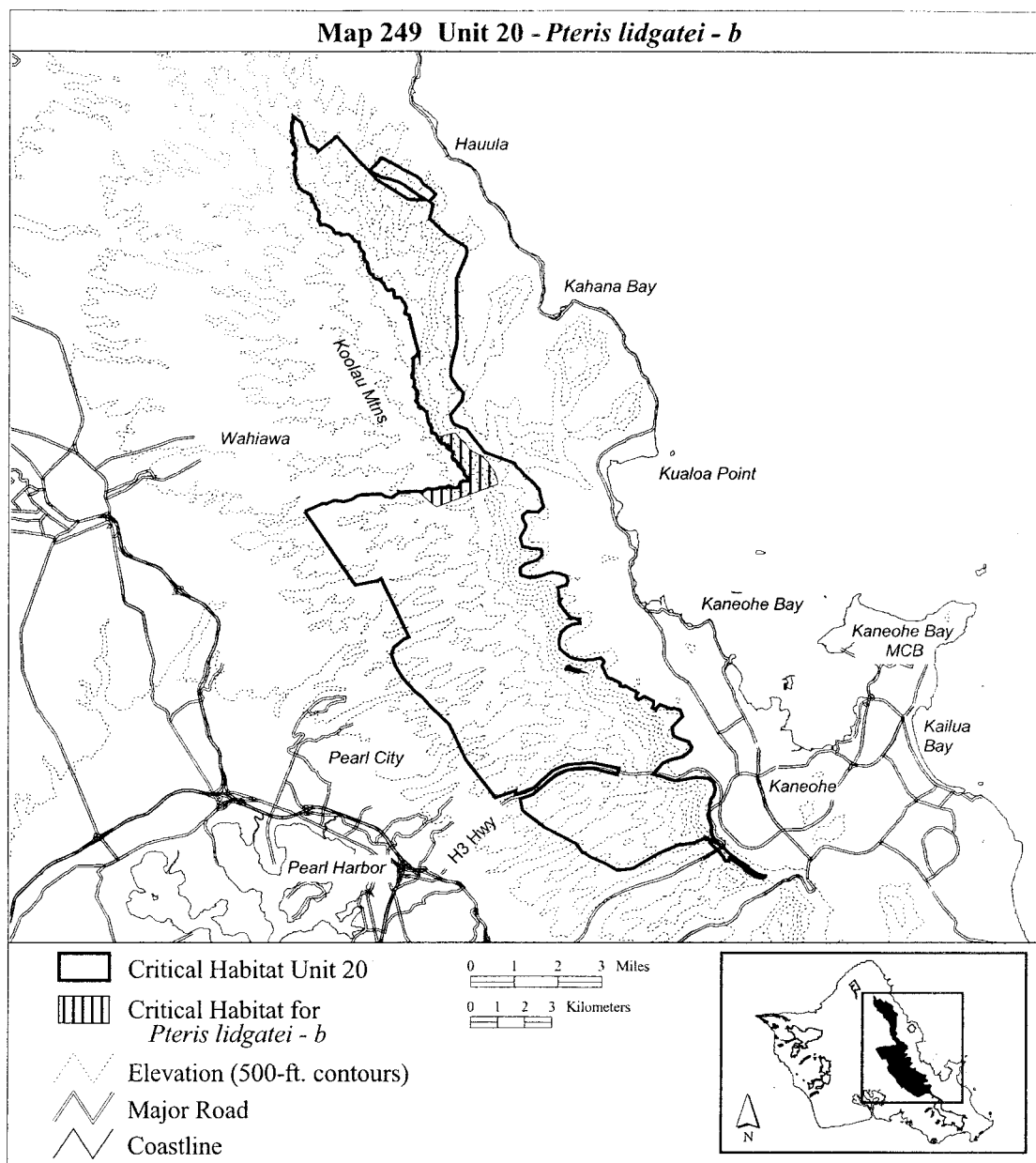
2378328; 613583, 2378329; 613568, 2378356; 613568, 2378357; 613556, 2378372; 613524, 2378400; 613517, 2378408; 613476, 2378444; 613462, 2378463; 613462, 2378464; 613447, 2378478; 613424, 2378499; 613386, 2378532; 613364, 2378562; 613346, 2378613; 613330, 2378641; 613265, 2378728; 613248, 2378749; 613247, 2378750; 613232, 2378759; 613231, 2378759; 613213, 2378764; 613199, 2378769; 613190, 2378778; 613172, 2378818; 613172, 2378819; 613152, 2378848; 613147, 2378859; 613147, 2378860; 613146, 2378860; 613145, 2378860; 613145, 2378861; 613146, 2378862; 613145, 2378862; 613144, 2378873; 613159, 2378951; 613185, 2378998; 613187, 2379004; 613187,

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2379072; 613115, 2379100; 613099,
2379113; 613098, 2379113; 613063,
2379127; 612997, 2379166; 612978,
2379188; 612969, 2379215; 612963,
2379226; 612959, 2379247; 612959,
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2379424; 612683, 2379441; 612663,
2379470; 612619, 2379529; 612600,
2379563; 612591, 2379598; 613252,
2379742; 613432, 2379563; 613629,
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2378277; 614809, 2378014; 614830,

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2377588; 612012, 2377584; 612038,
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2377574; 612103, 2377583; 612103,
2377584; 612166, 2377617; 612168,
2377619; 612169, 2377619; 612247,
2377687; return to starting point.

(ii) **Note:** Map 249 follows:



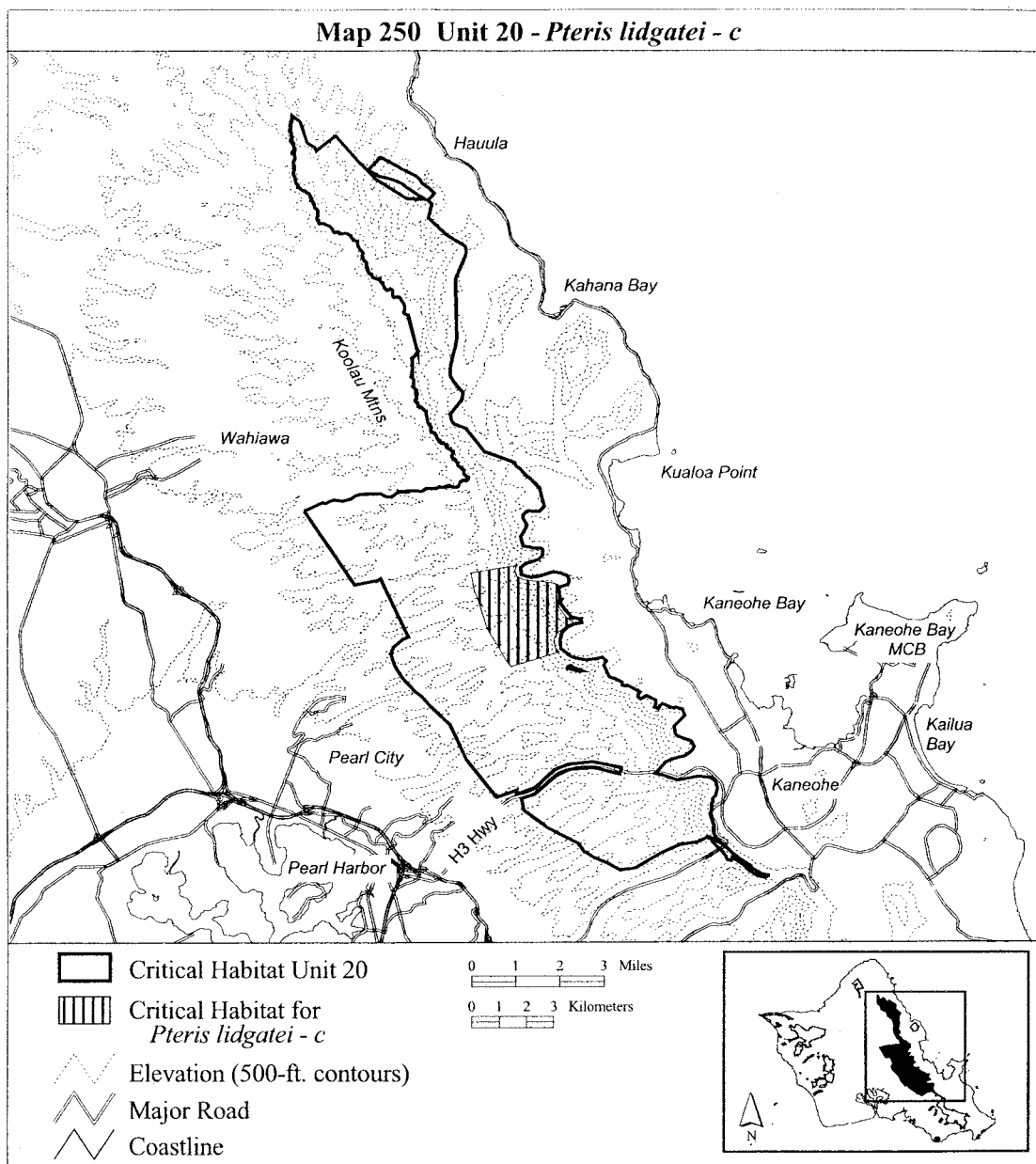
(250) Oahu 20—*Pteris lidgatei*—c (844 ha; 2,085 ac)

(i) Unit consists of the following 33 boundary points: Start at 615336, 2371138; 615108, 2371435; 614942, 2371722; 614713, 2372117; 614483,

2372506; 614006, 2373883; 613993, 2373883; 613891, 2374444; 613858, 2374602; 615567, 2374877; 615503, 2374814; 615452, 2374661; 615542, 2374482; 615777, 2374348; 616185, 2374285; 616370, 2374285; 616753,

2374253; 617008, 2374183; 617072, 2374055; 616989, 2373883; 616977, 2373883; 616995, 2373628; 617065, 2373341; 617205, 2373144; 617346, 2372959; 617620, 2372755; 617409, 2372697; 617199, 2372544; 616982,

2372353; 616880, 2372105; 616931,

2371837; 617072, 2371696; 615352,
2371166; return to starting point.(ii) **Note:** Map 250 follows:

(251) Oahu 20—*Sanicula purpurea*—a
(704 ha; 1,739 ac)

(i) Unit consists of the following 940 boundary points: Start at 613751, 2378091; 613747, 2378094; 613746, 2378095; 613718, 2378106; 613711, 2378117; 613691, 2378143; 613660, 2378168; 613602, 2378212; 613593, 2378224; 613586, 2378238; 613583, 2378253; 613583, 2378292; 613583, 2378328; 613583, 2378329; 613568, 2378356; 613568, 2378357; 613556, 2378372; 613524, 2378400; 613517, 2378408; 613476, 2378444; 613462, 2378463; 613462, 2378464; 613447,

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2376710; 614855, 2376608; 614861,
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2376325; 614993, 2376229; 615011,
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2375943; 614984, 2375886; 614993,
2375826; 615026, 2375754; 615053,
2375645; 615129, 2375510; 615225,
2375396; 615306, 2375294; 615201,
2375170; 615122, 2375071; 615047,
2374942; 615023, 2374870; 615011,
2374806; 615017, 2374737; 615053,
2374644; 615104, 2374548; 615180,
2374437; 615288, 2374256; 615303,
2374175; 615339, 2374049; 615432,
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2373673; 616220, 2373682; 616319,
2373706; 616400, 2373736; 616473,
2373778; 616563, 2373799; 616581,
2373775; 616593, 2373700; 616593,
2373646; 616578, 2373562; 616593,
2373486; 616617, 2373366; 616656,
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2373041; 616764, 2372999; 616767,
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2372864; 616939, 2372801; 616963,
2372717; 616936, 2372644; 616833,
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2371935; 616812, 2371803; 616830,
2371718; 616860, 2371640; 616903,
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2371358; 617113, 2371264; 617187,
2371212; 617366, 2371114; 617465,
2371066; 617570, 2371042; 617735,
2371006; 617832, 2371003; 617958,
2371006; 618045, 2371024; 618090,
2371054; 618126, 2371087; 618217,
2371138; 618301, 2371171; 618304,
2371135; 618283, 2371072; 618174,
2370964; 618093, 2370888; 618024,
2370777; 618015, 2370651; 618018,
2370564; 618063, 2370489; 618123,
2370404; 618183, 2370332; 618229,
2370266; 618376, 2370122; 618550,
2370010; 618809, 2369950; 619068,
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2369862; 619155, 2369861; 619190,
2369844; 619233, 2369823; 619232,
2369822; 619305, 2369785; 619362,
2369728; 619407, 2369674; 619504,
2369544; 619537, 2369544; 619678,
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2368805; 620544, 2368678; 620547,
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2368327; 620793, 2368260; 620911,
2368245; 620977, 2368251; 621052,
2368239; 621037, 2368185; 620962,
2368152; 620911, 2368140; 620787,
2368119; 620763, 2368110; 620715,
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2366504; 621732, 2366503; 621843,
2366521; 621972, 2366558; 622035,
2366539; 622035, 2366449; 622020,
2366350; 621981, 2366209; 621909,
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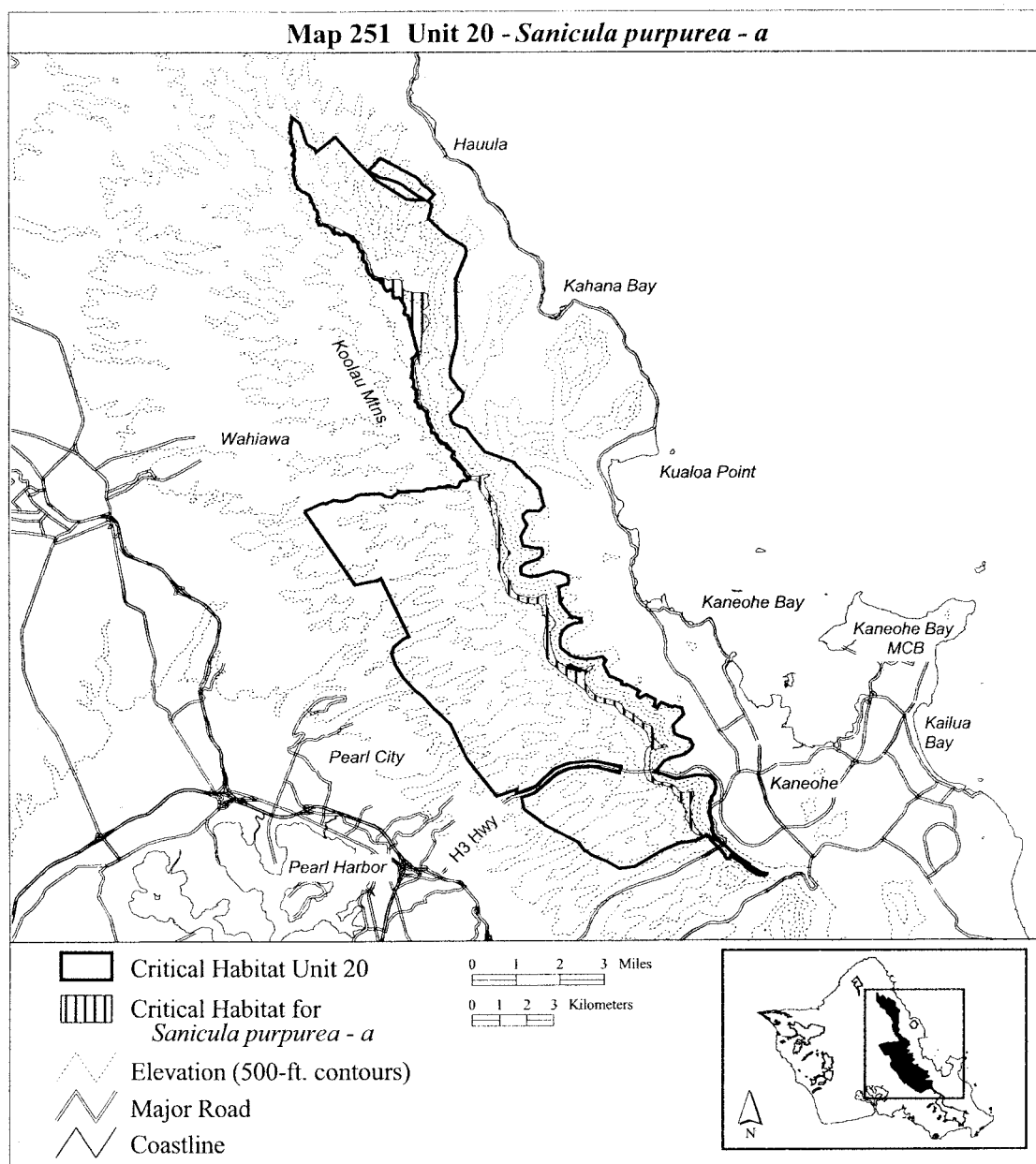
2365619; 621933, 2365568; 621972,
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2364943; 622363, 2364925; 622273,
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2365439; 621801, 2365481; 621720,
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2367283; 620195, 2367373; 620231,
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2369986; 618138, 2370077; 618021,
2370242; 617898, 2370338; 617835,
2370398; 617778, 2370455; 617600,
2370576; 617525, 2370615; 617402,
2370687; 617308, 2370798; 617188,
2370900; 617044, 2371027; 617050,
2371039; 616767, 2371237; 616683,
2371324; 616626, 2371436; 616599,
2371538; 616599, 2371655; 616557,
2371760; 616536, 2371815; 616506,
2371881; 616503, 2372034; 616503,
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2372464; 616563, 2372560; 616593,
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2372891; 616548, 2372969; 616494,
2373008; 616500, 2373008; 616458,
2373086; 616446, 2373195; 616452,
2373324; 616415, 2373372; 616364,
2373429; 616112, 2373444; 615814,
2373492; 615601, 2373556; 615360,
2373664; 615201, 2373787; 615116,
2373928; 615104, 2374055; 615068,
2374169; 615011, 2374283; 614948,

2374431; 614870, 2374599; 614819,
2374755; 614819, 2374861; 614816,
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2375020; 614861, 2375104; 614852,
2375185; 614861, 2375303; 614825,
2375375; 614765, 2375465; 614762,
2375564; 614762, 2375687; 614756,
2375832; 614777, 2375979; 614762,

2376138; 614723, 2376259; 614641,
2376349; 614641, 2376391; 614641,
2376550; 614617, 2376653; 614590,
2376791; 614602, 2376929; 614602,
2376932; 614530, 2377068; 614482,
2377179; 614434, 2377242; 614365,
2377350; 614323, 2377431; 614211,
2377594; 614115, 2377753; 614115,

2377816; 614088, 2377922; 614031,
2378000; 613935, 2378000; 613833,
2377985; 613763, 2378008; 613771,
2378068; 613764, 2378090; 613757,
2378093; 613753, 2378093; return to
starting point.

(ii) Note: Map 251 follows:



(252) Oahu 20—*Schiedea kaalae*—e
(378 ha; 934 ac)

(i) Unit consists of the following 100
boundary points: Start at 610262,
2387162; 610252, 2387163; 610196,
2387181; 610159, 2387216; 610133,
2387242; 610063, 2387266; 610077,
2387301; 610149, 2387343; 610210,
2387403; 610168, 2387460; 610107,

2387518; 610058, 2387565; 610063,
2387719; 610159, 2387749; 610222,
2387768; 610273, 2387791; 610320,
2387824; 610336, 2387848; 610325,
2387892; 610299, 2387953; 610259,
2388006; 610259, 2388044; 610266,
2388112; 610252, 2388147; 610222,
2388182; 610178, 2388226; 610114,
2388238; 610000, 2388289; 609981,

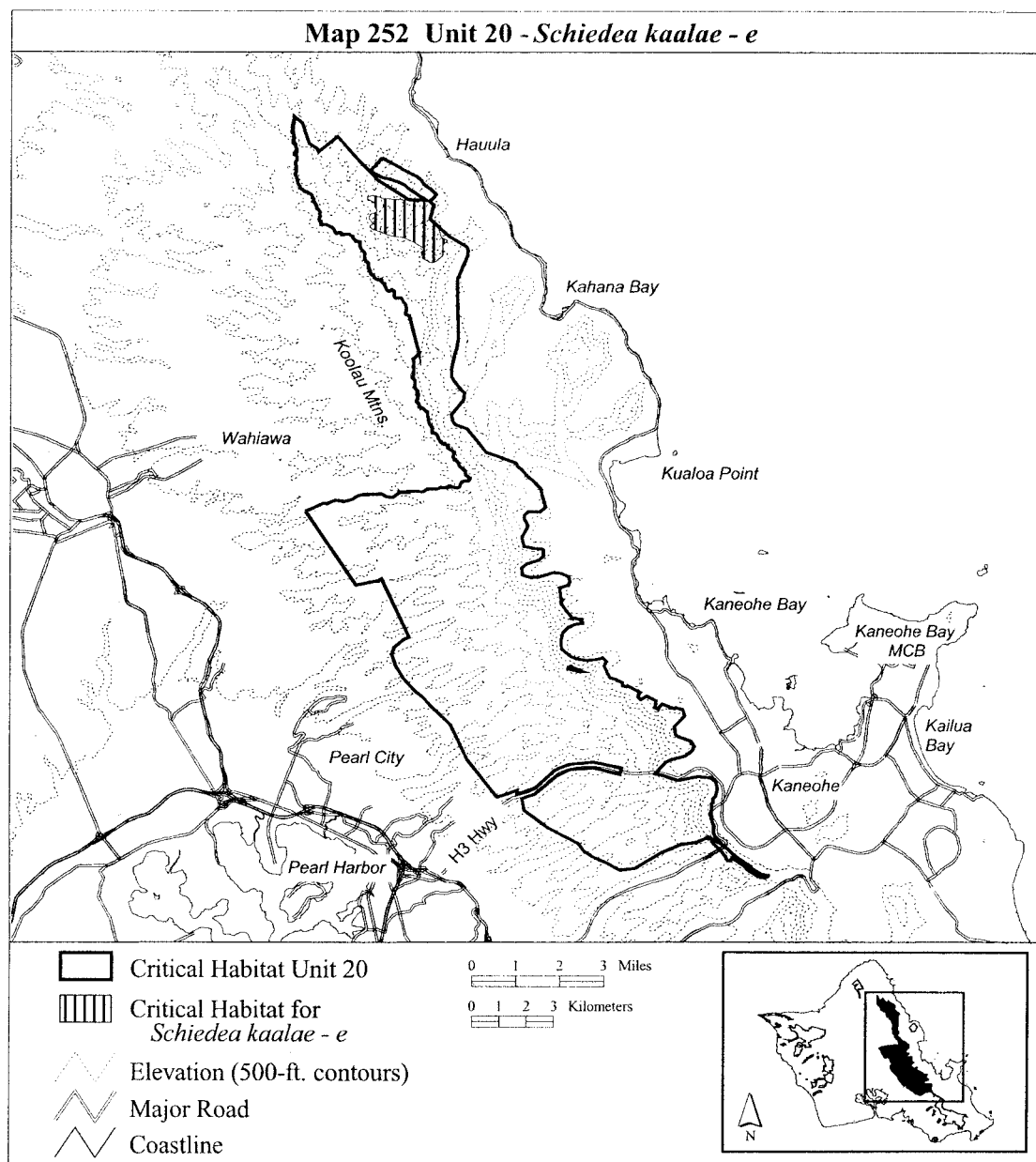
2388301; 609999, 2388345; 610027,
2388381; 610054, 2388383; 610098,
2388387; 610124, 2388392; 610140,
2388423; 610168, 2388432; 610222,
2388437; 610278, 2388437; 610318,
2388437; 610348, 2388390; 610402,
2388369; 610446, 2388369; 610486,
2388355; 610504, 2388319; 610504,
2388322; 611095, 2388275; 611810,

2388272; 612073, 2388265; 612212,
2388258; 612267, 2388207; 612400,
2388103; 612399, 2388096; 612360,
2387934; 612330, 2387792; 612282,
2387600; 612285, 2387571; 612284,
2387567; 612284, 2387566; 612285,
2387565; 612286, 2387564; 612293,
2387485; 612424, 2387377; 612559,
2387286; 612603, 2387148; 612610,
2387155; 612620, 2387131; 612633,

2387027; 612677, 2386915; 612714,
2386885; 612785, 2386861; 612876,
2386831; 612910, 2386794; 612873,
2386740; 612789, 2386649; 612731,
2386564; 612731, 2386446; 612731,
2386338; 612731, 2386230; 612637,
2386146; 612542, 2386065; 612407,
2385981; 612313, 2385977; 612235,
2386008; 612127, 2386072; 612013,
2386132; 611965, 2386227; 611972,

2386311; 612002, 2386372; 612063,
2386480; 612009, 2386551; 612014,
2386556; 611965, 2386574; 611658,
2386733; 611486, 2386821; 611257,
2386902; 611071, 2386929; 610859,
2386949; 610680, 2387010; 610558,
2387054; 610437, 2387114; return to
starting point.

(ii) **Note:** Map 252 follows:



(253) Oahu 20—*Tetraplasandra gymnocarpa*—a (457 ha; 1,129 ac)

(i) Unit consists of the following 197 boundary points: Start at 609064, 2386997; 609513, 2387148; 610476, 2387018; 610552, 2386998; 610622, 2387041; 610795, 2387041; 611132,

2386909; 611289, 2386794; 611684, 2386695; 612203, 2386580; 612317, 2386517; 612583, 2386377; 612341, 2386005; 611418, 2384089; 611404, 2384097; 611396, 2384120; 611393, 2384150; 611397, 2384172; 611413, 2384204; 611422, 2384233; 611428,

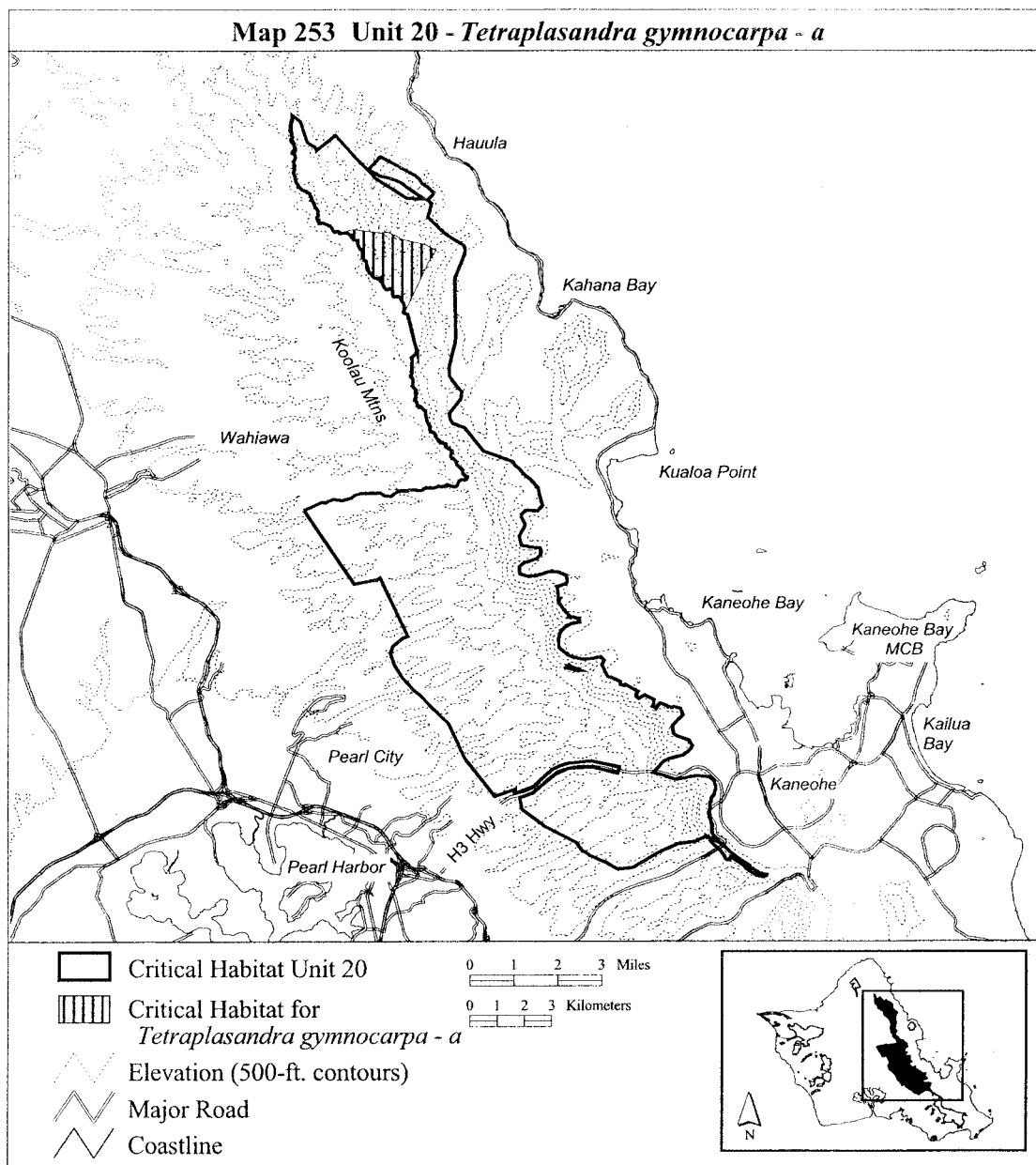
2384263; 611435, 2384302; 611435, 2384321; 611429, 2384356; 611429, 2384357; 611417, 2384382; 611394, 2384464; 611387, 2384476; 611374, 2384488; 611374, 2384489; 611358, 2384501; 611334, 2384524; 611326, 2384536; 611302, 2384584; 611257,

2384667; 611256, 2384667; 611245,
2384680; 611244, 2384681; 611224,
2384695; 611223, 2384695; 611203,
2384703; 611202, 2384704; 611192,
2384704; 611191, 2384703; 611165,
2384698; 611119, 2384696; 611118,
2384696; 611082, 2384690; 611081,
2384690; 611065, 2384682; 611064,
2384681; 611058, 2384675; 611046,
2384674; 611039, 2384675; 611028,
2384688; 611014, 2384713; 610994,
2384778; 610981, 2384838; 610976,
2384927; 610973, 2384941; 610973,
2384942; 610965, 2384959; 610965,
2384960; 610957, 2384969; 610957,
2384970; 610934, 2384987; 610933,
2384987; 610909, 2384993; 610908,
2384993; 610888, 2384986; 610839,
2384956; 610809, 2384945; 610780,
2384942; 610766, 2384942; 610749,
2384953; 610709, 2384995; 610692,
2385014; 610679, 2385041; 610630,
2385180; 610616, 2385205; 610606,
2385215; 610606, 2385216; 610598,
2385220; 610558, 2385236; 610543,
2385248; 610533, 2385266; 610516,
2385329; 610509, 2385341; 610509,
2385342; 610508, 2385342; 610497,

2385351; 610496, 2385351; 610454,
2385362; 610440, 2385362; 610440,
2385363; 610394, 2385362; 610370,
2385370; 610333, 2385392; 610292,
2385406; 610280, 2385413; 610261,
2385429; 610248, 2385449; 610237,
2385473; 610222, 2385512; 610222,
2385513; 610214, 2385522; 610206,
2385531; 610206, 2385532; 610187,
2385540; 610166, 2385544; 610134,
2385558; 610129, 2385561; 610122,
2385580; 610119, 2385604; 610119,
2385605; 610112, 2385620; 610111,
2385621; 610093, 2385637; 610078,
2385652; 610077, 2385659; 610090,
2385687; 610097, 2385698; 610098,
2385699; 610098, 2385700; 610097,
2385705; 610097, 2385706; 610081,
2385734; 610054, 2385762; 610039,
2385790; 610028, 2385816; 610024,
2385839; 610027, 2385873; 610035,
2385901; 610035, 2385902; 610035,
2385943; 610035, 2385944; 610029,
2385956; 610029, 2385957; 610003,
2385991; 609994, 2386004; 609993,
2386004; 609993, 2386005; 609971,
2386017; 609955, 2386025; 609948,
2386031; 609929, 2386085; 609909,

2386112; 609908, 2386113; 609898,
2386121; 609887, 2386134; 609883,
2386146; 609884, 2386168; 609879,
2386204; 609884, 2386223; 609905,
2386254; 609905, 2386255; 609909,
2386278; 609909, 2386279; 609907,
2386291; 609881, 2386354; 609880,
2386355; 609858, 2386384; 609834,
2386404; 609797, 2386443; 609797,
2386444; 609790, 2386450; 609769,
2386468; 609748, 2386495; 609737,
2386524; 609719, 2386644; 609711,
2386719; 609711, 2386720; 609705,
2386737; 609704, 2386737; 609704,
2386738; 609693, 2386745; 609692,
2386745; 609595, 2386759; 609570,
2386766; 609560, 2386772; 609536,
2386797; 609481, 2386863; 609461,
2386894; 609449, 2386918; 609449,
2386919; 609439, 2386933; 609438,
2386934; 609425, 2386943; 609379,
2386966; 609323, 2387005; 609308,
2387012; 609269, 2387020; 609248,
2387021; 609184, 2387014; 609134,
2387001; 609078, 2386982; 609074,
2386984; return to starting point.

(ii) **Note:** Map 253 follows:



(254) Oahu 20—*Tetraplasandra gymnocarpa*—b (235 ha; 581 ac)

(i) Unit consists of the following 125 boundary points: Start at 612686,

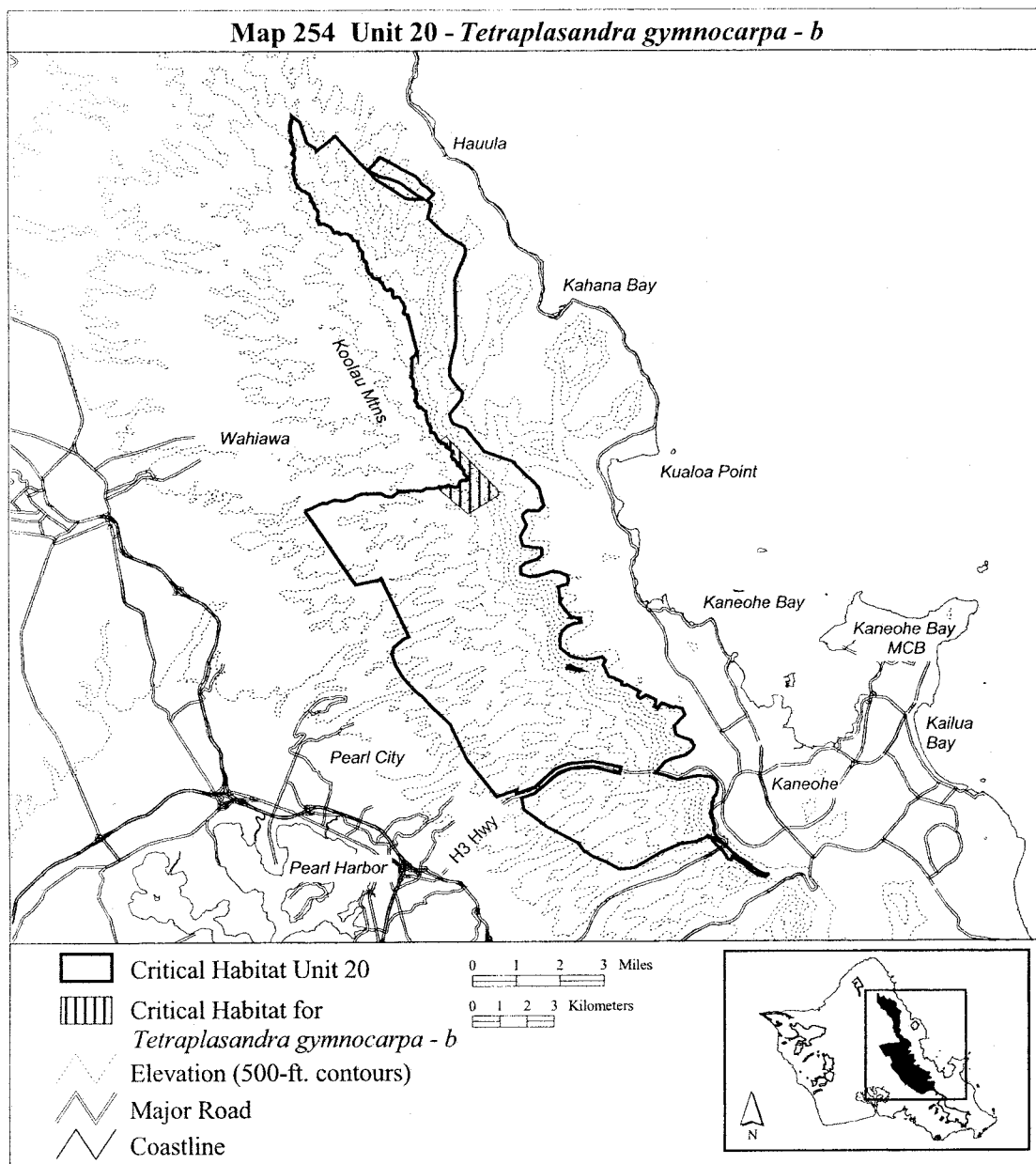
2377751; 612705, 2377757; 612764, 2377738; 612765, 2377738; 612794, 2377742; 612814, 2377728; 612853, 2377742; 612870, 2377747; 613040, 2377760; 613059, 2377772; 613059, 2377774; 613085, 2377777; 613154, 2377768; 613224, 2377738; 613264, 2377728; 613265, 2377728; 613335, 2377738; 613336, 2377738; 613359, 2377752; 613368, 2377747; 613413, 2377754; 613415, 2377755; 613449, 2377784; 613454, 2377825; 613460, 2377881; 613497, 2377929; 613554, 2377977; 613555, 2377987; 613674, 2377978; 613675, 2377978; 613694, 2377988; 613721, 2377976; 613733, 2377976; 613762, 2378001; 613771, 2378068; 613764, 2378090; 613757, 2378093; 613753, 2378093; 613751, 2378091; 613747, 2378094; 613746, 2378095; 613718, 2378106; 613711, 2378117; 613711, 2378118; 613691, 2378143; 613660, 2378168; 613602, 2378212; 613593, 2378224; 613586, 2378238; 613583, 2378253; 613583, 2378292; 613583, 2378328; 613583, 2378329; 613568, 2378356; 613568, 2378357; 613556, 2378372; 613524, 2378400; 613517, 2378408; 613476, 2378444; 613462, 2378463; 613462, 2378464; 613447, 2378478; 613424, 2378499; 613386, 2378532; 613364, 2378562; 613346, 2378613; 613330, 2378641; 613265, 2378728; 613248, 2378749; 613247, 2378750; 613232, 2378759; 613231, 2378759; 613213, 2378764; 613199, 2378769; 613190, 2378778; 613172, 2378818; 613172, 2378819; 613152, 2378848; 613147, 2378859; 613147, 2378860; 613146, 2378860; 613145, 2378860; 613145, 2378861; 613146, 2378862; 613145, 2378862; 613144, 2378873; 613159, 2378951; 613185, 2378998; 613187, 2379004; 613187, 2379005; 613185, 2379019; 613185, 2379020; 613171, 2379040; 613142, 2379072; 613115, 2379100; 613099, 2379113; 613098, 2379113; 613063, 2379127; 612997, 2379166; 612978, 2379188; 612969, 2379215; 612963, 2379226; 612959, 2379247; 612959, 2379248; 612945, 2379276; 612945, 2379277; 612929,

2379297; 612928, 2379298; 612905,
2379314; 612876, 2379327; 612840,
2379337; 612770, 2379350; 612764,
2379355; 612758, 2379364; 612748,

2379389; 612748, 2379390; 612725,
2379410; 612708, 2379419; 612945,
2379601; 614821, 2377667; 614879,
2377445; 613757, 2376749; 612632,

2377703; 612668, 2377720; 612688,
2377749; return to starting point.

(ii) **Note:** Map 254 follows:



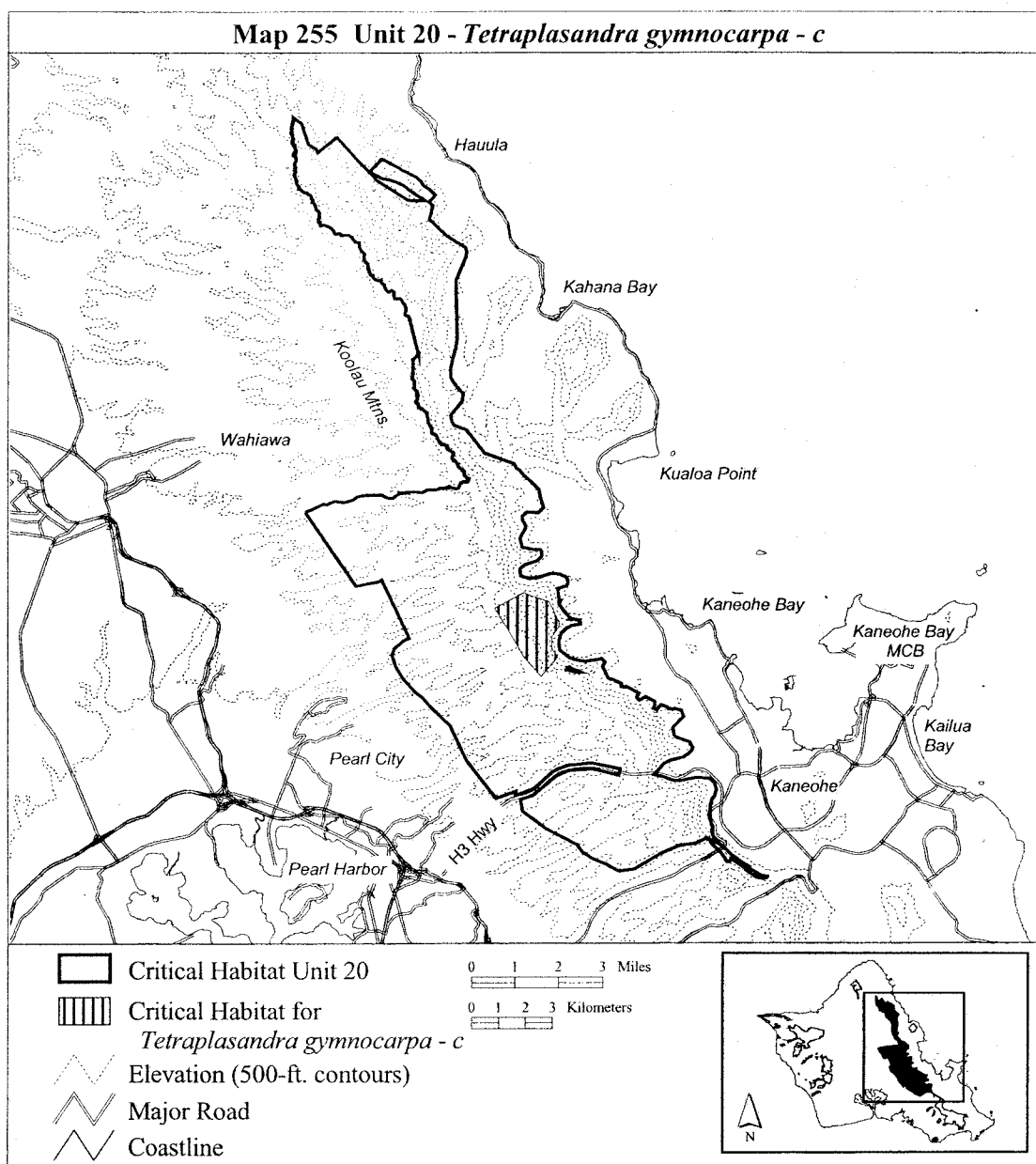
(255) Oahu 20—*Tetraplasandra gymnocarpa*—c (411 ha; 1,016 ac)

(i) Unit consists of the following 12 boundary points: Start at 614721,

2373348; 615833, 2373916; 616083,
2373791; 616741, 2373598; 617116,
2372803; 617082, 2372633; 616843,
2372292; 616855, 2371861; 617070,

2371555; 616446, 2370840; 615799,
2371623; 615300, 2372440; return to
starting point.

(ii) **Note:** Map 255 follows:



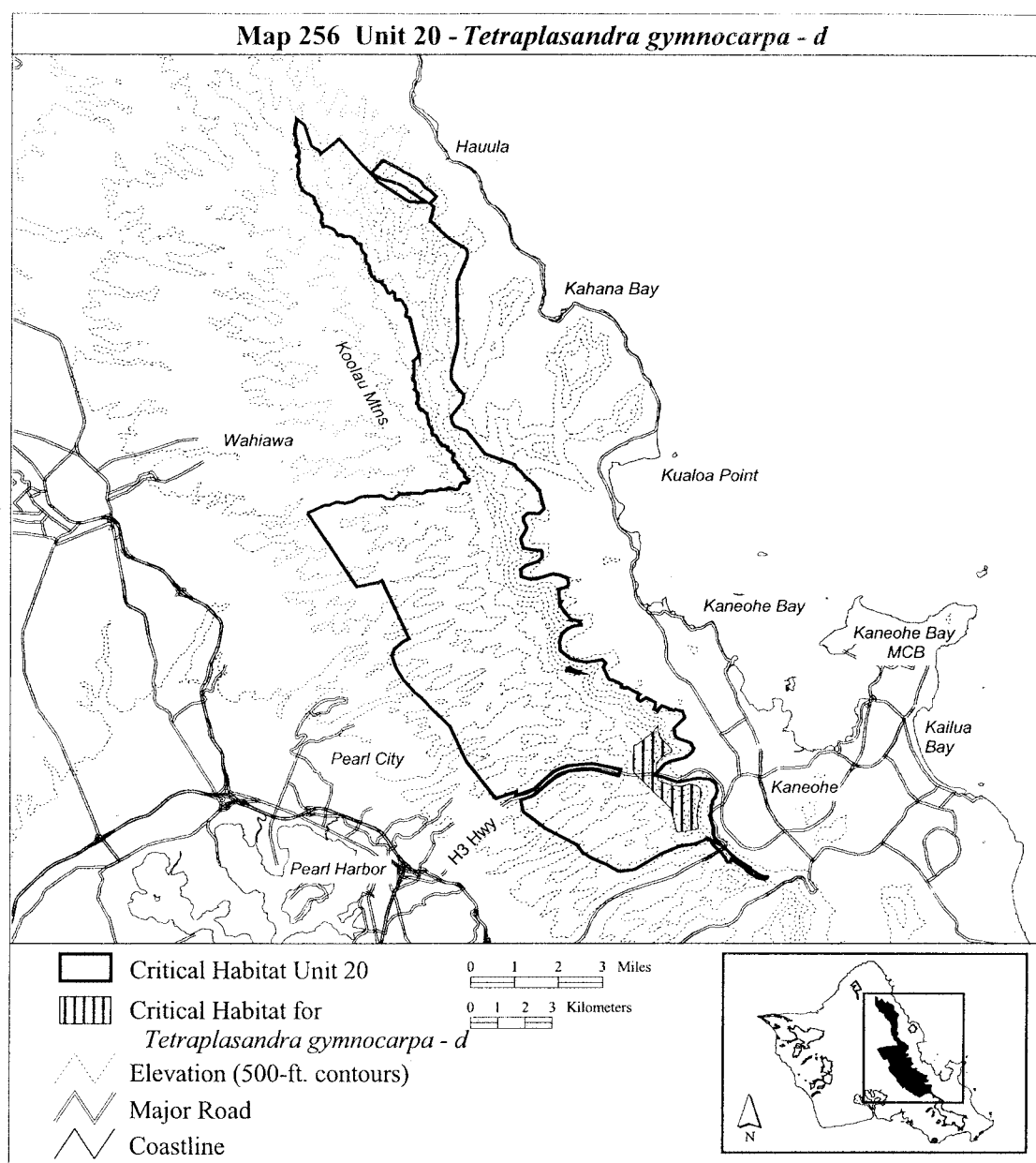
(256) Oahu 20—*Tetraplasandra gymnocarpa*—d (370 ha; 914 ac)

(i) Unit consists of the following 42 boundary points: Start at 621415, 2365210; 621377, 2365197; 621260, 2365702; 621215, 2365844; 621141, 2366079; 619831, 2367368; 619834, 2367413; 619826, 2367420; 619787, 2367457; 619819, 2368310; 619899,

2368379; 619896, 2368335; 620536, 2368845; 620712, 2369081; 620721, 2368747; 620937, 2368490; 621164, 2368253; 621205, 2368109; 620896, 2367965; 620670, 2367717; 620670, 2367338; 620604, 2367260; 620603, 2367260; 620603, 2367259; 620604, 2367258; 620682, 2367237; 620711, 2367069; 621226, 2366873; 621451,

2366857; 621905, 2366944; 621914, 2366941; 621926, 2366944; 621932, 2366935; 622173, 2366851; 622276, 2366759; 622317, 2366501; 622183, 2366264; 622122, 2365750; 622170, 2365369; 622180, 2365290; 621429, 2365165; 621416, 2365206; return to starting point.

(ii) **Note:** Map 256 follows:



(257) Oahu 20—*Trematolobelia singularis*—a (88 ha; 217 ac)

(i) Unit consists of the following 173 boundary points: Start at 619374,

2369581; 619392, 2369559; 619441, 2369499; 619483, 2369472; 619551, 2369457; 619725, 2369358; 619888, 2369229; 620066, 2369093; 620195, 2369010; 620366, 2368938; 620453, 2368904; 620483, 2368794; 620502, 2368623; 620559, 2368456; 620624, 2368335; 620688, 2368271; 620684, 2368214; 620586, 2368153; 620479, 2368054; 620381, 2367956; 620362, 2367873; 620290, 2367865; 620260, 2367914; 620316, 2368001; 620381, 2368058; 620472, 2368187; 620552, 2368248; 620582, 2368282; 620536,

2368339; 620430, 2368437; 620430, 2368547; 620415, 2368684; 620423, 2368775; 620381, 2368839; 620298, 2368862; 620097, 2368972; 619953, 2369059; 619714, 2369248; 619539, 2369351; 619411, 2369430; 619377, 2369472; 619377, 2369458; 619289, 2369552; 619210, 2369659; 619134, 2369731; 619013, 2369783; 618837, 2369792; 618789, 2369792; 618637, 2369862; 618406, 2369919; 618243, 2370004; 618243, 2370068; 618197, 2370144; 618185, 2370171; 618137, 2370183; 618109, 2370220; 618079, 2370301; 617988, 2370408; 617906, 2370492; 617858, 2370556; 617858, 2370623; 617876, 2370687; 617897, 2370796; 617836, 2370808; 617773,

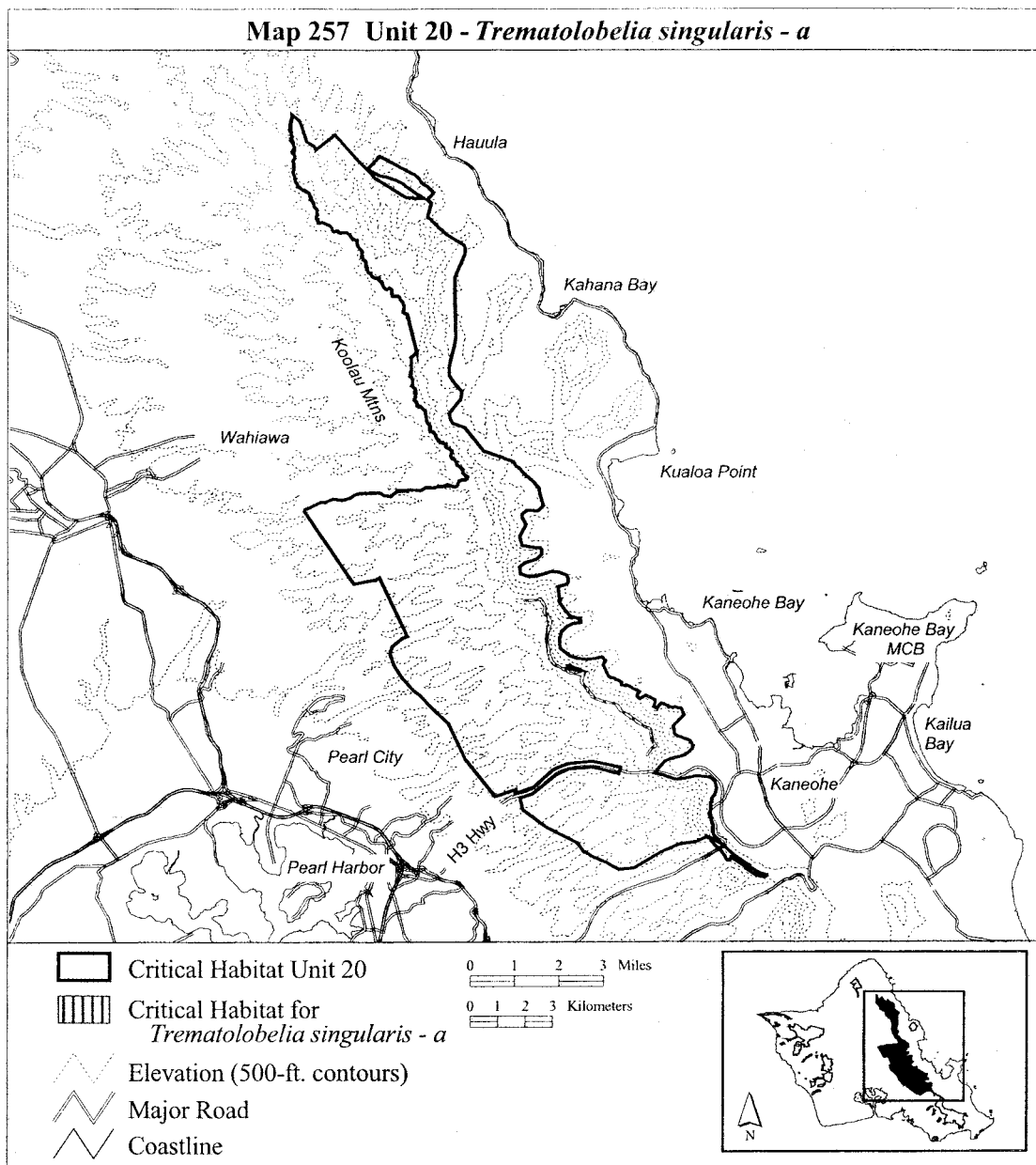
2370817; 617724, 2370838; 617648, 2370859; 617542, 2370859; 617451, 2370902; 617379, 2370941; 617218, 2371026; 617157, 2371064; 617151, 2371055; 617084, 2371122; 616985, 2371134; 616903, 2371185; 616812, 2371264; 616733, 2371359; 616713, 2371457; 616666, 2371619; 616638, 2371785; 616611, 2371942; 616583, 2372108; 616599, 2372266; 616638, 2372415; 616634, 2372423; 616631, 2372565; 616698, 2372672; 616678, 2372739; 616666, 2372806; 616654, 2372908; 616631, 2372964; 616567, 2372999; 616536, 2373078; 616489, 2373161; 616524, 2373236; 616532, 2373310; 616504, 2373381; 616469, 2373445; 616433, 2373496; 616410,

2373563; 616366, 2373579; 616351,
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2373606; 616102, 2373606; 616185,
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2373665; 616473, 2373638; 616536,
2373535; 616607, 2373405; 616607,
2373255; 616627, 2373137; 616717,
2373042; 616757, 2372960; 616820,
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2372605; 616761, 2372522; 616761,

2372419; 616729, 2372348; 616705,
2372195; 616709, 2372096; 616721,
2371958; 616753, 2371836; 616769,
2371714; 616761, 2371674; 616796,
2371548; 616839, 2371473; 616875,
2371371; 616958, 2371280; 617045,
2371209; 617192, 2371133; 617194,
2371135; 617369, 2371041; 617509,
2370969; 617636, 2370923; 617697,
2370908; 617824, 2370908; 617958,
2370938; 618000, 2370956; 618058,
2370984; 618109, 2370993; 618128,
2370956; 618097, 2370929; 618058,

2370868; 618027, 2370799; 617988,
2370714; 617967, 2370641; 617973,
2370568; 618030, 2370492; 618076,
2370438; 618106, 2370408; 618161,
2370368; 618212, 2370256; 618337,
2370141; 618385, 2370065; 618431,
2370004; 618546, 2369956; 618737,
2369901; 618855, 2369874; 619068,
2369828; 619198, 2369792; 619313,
2369707; 619347, 2369643; 619374,
2369586; return to starting point.

(ii) Note: Map 257 follows:



(258) Oahu 20—*Trematolobelia singularis*—b (10 ha; 25 ac)

(i) Unit consists of the following 104 boundary points: Start at 622202,

2365006; 622110, 2365022; 622077,
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2365225; 621917, 2365275; 621904,

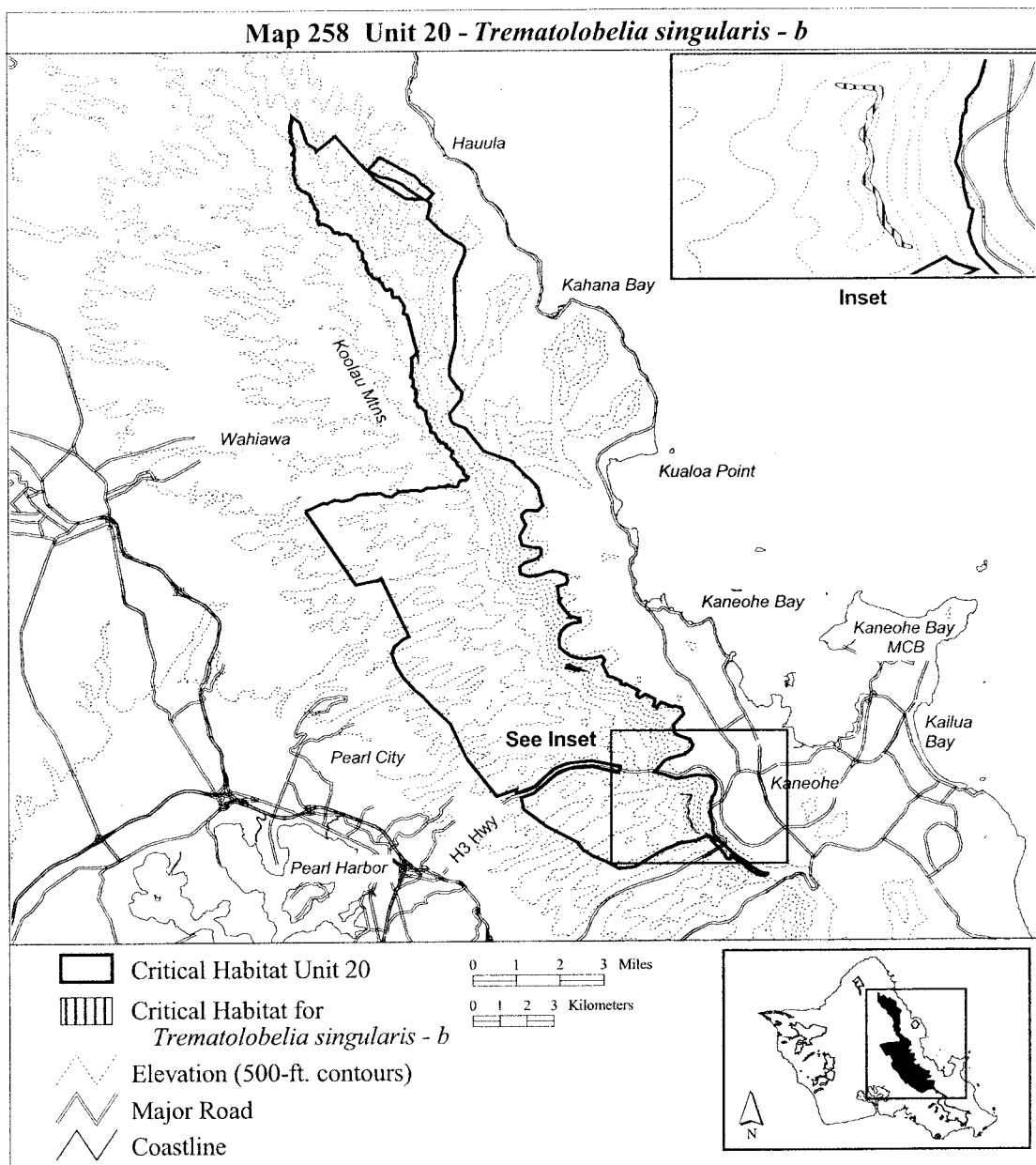
2365327; 621896, 2365404; 621891,
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2365545; 621767, 2365584; 621767,
2365605; 621772, 2365640; 621790,

2365678; 621813, 2365705; 621835,
2365747; 621834, 2365781; 621835,
2365782; 621835, 2365784; 621832,
2365788; 621833, 2365788; 621823,
2365812; 621813, 2365837; 621804,
2365879; 621799, 2365908; 621779,
2365935; 621745, 2365973; 621740,
2365992; 621740, 2366025; 621751,
2366056; 621784, 2366087; 621807,
2366127; 621803, 2366169; 621799,
2366195; 621809, 2366216; 621840,
2366239; 621871, 2366276; 621890,
2366304; 621900, 2366327; 621907,
2366351; 621891, 2366388; 621840,
2366397; 621787, 2366406; 621706,
2366405; 621654, 2366406; 621584,

2366414; 621553, 2366429; 621531,
2366439; 621532, 2366457; 621565,
2366462; 621627, 2366456; 621683,
2366445; 621730, 2366436; 621801,
2366441; 621865, 2366434; 621930,
2366434; 621953, 2366420; 621956,
2366377; 621953, 2366337; 621928,
2366285; 621899, 2366237; 621880,
2366205; 621857, 2366169; 621860,
2366136; 621840, 2366101; 621815,
2366053; 621803, 2366028; 621798,
2366007; 621823, 2365964; 621846,
2365922; 621870, 2365794; 621871,
2365794; 621872, 2365783; 621874,
2365781; 621871, 2365770; 621870,
2365770; 621869, 2365768; 621857,

2365714; 621848, 2365669; 621834,
2365618; 621834, 2365594; 621849,
2365573; 621880, 2365543; 621914,
2365506; 621935, 2365444; 621959,
2365404; 621970, 2365335; 621981,
2365287; 621983, 2365253; 622011,
2365219; 622022, 2365197; 622057,
2365178; 622088, 2365146; 622107,
2365130; 622118, 2365084; 622130,
2365064; 622146, 2365054; 622172,
2365050; 622200, 2365037; 622217,
2365025; 622217, 2365011; return to
starting point.

(ii) **Note:** Map 258 follows:



(259) Oahu 20—*Viola oahuensis*—a (903 ha; 2,232 ac)

(i) Unit consists of the following 1014 boundary points: Start at 613555,

2377987; 613674, 2377978; 613675, 2377978; 613694, 2377988; 613721, 2377976; 613733, 2377976; 613762, 2378001; 613771, 2378068; 613764, 2378090; 613757, 2378093; 613753, 2378093; 613751, 2378091; 613747, 2378094; 613746, 2378095; 613718, 2378106; 613711, 2378117; 613691, 2378143; 613660, 2378168; 613602, 2378212; 613593, 2378224; 613586, 2378238; 613583, 2378253; 613583, 2378292; 613583, 2378328; 613583, 2378329; 613568, 2378356; 613556, 2378372; 613524, 2378400; 613517, 2378408; 613476, 2378444; 613462, 2378463; 613447, 2378478; 613424, 2378499; 613386, 2378532; 613364, 2378562; 613346, 2378613; 613330, 2378641; 613265, 2378728; 613248, 2378749; 613232, 2378759; 613213, 2378764; 613199, 2378769; 613190, 2378778; 613172, 2378818; 613172, 2378819; 613152, 2378848; 613147, 2378859; 613147, 2378860; 613146, 2378860; 613145, 2378861; 613146, 2378862; 613144, 2378873; 613159, 2378951; 613185, 2378998; 613187, 2379004; 613187, 2379005; 613185, 2379019; 613185, 2379020; 613171, 2379040; 613142, 2379072; 613115, 2379100; 613099, 2379113; 613098, 2379113; 613063, 2379127; 612997, 2379166; 612978, 2379188; 612969, 2379215; 612963, 2379226; 612959, 2379247; 612959, 2379248; 612945, 2379276; 612929, 2379297; 612905, 2379314; 612876, 2379327; 612840, 2379337; 612770, 2379350; 612764, 2379355; 612758, 2379364; 612748, 2379389; 612748, 2379390; 612725, 2379410; 612700, 2379424; 612683, 2379441; 612663, 2379470; 612619, 2379529; 612600, 2379563; 612586, 2379618; 612573, 2379650; 612555, 2379679; 612517, 2379716; 612495, 2379729; 612412, 2379753; 612397, 2379761; 612387, 2379798; 612388, 2379851; 612386, 2379928; 612379, 2379961; 612375, 2379970; 612367, 2379981; 612366, 2379981; 612353, 2379991; 612328, 2380018; 612262, 2380145; 612255, 2380163; 612249, 2380199; 612248, 2380233; 612234, 2380304; 612226, 2380334; 612225, 2380334; 612224, 2380337; 612211, 2380367; 612213, 2380397; 612218, 2380419; 612218, 2380420; 612215, 2380452; 612212, 2380464; 612202, 2380506; 612202, 2380507; 612197, 2380516; 612177, 2380539; 612112, 2380593; 612086, 2380625; 612073, 2380644; 612046, 2380669; 612016, 2380686; 611992, 2380690; 611965, 2380687; 611955,

2380689; 611941, 2380693; 611927, 2380702; 611919, 2380710; 611905, 2380743; 611889, 2380825; 611889, 2380826; 611880, 2380839; 611856, 2380862; 611812, 2380892; 611799, 2380905; 611798, 2380918; 611800, 2380925; 611815, 2380943; 611838, 2380960; 611848, 2380980; 611851, 2381022; 611848, 2381067; 611853, 2381081; 611879, 2381118; 611879, 2381119; 611879, 2381131; 611879, 2381132; 611868, 2381149; 611858, 2381155; 611857, 2381155; 611847, 2381160; 611837, 2381167; 611828, 2381178; 611825, 2381193; 611830, 2381214; 611838, 2381223; 611854, 2381250; 611854, 2381251; 611856, 2381258; 611855, 2381265; 611855, 2381266; 611849, 2381285; 611848, 2381286; 611828, 2381312; 611784, 2381363; 611765, 2381383; 611734, 2381424; 611733, 2381424; 611730, 2381426; 611737, 2381446; 611745, 2381514; 611746, 2381550; 611748, 2381618; 611739, 2381669; 611736, 2381680; 611727, 2381699; 611727, 2381700; 611673, 2381758; 611666, 2381774; 611666, 2381794; 611670, 2381810; 611702, 2381865; 611712, 2381882; 611712, 2381883; 611712, 2381915; 611712, 2381916; 611710, 2381923; 611687, 2381955; 611687, 2381978; 611695, 2381990; 611702, 2382013; 611702, 2382014; 611700, 2382058; 611694, 2382120; 611695, 2382225; 611701, 2382278; 611701, 2382279; 611699, 2382320; 611695, 2382360; 611693, 2382433; 611692, 2382455; 611698, 2382473; 611744, 2382512; 611805, 2382557; 611831, 2382588; 611844, 2382604; 611850, 2382621; 611874, 2382653; 611896, 2382683; 611903, 2382704; 611903, 2382705; 611903, 2382706; 611902, 2382707; 611901, 2382707; 611900, 2382707; 611900, 2382706; 611899, 2382706; 611892, 2382686; 611891, 2382684; 611795, 2383056; 611597, 2383822; 611567, 2383939; 611567, 2383940; 611561, 2383949; 611537, 2384020; 611536, 2384020; 611525, 2384040; 611515, 2384051; 611495, 2384064; 611460, 2384078; 611430, 2384082; 611404, 2384097; 611396, 2384120; 611393, 2384150; 611397, 2384172; 611413, 2384204; 611422, 2384233; 611428, 2384263; 611435, 2384302; 611435, 2384321; 611429, 2384356; 611417, 2384382; 611394, 2384464; 611387, 2384476; 611374, 2384488; 611358, 2384501; 611334, 2384524; 611326, 2384536; 611302, 2384584; 611257, 2384667; 611256, 2384667; 611245, 2384680; 611244, 2384681; 611224, 2384695; 611223, 2384695; 611203, 2384703; 611202, 2384704; 611192, 2384704; 611165, 2384698; 611119, 2384696; 611082,

2384690; 611081, 2384690; 611065, 2384682; 611058, 2384675; 611046, 2384674; 611039, 2384675; 611028, 2384688; 611014, 2384713; 610994, 2384778; 610981, 2384838; 610976, 2384927; 610973, 2384941; 610965, 2384959; 610957, 2384969; 610957, 2384970; 610934, 2384987; 610933, 2384987; 610909, 2384993; 610908, 2384993; 610888, 2384986; 610839, 2384956; 610809, 2384945; 610780, 2384942; 610766, 2384942; 610749, 2384953; 610709, 2384995; 610692, 2385014; 610679, 2385041; 610630, 2385180; 610616, 2385205; 610606, 2385215; 610606, 2385216; 610598, 2385220; 610558, 2385236; 610543, 2385248; 610533, 2385266; 610516, 2385329; 610509, 2385341; 610509, 2385342; 610497, 2385351; 610496, 2385351; 610454, 2385362; 610440, 2385362; 610394, 2385362; 610370, 2385370; 610333, 2385392; 610292, 2385406; 610280, 2385413; 610261, 2385429; 610248, 2385449; 610237, 2385473; 610222, 2385512; 610222, 2385513; 610214, 2385522; 610206, 2385531; 610206, 2385532; 610187, 2385540; 610166, 2385544; 610134, 2385558; 610129, 2385561; 610122, 2385580; 610119, 2385604; 610119, 2385605; 610112, 2385620; 610111, 2385621; 610093, 2385637; 610078, 2385652; 610077, 2385659; 610090, 2385687; 610097, 2385698; 610098, 2385699; 610098, 2385700; 610097, 2385705; 610097, 2385706; 610081, 2385734; 610054, 2385762; 610039, 2385790; 610028, 2385816; 610024, 2385839; 610027, 2385873; 610035, 2385901; 610035, 2385902; 610035, 2385943; 610035, 2385944; 610029, 2385956; 610029, 2385957; 610003, 2385991; 609994, 2386004; 609993, 2386004; 609993, 2386005; 609971, 2386017; 609955, 2386025; 609948, 2386031; 609929, 2386085; 609909, 2386112; 609908, 2386113; 609898, 2386121; 609887, 2386134; 609883, 2386146; 609884, 2386168; 609879, 2386204; 609884, 2386223; 609905, 2386254; 609905, 2386255; 609909, 2386278; 609909, 2386279; 609907, 2386291; 609881, 2386354; 609880, 2386355; 609858, 2386384; 609834, 2386404; 609797, 2386443; 609790, 2386450; 609769, 2386468; 609748, 2386495; 609737, 2386524; 609719, 2386644; 609711, 2386719; 609711, 2386720; 609705, 2386737; 609704, 2386737; 609693, 2386745; 609595, 2386759; 609570, 2386766; 609560, 2386772; 609536, 2386797; 609481, 2386863; 609461, 2386894; 609449, 2386918; 609449, 2386919; 609439, 2386933; 609425, 2386943; 609379, 2386966; 609323, 2387005; 609308, 2387012; 609269, 2387020; 609248,

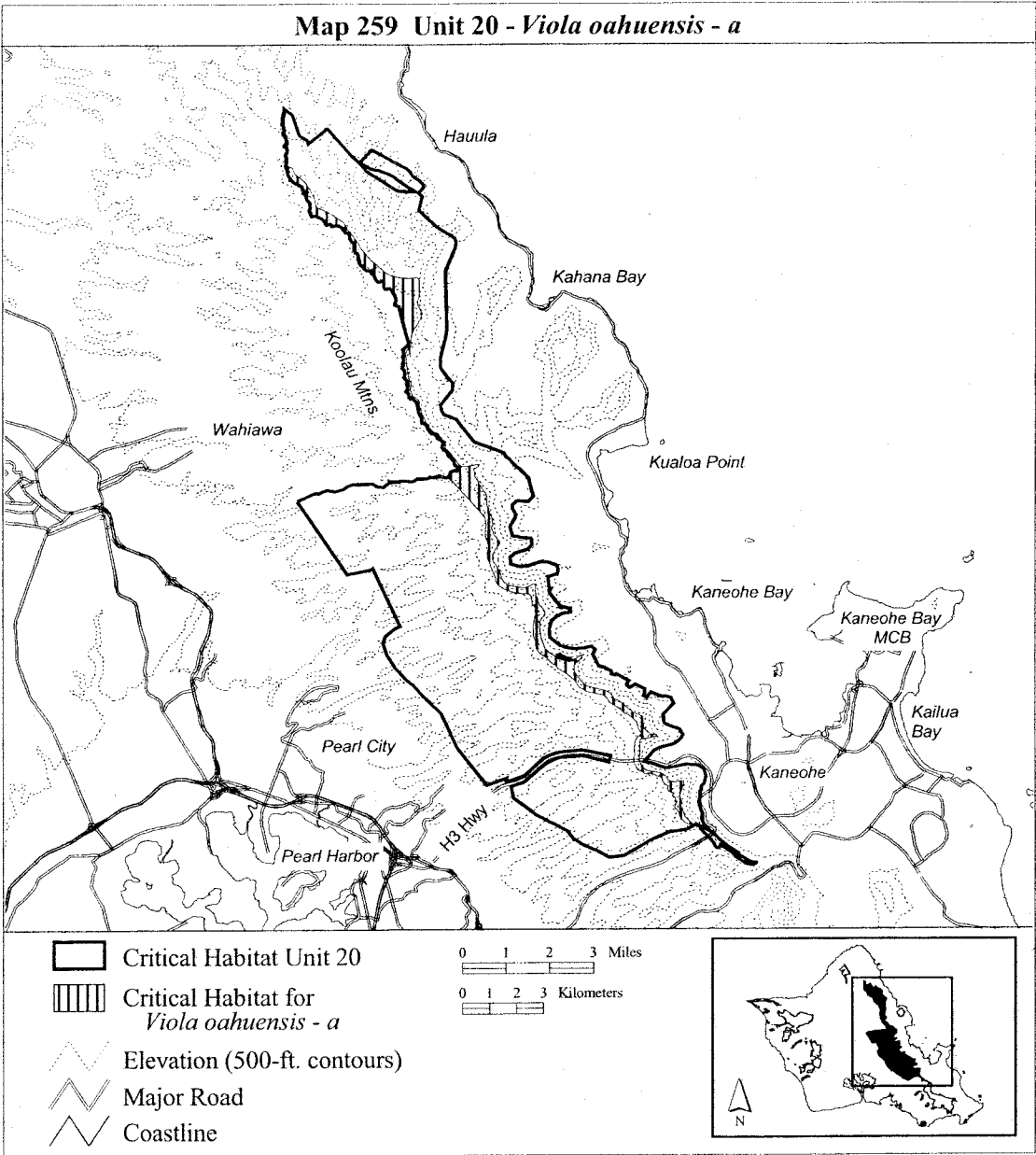
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2381044; 611960, 2380979; 611880,
2380970; 611968, 2380977; 612013,
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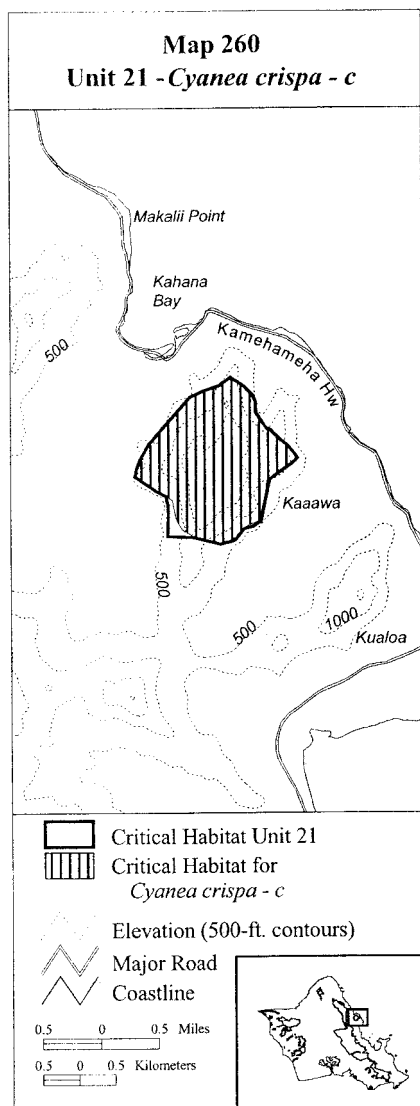
(ii) **Note:** Map 259 follows:



(260) Oahu 21—*Cyanea crispa*—c (302 ha; 747 ac)

(i) Unit consists of the following 37 boundary points: Start at 617933, 2381390; 617892, 2381379; 617719, 2381338; 617384, 2381422; 617189, 2381542; 617110, 2381673; 617049, 2381956; 616835, 2382068; 616529, 2382272; 616554, 2382383; 616601, 2382510; 616729, 2382733; 617094, 2383146; 617300, 2383383; 617491, 2383463; 617713, 2383542; 617872, 2383652; 618044, 2383540; 618179, 2383410; 618225, 2383312; 618225, 2383164; 618360, 2382964; 618495, 2382829; 618656, 2382717; 618767, 2382588; 618804, 2382523; 618721, 2382449; 618563, 2382347; 618378, 2382198; 618350, 2382032; 618304, 2381819; 618258, 2381661; 618119, 2381597; 617980, 2381477; 617937, 2381395; 617934, 2381393; 617933, 2381392; return to starting point.

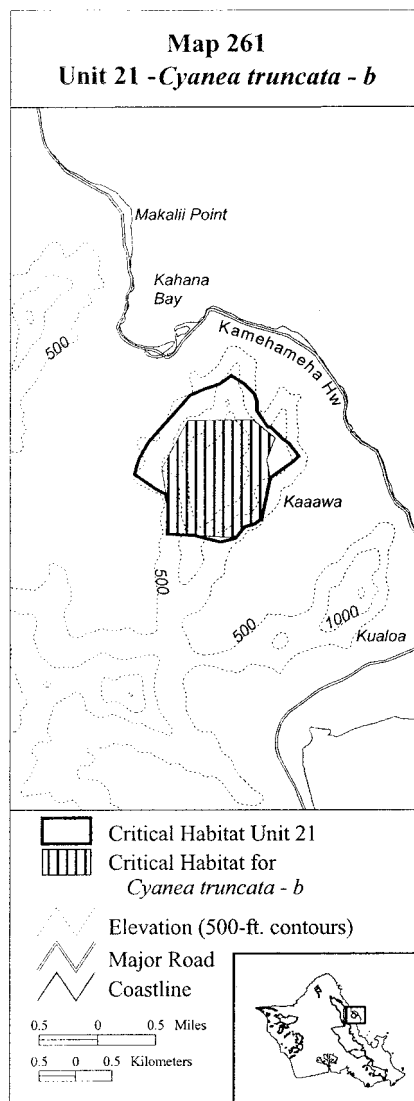
(ii) **Note:** Map 260 follows:



(261) Oahu 21—*Cyanea truncata*—b (211 ha; 520 ac)

(i) Unit consists of the following 23 boundary points: Start at 618479, 2382785; 618362, 2382482; 618416, 2382209; 618407, 2382202; 618406, 2382201; 618288, 2381653; 618264, 2381637; 618183, 2381582; 618057, 2381548; 617941, 2381398; 617940, 2381397; 616992, 2381447; 616996, 2381713; 616996, 2381862; 616998, 2381875; 616998, 2381876; 616997, 2381877; 616993, 2381879; 616985, 2381888; 616911, 2382352; 617268, 2383028; 618143, 2383034; 618178, 2383039; return to starting point.

(ii) **Note:** Map 261 follows:

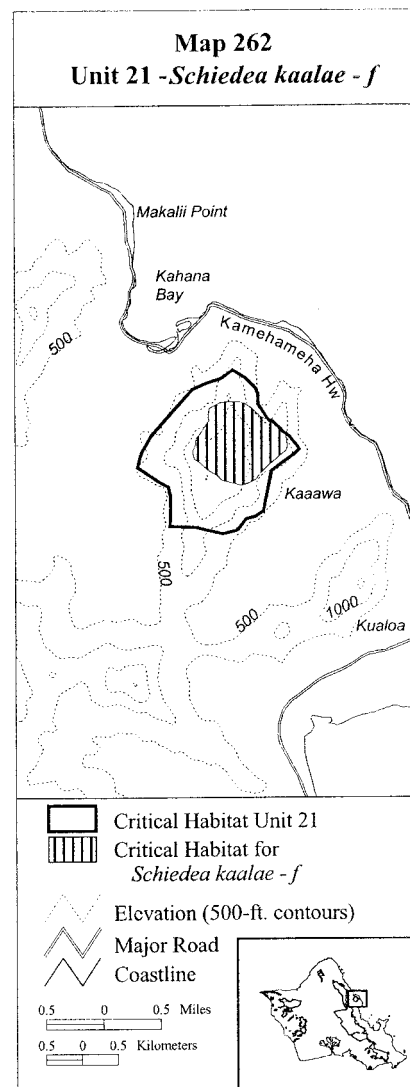


(262) Oahu 21—*Schiedea kaalae*—f (105 ha; 260 ac)

(i) Unit consists of the following 31 boundary points: Start at 617965, 2383203; 618037, 2383179; 618147, 2383102; 618264, 2382982; 618420, 2382928; 618471, 2382874; 618531,

2382829; 618614, 2382721; 618638, 2382581; 618620, 2382509; 618536, 2382443; 618387, 2382317; 618261, 2382195; 618189, 2382102; 618090, 2382057; 618004, 2382024; 617722, 2382091; 617650, 2382160; 617516, 2382246; 617429, 2382327; 617333, 2382396; 617312, 2382498; 617348, 2382579; 617357, 2382669; 617438, 2382781; 617495, 2382871; 617534, 2382931; 617531, 2383024; 617543, 2383114; 617701, 2383197; 617809, 2383206; return to starting point.

(ii) **Note:** Map 262 follows:

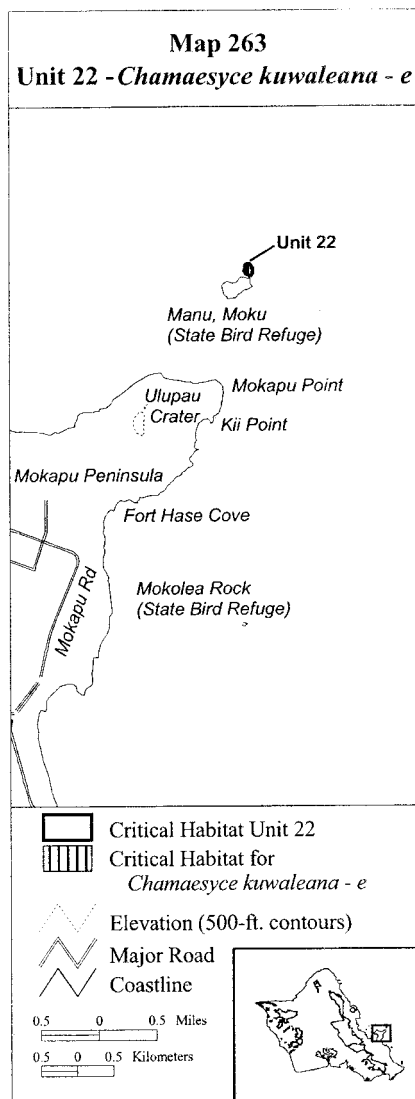


(263) Oahu 22—*Chamaesyce kuwaleana*—e (1 ha; 3 ac)

(i) Unit consists of the following 41 boundary points: Start at 632758, 2374821; 632752, 2374819; 632749, 2374820; 632735, 2374834; 632728, 2374841; 632710, 2374844; 632703, 2374848; 632695, 2374856; 632694, 2374865; 632682, 2374879; 632677, 2374886; 632677, 2374893; 632681,

2374899; 632688, 2374903; 632689, 2374903; 632695, 2374910; 632695, 2374911; 632696, 2374916; 632697, 2374917; 632696, 2374917; 632695, 2374920; 632691, 2374932; 632690, 2374948; 632694, 2374960; 632697, 2374967; 632707, 2374975; 632721, 2374981; 632736, 2374981; 632747, 2374977; 632756, 2374970; 632765, 2374955; 632774, 2374935; 632778, 2374927; 632779, 2374924; 632779, 2374923; 632781, 2374922; 632787, 2374905; 632787, 2374876; 632782, 2374856; 632774, 2374840; 632769, 2374833; return to starting point.

(ii) **Note:** Map 263 follows:

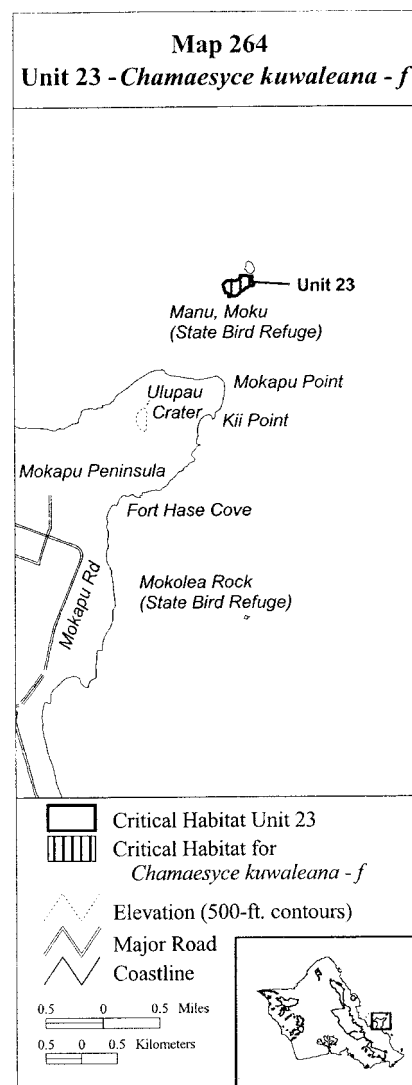


(264) Oahu 23—*Chamaesyce kuwaleana*—f (6 ha; 15 ac)

(i) Unit consists of the following 129 boundary points: Start at 632637, 2374611; 632629, 2374603; 632619, 2374595; 632608, 2374587; 632608, 2374586; 632597, 2374573; 632587, 2374562; 632581, 2374557; 632569,

2374552; 632562, 2374549; 632546, 2374546; 632534, 2374546; 632521, 2374547; 632507, 2374547; 632498, 2374546; 632497, 2374546; 632494, 2374543; 632486, 2374538; 632479, 2374535; 632475, 2374535; 632474, 2374536; 632473, 2374543; 632473, 2374550; 632470, 2374561; 632468, 2374569; 632468, 2374570; 632464, 2374575; 632464, 2374576; 632458, 2374582; 632451, 2374584; 632450, 2374584; 632442, 2374585; 632434, 2374589; 632428, 2374592; 632424, 2374597; 632420, 2374606; 632416, 2374616; 632412, 2374627; 632409, 2374637; 632406, 2374648; 632402, 2374660; 632399, 2374675; 632399, 2374685; 632399, 2374694; 632402, 2374698; 632411, 2374704; 632419, 2374712; 632427, 2374720; 632427, 2374721; 632433, 2374729; 632440, 2374734; 632444, 2374737; 632451, 2374740; 632459, 2374743; 632470, 2374743; 632481, 2374743; 632493, 2374748; 632499, 2374749; 632503, 2374748; 632510, 2374744; 632520, 2374741; 632529, 2374736; 632530, 2374736; 632539, 2374735; 632547, 2374735; 632548, 2374735; 632570, 2374745; 632579, 2374748; 632587, 2374751; 632595, 2374754; 632601, 2374757; 632606, 2374760; 632606, 2374761; 632610, 2374767; 632613, 2374772; 632615, 2374778; 632616, 2374786; 632616, 2374790; 632618, 2374793; 632620, 2374797; 632622, 2374799; 632627, 2374801; 632633, 2374802; 632644, 2374804; 632655, 2374805; 632668, 2374805; 632681, 2374803; 632694, 2374800; 632705, 2374797; 632721, 2374794; 632731, 2374790; 632732, 2374790; 632737, 2374791; 632738, 2374791; 632740, 2374792; 632743, 2374796; 632747, 2374797; 632752, 2374797; 632756, 2374795; 632760, 2374787; 632763, 2374778; 632763, 2374771; 632758, 2374768; 632750, 2374763; 632750, 2374762; 632749, 2374757; 632751, 2374749; 632755, 2374738; 632762, 2374727; 632770, 2374717; 632777, 2374707; 632783, 2374699; 632783, 2374690; 632781, 2374683; 632777, 2374679; 632767, 2374678; 632750, 2374674; 632738, 2374669; 632720, 2374663; 632694, 2374654; 632682, 2374650; 632681, 2374650; 632677, 2374646; 632677, 2374645; 632671, 2374638; 632668, 2374633; 632661, 2374628; 632641, 2374614; 632640, 2374614; return to starting point.

(ii) **Note:** Map 264 follows:



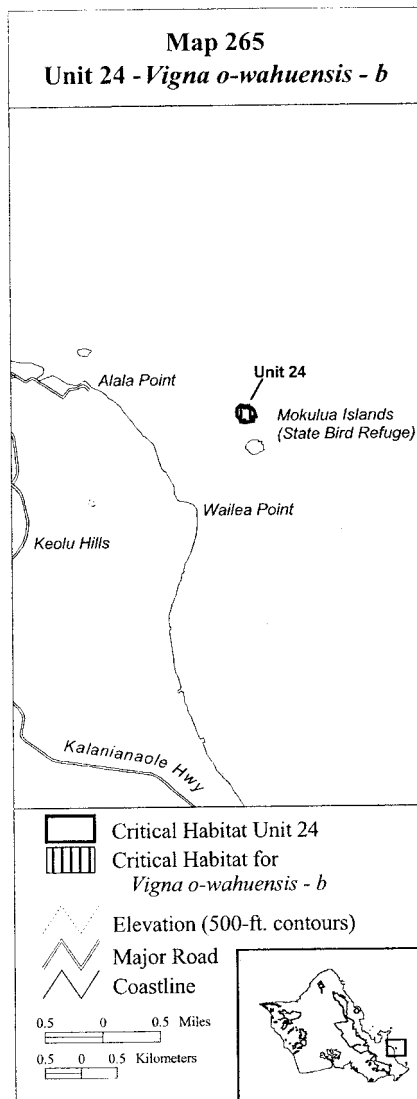
(265) Oahu 24—*Vigna o-wahuensis*—b (5 ha; 12 ac)

(i) Unit consists of the following 182 boundary points: Start at 634907, 2365956; 634895, 2365952; 634889, 2365949; 634884, 2365946; 634883, 2365946; 634879, 2365942; 634874, 2365938; 634871, 2365935; 634867, 2365934; 634863, 2365935; 634858, 2365937; 634857, 2365938; 634854, 2365938; 634853, 2365937; 634848, 2365936; 634844, 2365934; 634843, 2365935; 634842, 2365939; 634843, 2365942; 634843, 2365943; 634844, 2365947; 634846, 2365954; 634847, 2365961; 634845, 2365964; 634845, 2365965; 634844, 2365965; 634838, 2365969; 634837, 2365969; 634836, 2365969; 634832, 2365968; 634831, 2365968; 634829, 2365966; 634828, 2365966; 634826, 2365963; 634823, 2365960; 634818, 2365954; 634812, 2365948; 634807, 2365947; 634802, 2365947; 634799, 2365947; 634796, 2365950; 634792,

2365956; 634788, 2365963; 634784, 2365969; 634784, 2365977; 634782, 2365983; 634782, 2365984; 634778, 2365989; 634778, 2365990; 634772, 2365995; 634762, 2366004; 634755, 2366010; 634749, 2366016; 634743, 2366023; 634741, 2366030; 634739, 2366040; 634738, 2366050; 634738, 2366057; 634737, 2366057; 634737, 2366068; 634737, 2366079; 634737, 2366088; 634740, 2366098; 634742, 2366104; 634742, 2366105; 634742, 2366109; 634742, 2366110; 634739, 2366114; 634738, 2366120; 634738, 2366126; 634738, 2366134; 634739, 2366140; 634741, 2366144; 634749, 2366150; 634763, 2366160; 634791, 2366178; 634795, 2366181; 634799, 2366182; 634803, 2366182; 634804, 2366182; 634806, 2366183; 634807, 2366184; 634807, 2366187; 634808, 2366189; 634809, 2366189; 634813, 2366189; 634815, 2366188; 634819, 2366186; 634821, 2366184; 634824, 2366178; 634827, 2366170; 634829, 2366160; 634831, 2366153; 634832, 2366148; 634832, 2366147; 634833, 2366147; 634844, 2366143; 634847, 2366142; 634851, 2366142; 634852, 2366142; 634852, 2366143; 634853, 2366144; 634855, 2366148; 634859, 2366154; 634862, 2366159; 634864, 2366164; 634869, 2366166; 634874, 2366169; 634881, 2366172; 634887, 2366175; 634893, 2366177; 634899, 2366177; 634902, 2366174; 634905, 2366171; 634906, 2366165; 634904, 2366158; 634902, 2366149; 634902, 2366144; 634902, 2366143; 634905, 2366141; 634906, 2366141; 634913, 2366142; 634921, 2366142; 634926, 2366144; 634929, 2366146; 634933, 2366148; 634936, 2366148; 634939, 2366144; 634942, 2366135; 634943, 2366135; 634946, 2366129; 634946, 2366128; 634950, 2366126; 634951, 2366126; 634957, 2366124; 634962, 2366119; 634968, 2366114; 634975, 2366105; 634981, 2366095; 634987, 2366083; 634993, 2366061; 634996, 2366050; 634999, 2366035; 634999, 2366024; 634998, 2366020; 634992, 2366018; 634985, 2366018; 634985, 2366019; 634984, 2366018; 634975, 2366017; 634963, 2366016; 634962, 2366016; 634960, 2366014; 634959, 2366014; 634959, 2366013; 634960, 2366011; 634960, 2366010; 634962, 2366006; 634965, 2366003; 634967, 2366000; 634969, 2365996; 634968, 2365990; 634965, 2365985; 634964, 2365985; 634963, 2365979; 634961, 2365974; 634961, 2365973; 634962, 2365965; 634963, 2365961; 634961, 2365960; 634956, 2365955; 634951, 2365953; 634942, 2365952; 634934, 2365951; 634930, 2365950; 634926, 2365949; 634922, 2365950; 634916,

2365953; 634911, 2365956; 634911, 2365957; 634910, 2365956; return to starting point.

(ii) **Note:** Map 265 follows:

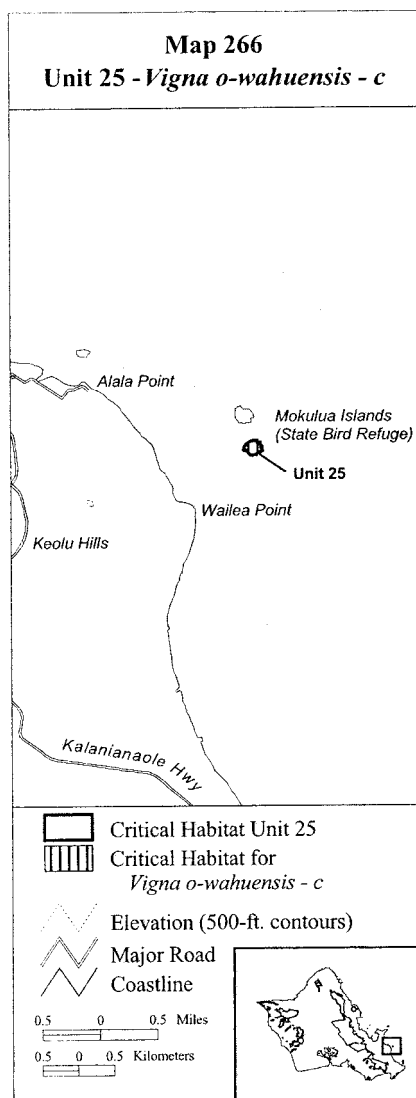


(266) Oahu 25—*Vigna o-wahuensis*—c (4 ha; 9 ac)

(i) Unit consists of the following 117 boundary points: Start at 635103, 2365593; 635104, 2365590; 635104, 2365589; 635105, 2365586; 635106, 2365574; 635107, 2365567; 635107, 2365566; 635108, 2365566; 635112, 2365561; 635116, 2365557; 635116, 2365552; 635111, 2365547; 635103, 2365543; 635091, 2365539; 635077, 2365535; 635065, 2365533; 635055, 2365530; 635054, 2365530; 635048, 2365523; 635042, 2365515; 635033, 2365507; 635028, 2365502; 635023, 2365498; 635015, 2365497; 635007, 2365497; 634993, 2365497; 634986, 2365497; 634986, 2365498; 634985, 2365497; 634980, 2365496; 634972, 2365497; 634958, 2365498; 634948,

2365500; 634938, 2365503; 634929, 2365511; 634921, 2365519; 634915, 2365529; 634914, 2365532; 634914, 2365533; 634906, 2365541; 634900, 2365548; 634893, 2365556; 634892, 2365557; 634887, 2365560; 634882, 2365562; 634876, 2365564; 634875, 2365565; 634875, 2365564; 634867, 2365564; 634861, 2365566; 634858, 2365567; 634857, 2365573; 634855, 2365579; 634854, 2365588; 634853, 2365592; 634856, 2365600; 634861, 2365606; 634862, 2365606; 634872, 2365624; 634887, 2365638; 634898, 2365648; 634898, 2365649; 634903, 2365654; 634910, 2365662; 634918, 2365671; 634928, 2365679; 634935, 2365684; 634944, 2365687; 634956, 2365691; 634967, 2365696; 634978, 2365699; 634990, 2365701; 634998, 2365698; 635005, 2365696; 635018, 2365695; 635027, 2365696; 635035, 2365698; 635037, 2365697; 635040, 2365694; 635041, 2365692; 635042, 2365688; 635041, 2365684; 635040, 2365681; 635039, 2365678; 635039, 2365677; 635040, 2365675; 635040, 2365674; 635041, 2365674; 635046, 2365671; 635047, 2365671; 635054, 2365670; 635055, 2365670; 635062, 2365671; 635071, 2365671; 635078, 2365672; 635082, 2365672; 635084, 2365670; 635087, 2365666; 635087, 2365662; 635085, 2365658; 635085, 2365657; 635084, 2365652; 635083, 2365648; 635083, 2365647; 635086, 2365643; 635092, 2365637; 635099, 2365631; 635107, 2365625; 635110, 2365621; 635111, 2365616; 635110, 2365612; 635109, 2365608; 635104, 2365602; 635101, 2365599; 635101, 2365598; 635101, 2365597; return to starting point.

(ii) **Note:** Map 266 follows:



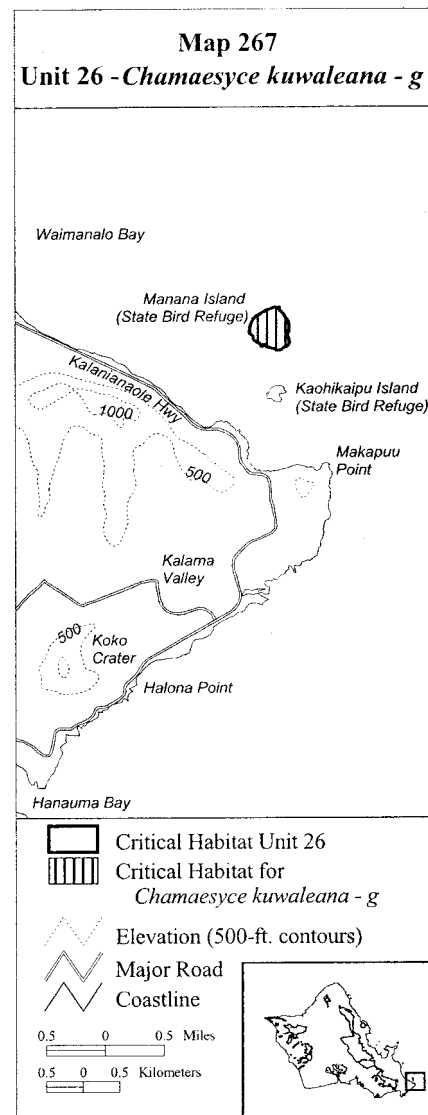
(267) Oahu 26—*Chamaesyce kuwaleana*—g (27 ha; 66 ac)

(i) Unit consists of the following 214 boundary points: Start at 639041, 2358964; 639029, 2358969; 639024, 2358973; 639019, 2358980; 639016, 2358988; 639015, 2358994; 639015, 2358998; 639014, 2359006; 639013, 2359012; 639012, 2359023; 639012, 2359024; 639009, 2359029; 639006, 2359034; 639005, 2359035; 639002, 2359038; 638998, 2359043; 638997, 2359043; 638992, 2359048; 638982, 2359054; 638972, 2359062; 638965, 2359067; 638959, 2359072; 638956, 2359077; 638955, 2359084; 638955, 2359090; 638959, 2359100; 638961, 2359105; 638962, 2359109; 638963, 2359116; 638964, 2359125; 638964, 2359139; 638966, 2359158; 638968, 2359166; 638972, 2359175; 638975, 2359185; 638980, 2359202; 638985, 2359213; 638990, 2359226; 638995, 2359239; 639003, 2359252; 639009, 2359267; 639016, 2359280; 639027,

2359291; 639035, 2359299; 639044, 2359307; 639057, 2359317; 639065, 2359323; 639076, 2359330; 639088, 2359336; 639107, 2359344; 639114, 2359349; 639122, 2359355; 639129, 2359360; 639137, 2359367; 639153, 2359376; 639167, 2359385; 639180, 2359392; 639190, 2359397; 639202, 2359404; 639210, 2359408; 639229, 2359417; 639241, 2359421; 639260, 2359429; 639278, 2359435; 639302, 2359444; 639312, 2359448; 639327, 2359452; 639337, 2359453; 639356, 2359453; 639369, 2359451; 639377, 2359449; 639383, 2359446; 639387, 2359442; 639391, 2359438; 639395, 2359434; 639396, 2359431; 639397, 2359426; 639398, 2359420; 639398, 2359416; 639399, 2359411; 639400, 2359407; 639400, 2359406; 639404, 2359403; 639413, 2359394; 639422, 2359387; 639430, 2359381; 639441, 2359370; 639450, 2359359; 639456, 2359350; 639463, 2359340; 639468, 2359332; 639474, 2359317; 639487, 2359300; 639495, 2359288; 639502, 2359276; 639510, 2359263; 639516, 2359251; 639520, 2359243; 639523, 2359239; 639525, 2359235; 639528, 2359229; 639531, 2359221; 639532, 2359216; 639533, 2359206; 639535, 2359193; 639536, 2359179; 639536, 2359168; 639539, 2359153; 639539, 2359142; 639540, 2359134; 639540, 2359129; 639540, 2359124; 639538, 2359112; 639536, 2359106; 639533, 2359100; 639529, 2359093; 639529, 2359092; 639526, 2359080; 639524, 2359071; 639524, 2359070; 639524, 2359056; 639523, 2359038; 639524, 2359025; 639526, 2359010; 639531, 2358995; 639534, 2358978; 639537, 2358968; 639540, 2358958; 639542, 2358950; 639543, 2358943; 639543, 2358938; 639543, 2358932; 639542, 2358923; 639539, 2358916; 639539, 2358915; 639537, 2358908; 639532, 2358898; 639526, 2358892; 639520, 2358887; 639508, 2358880; 639498, 2358876; 639487, 2358872; 639476, 2358867; 639468, 2358865; 639458, 2358860; 639450, 2358853; 639444, 2358848; 639439, 2358843; 639432, 2358837; 639426, 2358833; 639418, 2358829; 639409, 2358826; 639402, 2358822; 639395, 2358822; 639380, 2358822; 639370, 2358822; 639364, 2358824; 639355, 2358827; 639346, 2358832; 639335, 2358837; 639322, 2358842; 639309, 2358846; 639301, 2358849; 639293, 2358852; 639280, 2358856; 639265, 2358862; 639264, 2358862; 639253, 2358863; 639249, 2358866; 639241, 2358869; 639240, 2358869; 639236, 2358869; 639235, 2358869; 639230, 2358868; 639223, 2358867; 639220, 2358867; 639214, 2358867; 639211, 2358867; 639207,

2358872; 639201, 2358877; 639194, 2358884; 639186, 2358891; 639177, 2358898; 639172, 2358900; 639167, 2358901; 639166, 2358902; 639166, 2358901; 639162, 2358900; 639161, 2358900; 639158, 2358897; 639154, 2358895; 639154, 2358894; 639151, 2358891; 639148, 2358888; 639148, 2358887; 639144, 2358883; 639142, 2358881; 639137, 2358881; 639134, 2358881; 639130, 2358884; 639129, 2358886; 639124, 2358894; 639120, 2358902; 639117, 2358909; 639113, 2358915; 639106, 2358924; 639102, 2358929; 639095, 2358933; 639089, 2358936; 639082, 2358938; 639076, 2358941; 639069, 2358945; 639063, 2358948; 639058, 2358953; return to starting point.

(ii) Note: Map 267 follows:



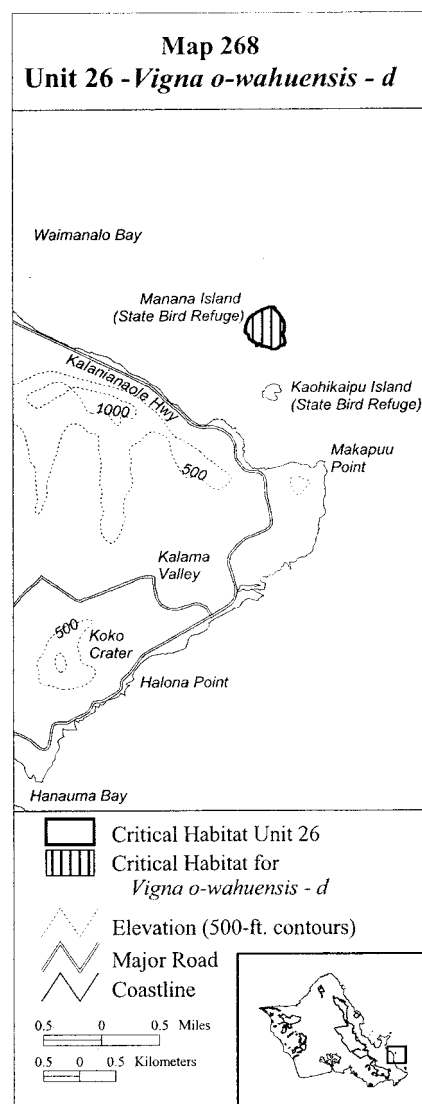
(268) Oahu 26—*Vigna o-wahuensis*—
(27 ha; 66 ac)

(i) Unit consists of the following 214 boundary points: Start at 639041,

2358964; 639029, 2358969; 639024, 2358973; 639019, 2358980; 639016, 2358988; 639015, 2358994; 639015, 2358998; 639014, 2359006; 639013, 2359012; 639012, 2359023; 639012, 2359024; 639009, 2359029; 639006, 2359034; 639005, 2359035; 639002, 2359038; 638998, 2359043; 638997, 2359043; 638992, 2359048; 638982, 2359054; 638972, 2359062; 638965, 2359067; 638959, 2359072; 638956, 2359077; 638955, 2359084; 638955, 2359090; 638959, 2359100; 638961, 2359105; 638962, 2359109; 638963, 2359116; 638964, 2359125; 638964, 2359139; 638966, 2359158; 638968, 2359166; 638972, 2359175; 638975, 2359185; 638980, 2359202; 638985, 2359213; 638990, 2359226; 638995, 2359239; 639003, 2359252; 639009, 2359267; 639016, 2359280; 639027, 2359291; 639035, 2359299; 639044, 2359307; 639057, 2359317; 639065, 2359323; 639076, 2359330; 639088, 2359336; 639107, 2359344; 639114, 2359349; 639122, 2359355; 639129, 2359360; 639137, 2359367; 639153, 2359376; 639167, 2359385; 639180, 2359392; 639190, 2359397; 639202, 2359404; 639210, 2359408; 639229, 2359417; 639241, 2359421; 639260, 2359429; 639278, 2359435; 639302, 2359444; 639312, 2359448; 639327, 2359452; 639337, 2359453; 639356, 2359453; 639369, 2359451; 639377, 2359449; 639383, 2359446; 639387, 2359442; 639391, 2359438; 639395, 2359434; 639396, 2359431; 639397, 2359426; 639398, 2359420; 639398, 2359416; 639399, 2359411; 639400, 2359407; 639400, 2359406; 639404, 2359403; 639413, 2359394; 639422, 2359387; 639430, 2359381; 639441, 2359370; 639450, 2359359; 639456, 2359350; 639463, 2359340; 639468, 2359332; 639474, 2359317; 639487, 2359300; 639495, 2359288; 639502, 2359276; 639510, 2359263; 639516, 2359251; 639520, 2359243; 639523, 2359239; 639525, 2359235; 639528, 2359229; 639531, 2359221; 639532, 2359216; 639533, 2359206; 639535, 2359193; 639536, 2359179; 639536, 2359168; 639539, 2359153; 639539, 2359142; 639540, 2359134; 639540, 2359129; 639540, 2359124; 639538, 2359112; 639536, 2359106; 639533, 2359100; 639529, 2359093; 639529, 2359092; 639526, 2359080; 639524, 2359071; 639524, 2359070; 639524, 2359056; 639523, 2359038; 639524, 2359025; 639526, 2359010; 639531, 2358995; 639534, 2358978; 639537, 2358968; 639540, 2358958; 639542,

2358950; 639543, 2358943; 639543, 2358938; 639543, 2358932; 639542, 2358923; 639539, 2358916; 639539, 2358915; 639537, 2358908; 639532, 2358898; 639526, 2358892; 639520, 2358887; 639508, 2358880; 639498, 2358876; 639487, 2358872; 639476, 2358867; 639468, 2358865; 639458, 2358860; 639450, 2358853; 639444, 2358848; 639439, 2358843; 639432, 2358837; 639426, 2358833; 639418, 2358829; 639409, 2358826; 639402, 2358822; 639395, 2358822; 639380, 2358822; 639370, 2358822; 639364, 2358824; 639355, 2358827; 639346, 2358832; 639335, 2358837; 639322, 2358842; 639309, 2358846; 639301, 2358849; 639293, 2358852; 639280, 2358856; 639265, 2358862; 639264, 2358862; 639253, 2358863; 639249, 2358866; 639241, 2358869; 639240, 2358869; 639236, 2358869; 639235, 2358869; 639230, 2358868; 639223, 2358867; 639220, 2358867; 639214, 2358867; 639211, 2358867; 639207, 2358872; 639201, 2358877; 639194, 2358884; 639186, 2358891; 639177, 2358898; 639172, 2358900; 639167, 2358901; 639166, 2358902; 639166, 2358901; 639162, 2358900; 639161, 2358900; 639158, 2358897; 639154, 2358895; 639154, 2358894; 639151, 2358891; 639148, 2358888; 639148, 2358887; 639144, 2358883; 639142, 2358881; 639137, 2358881; 639134, 2358881; 639130, 2358884; 639129, 2358886; 639124, 2358894; 639120, 2358902; 639117, 2358909; 639113, 2358915; 639106, 2358924; 639102, 2358929; 639095, 2358933; 639089, 2358936; 639082, 2358938; 639076, 2358941; 639069, 2358945; 639063, 2358948; 639058, 2358953; return to starting point.

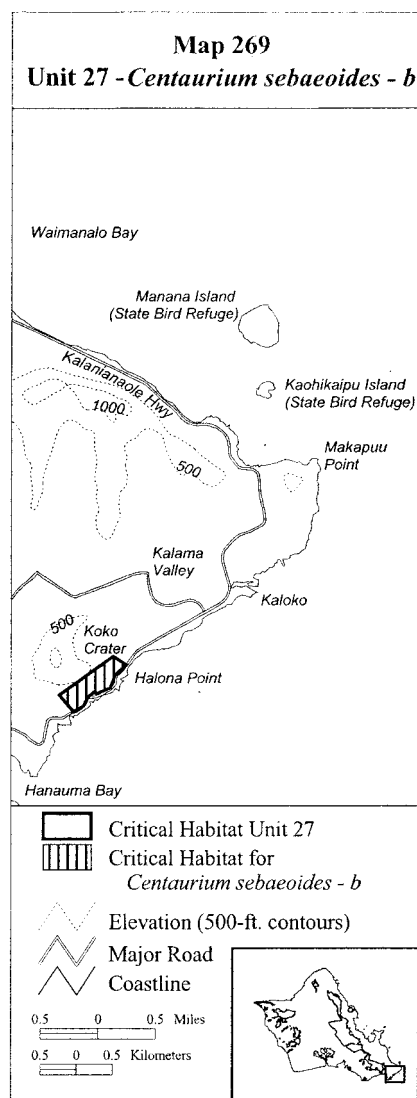
(ii) **Note:** Map 268 follows:



(269) Oahu 27—*Centaurium sebaeoides*—b (30 ha; 74 ac)

(i) Unit consists of the following 12 boundary points: Start at 636505, 2353431; 636303, 2353668; 637100, 2354241; 637297, 2354115; 637128, 2353956; 637052, 2353771; 636871, 2353692; 636811, 2353706; 636712, 2353621; 636657, 2353510; 636560, 2353454; 636508, 2353427; return to starting point.

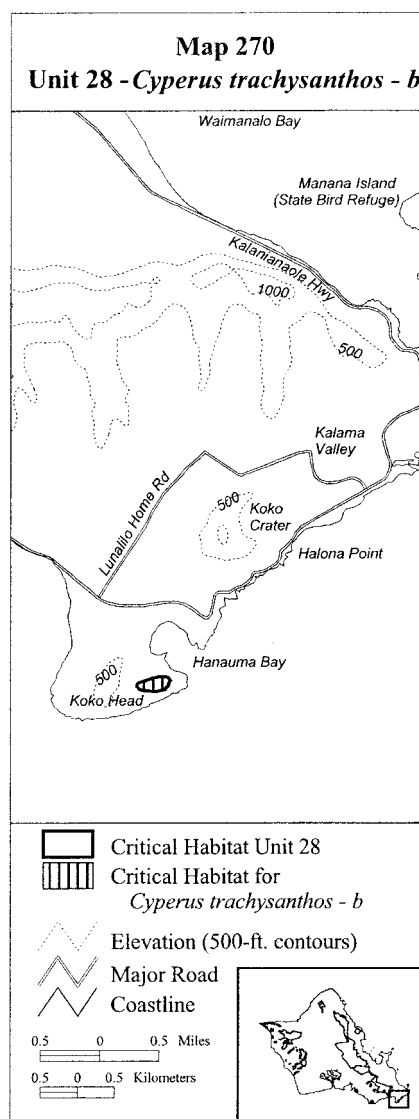
(ii) **Note:** Map 269 follows:



(270) Oahu 28—*Cyperus trachysanthos*—b (8 ha; 20 ac)

(i) Unit consists of the following 23 boundary points: Start at 635001, 2351956; 635110, 2351995; 635197, 2352022; 635282, 2352041; 635351, 2352039; 635434, 2352026; 635460, 2351985; 635438, 2351945; 635432, 2351917; 635414, 2351893; 635382, 2351869; 635338, 2351841; 635288, 2351826; 635247, 2351815; 635219, 2351815; 635158, 2351822; 635101, 2351828; 635053, 2351832; 634997, 2351852; 634971, 2351876; 634951, 2351893; 634949, 2351906; 634966, 2351939; return to starting point.

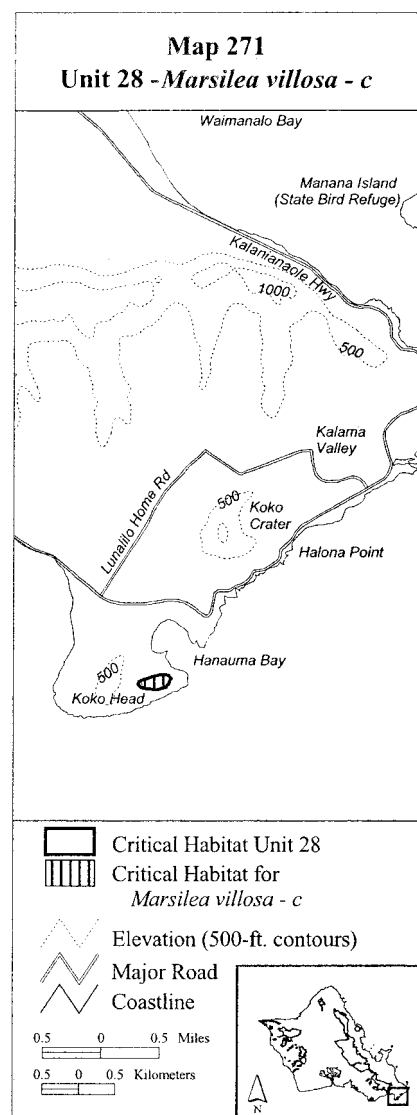
(ii) **Note:** Map 270 follows:



(271) Oahu 28—*Marsilea villosa*—c (7 ha; 18 ac)

(i) Unit consists of the following 14 boundary points: Start at 635006, 2351930; 635107, 2351989; 635178, 2352022; 635269, 2352038; 635357, 2352041; 635428, 2352038; 635441, 2351986; 635409, 2351898; 635383, 2351852; 635308, 2351830; 635246, 2351817; 635129, 2351826; 635035, 2351859; 635012, 2351898; return to starting point.

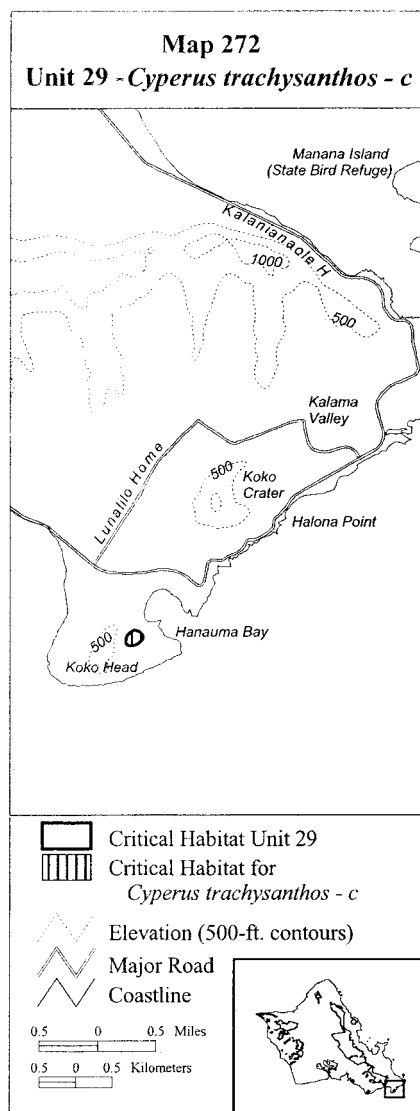
(ii) **Note:** Map 271 follows:



(272) Oahu 29—*Cyperus trachysanthos*—c (4 ha; 10 ac)

(i) Unit consists of the following 15 boundary points: Start at 634916, 2352187; 634932, 2352204; 634977, 2352241; 635034, 2352241; 635069, 2352232; 635108, 2352195; 635108, 2352137; 635086, 2352098; 635064, 2352067; 635021, 2352030; 634962, 2352004; 634921, 2352017; 634875, 2352043; 634873, 2352087; 634875, 2352135; return to starting point.

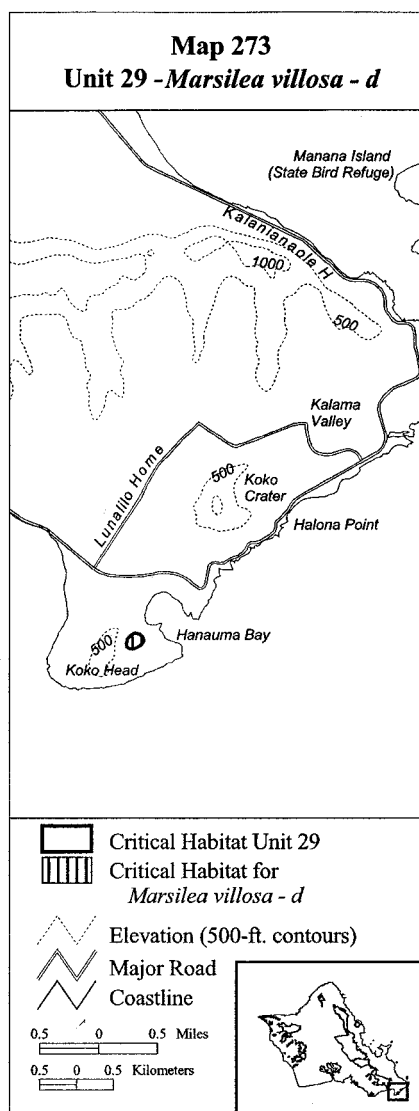
(ii) **Note:** Map 272 follows:



(273) Oahu 29—*Marsilea villosa*—d (5 ha; 11 ac)

(i) Unit consists of the following 13 boundary points: Start at 634980, 2352018; 634908, 2352018; 634873, 2352038; 634869, 2352090; 634886, 2352155; 634928, 2352207; 634999, 2352252; 635068, 2352236; 635116, 2352194; 635129, 2352152; 635123, 2352109; 635090, 2352064; 635035, 2352031; return to starting point.

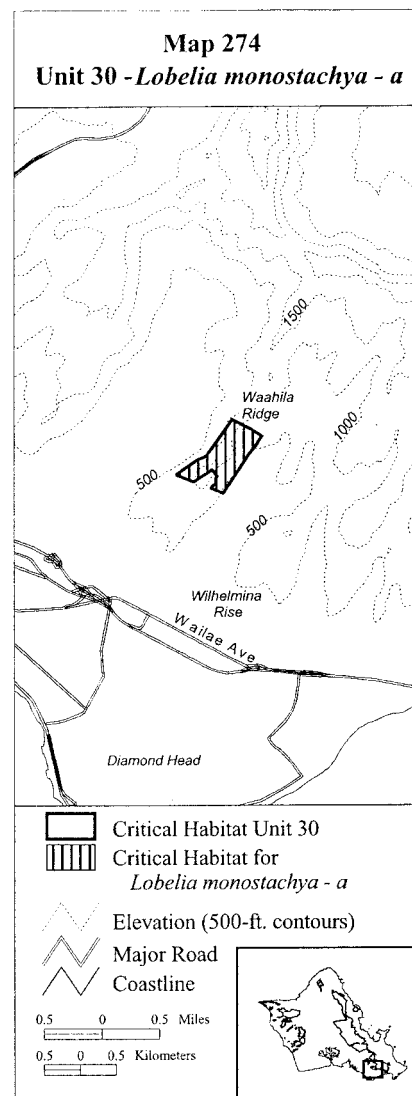
(ii) **Note:** Map 273 follows:



(274) Oahu 30—*Lobelia monostachya*—a (60 ha; 148 ac)

(i) Unit consists of the following 27 boundary points: Start at 624168, 2356522; 624519, 2356753; 624644, 2356802; 624645, 2356802; 624645, 2356803; 624648, 2356804; 624902, 2357165; 625018, 2357329; 625039, 2357383; 625337, 2357226; 625511, 2357122; 625420, 2356986; 625323, 2356853; 624917, 2356242; 624907, 2356227; 624732, 2356309; 624741, 2356330; 624795, 2356390; 624800, 2356466; 624811, 2356492; 624811, 2356493; 624734, 2356593; 624734, 2356594; 624733, 2356594; 624732, 2356594; 624709, 2356578; 624454, 2356409; return to starting point.

(ii) **Note:** Map 274 follows:



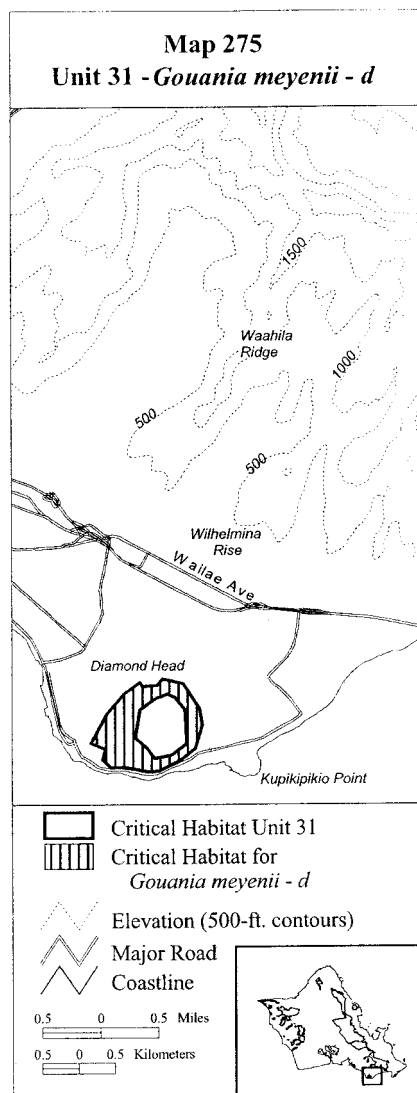
(275) Oahu 31—*Gouania meyenii*—d (116 ha; 286 ac)

(i) Unit consists of the following 22 boundary points: Start at 624109, 2351193; 624110, 2351193; 624344, 2351374; 624344, 2351375; 624322, 2351901; 624322, 2351902; 624173, 2352081; 624173, 2352082; 624049, 2352143; 624048, 2352143; 624047, 2352143; 623860, 2352077; 623615, 2351898; 623615, 2351897; 623614, 2351897; 623548, 2351462; 623548, 2351461; 623549, 2351460; 623733, 2351300; 623846, 2351144; 623846, 2351143; 623847, 2351143; return to starting point.

(ii) Excluding one area bounded by the following 22 points (59 ha, 146 ac): Start at 624110, 2351193; 624344, 2351374; 624344, 2351375; 624322, 2351901; 624322, 2351902; 624173, 2352081; 624173, 2352082; 624049, 2352143; 624048, 2352143; 624047, 2352143; 623860, 2352077; 623615, 2351898; 623615, 2351897; 623614,

2351897; 623548, 2351462; 623548, 2351461; 623549, 2351460; 623733, 2351300; 623846, 2351144; 623846, 2351143; 623847, 2351143; 624109, 2351193; return to starting point.

(iii) **Note:** Map 275 follows:



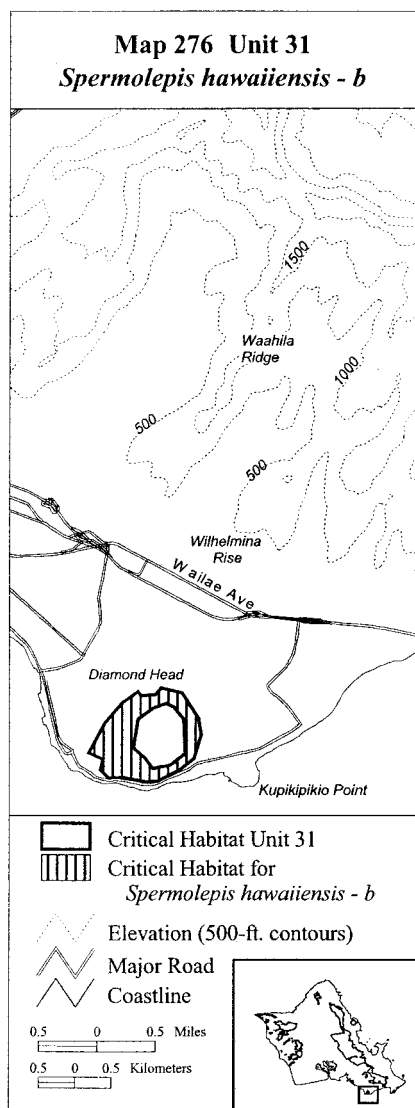
(276) Oahu 31—*Spermolepis hawaiiensis*—b (116 ha; 286 ac)

(i) Unit consists of the following 22 boundary points: Start at 624109, 2351193; 624110, 2351193; 624344, 2351374; 624344, 2351375; 624322, 2351901; 624322, 2351902; 624173, 2352081; 624173, 2352082; 624049, 2352143; 624048, 2352143; 624047, 2352143; 623860, 2352077; 623615, 2351898; 623615, 2351897; 623614, 2351897; 623548, 2351462; 623548, 2351461; 623549, 2351460; 623733, 2351300; 623846, 2351144; 623846, 2351143; 623847, 2351143; return to starting point.

(ii) Excluding one area bounded by the following 22 points (59ha, 146ac): Start at 624110, 2351193; 624344,

2351374; 624344, 2351375; 624322, 2351901; 624322, 2351902; 624173, 2352081; 624173, 2352082; 624049, 2352143; 624048, 2352143; 624047, 2352143; 623860, 2352077; 623615, 2351898; 623615, 2351897; 623614, 2351897; 623548, 2351462; 623548, 2351461; 623549, 2351460; 623733, 2351300; 623846, 2351144; 623846, 2351143; 623847, 2351143; 624109, 2351193; return to starting point.

(iii) **Note:** Map 276 follows:

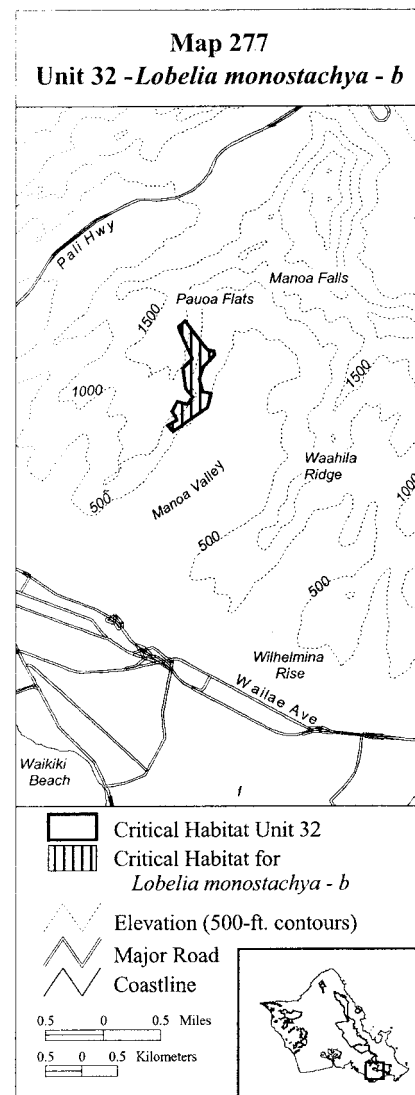


(277) Oahu 32—*Lobelia monostachya*—b (47 ha; 115 ac)

(i) Unit consists of the following 35 boundary points: Start at 623244, 2359774; 623355, 2359864; 623692, 2359434; 623717, 2359408; 623802, 2359404; 623814, 2359345; 623641, 2359143; 623578, 2358957; 623633, 2358768; 623759, 2358742; 623756, 2358730; 623701, 2358521; 623169, 2358151; 623083, 2358237; 623230, 2358329; 623230, 2358330; 623230,

2358331; 623154, 2358462; 623236, 2358610; 623388, 2358571; 623389, 2358571; 623390, 2358571; 623390, 2358572; 623478, 2358682; 623478, 2358683; 623453, 2358712; 623368, 2358817; 623353, 2358925; 623325, 2359134; 623469, 2359270; 623469, 2359271; 623469, 2359272; 623466, 2359279; 623468, 2359282; 623359, 2359518; return to starting point.

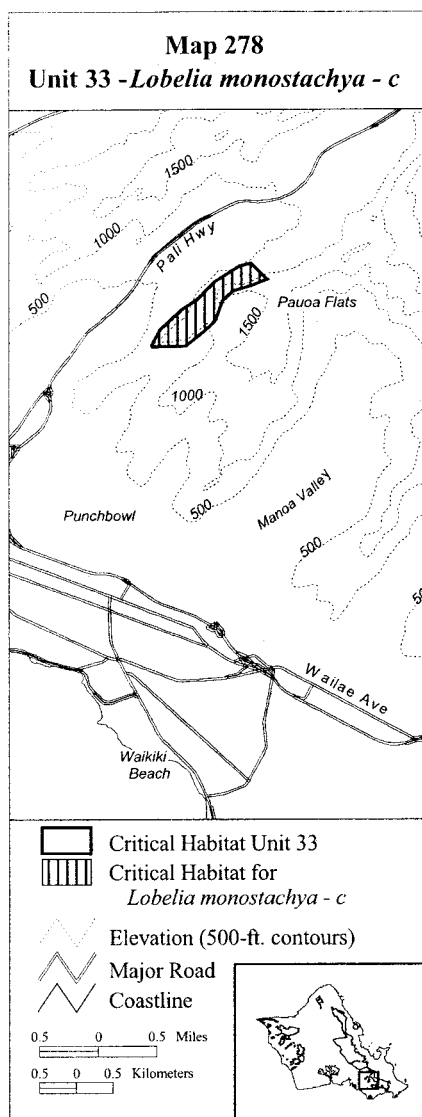
(ii) **Note:** Map 277 follows:



(278) Oahu 33—*Lobelia monostachya*—c (71 ha; 175 ac)

(i) Unit consists of the following 15 boundary points: Start at 621273, 2359524; 621269, 2359528; 621405, 2359780; 621744, 2360094; 621991, 2360258; 622260, 2360527; 622646, 2360763; 622811, 2360807; 623064, 2360560; 622811, 2360460; 622539, 2360384; 622376, 2360243; 622273, 2359934; 622138, 2359803; 621801, 2359537; return to starting point.

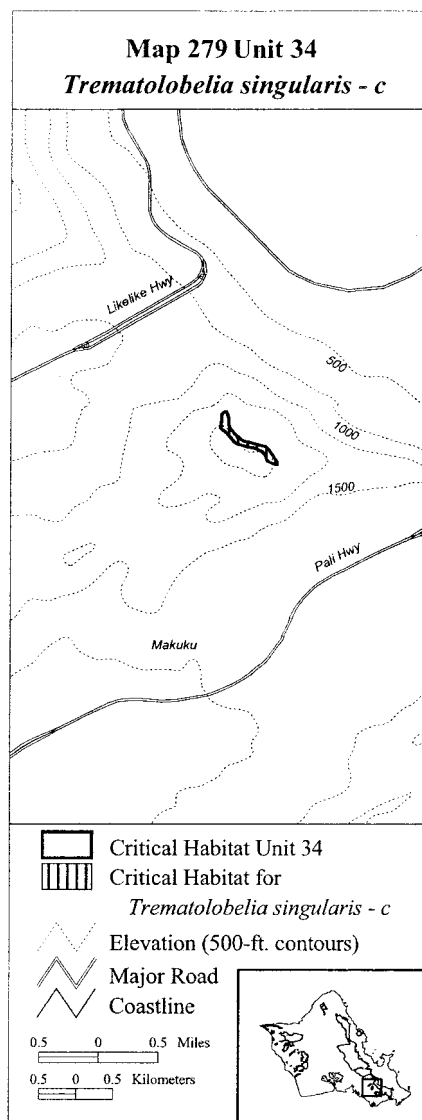
(ii) **Note:** Map 278 follows:



(279) Oahu 34—*Trematolobelia singularis*—c (2 ha; 5 ac)

(i) Unit consists of the following 32 boundary points: Start at 623343, 2363728; 623355, 2363728; 623364, 2363711; 623372, 2363677; 623371, 2363634; 623385, 2363607; 623414, 2363575; 623451, 2363542; 623476, 2363526; 623521, 2363513; 623563, 2363503; 623622, 2363488; 623649, 2363460; 623683, 2363405; 623700, 2363384; 623701, 2363365; 623686, 2363363; 623656, 2363376; 623636, 2363388; 623618, 2363424; 623600, 2363454; 623552, 2363477; 623493, 2363486; 623428, 2363505; 623409, 2363516; 623380, 2363554; 623357, 2363581; 623338, 2363598; 623319, 2363613; 623323, 2363648; 623326, 2363680; 623327, 2363707; return to starting point.

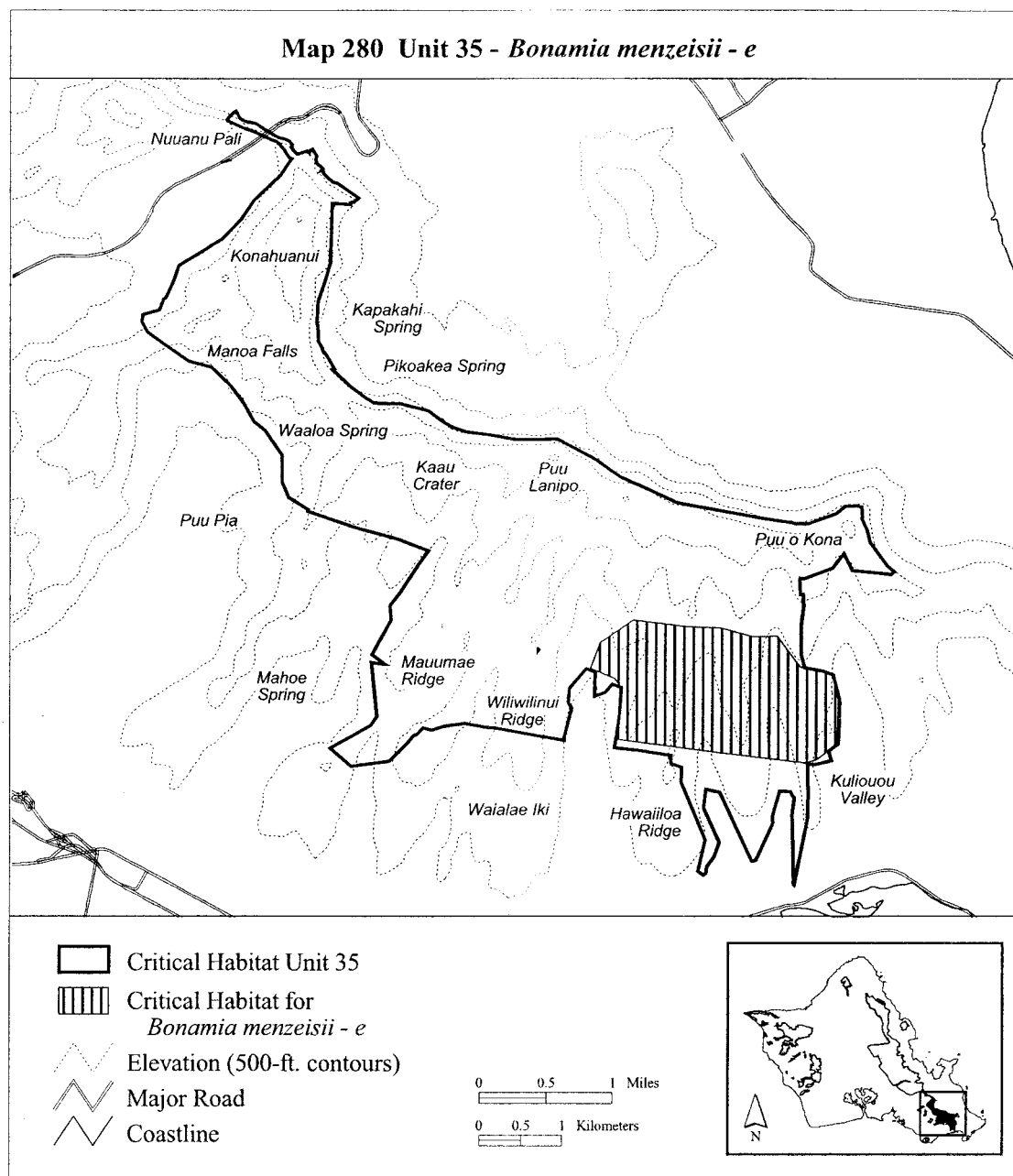
(ii) **Note:** Map 279 follows:



(280) Oahu 35—*Bonamia menziesii*—e (374 ha; 923 ac)

(i) Unit consists of the following 18 boundary points: Start at 629086, 2356780; 629201, 2357084; 629606, 2357366; 630257, 2357286; 630655, 2357272; 631038, 2357163; 631327, 2357170; 631609, 2356794; 631877, 2356751; 632000, 2356700; 632072, 2356404; 632058, 2355876; 631812, 2355681; 631674, 2355645; 630640, 2355768; 629404, 2355928; 629462, 2356549; 629375, 2356657; return to starting point.

(ii) **Note:** Map 280 follows:



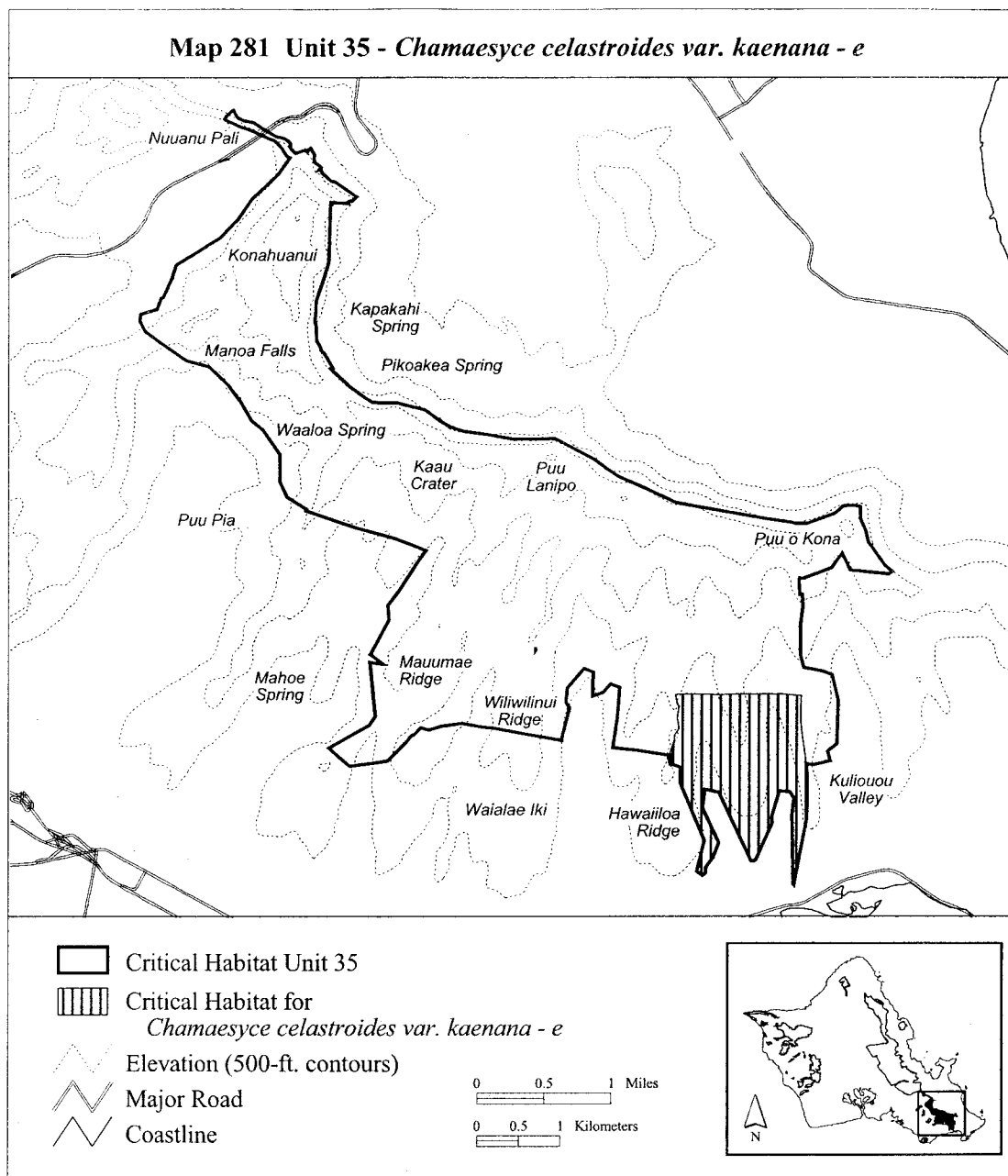
(281) Oahu 35—*Chamaesyce celastroides* var. *kaenana*—e (238 ha; 588 ac)

(i) Unit consists of the following 70 boundary points: Start at 630069, 2355613; 630055, 2355683; 630069, 2355782; 630115, 2355917; 630117, 2355972; 630168, 2356052; 630166, 2356126; 630151, 2356177; 630170, 2356314; 630142, 2356382; 630132, 2356461; 630142, 2356466; 630187, 2356468; 630387, 2356468; 630650, 2356466; 630903, 2356468; 631279, 2356468; 631394, 2356468; 631628,

2356449; 631621, 2356331; 631623, 2356148; 631638, 2355948; 631662, 2355818; 631694, 2355602; 631693, 2355601; 631693, 2355600; 631701, 2355280; 631697, 2354977; 631536, 2354177; 631533, 2354184; 631525, 2354596; 631529, 2354705; 631522, 2354734; 631518, 2354916; 631517, 2354919; 631511, 2355000; 631542, 2355222; 631516, 2355248; 631493, 2355297; 631363, 2355306; 631277, 2355000; 631285, 2354918; 631284, 2354916; 631283, 2354916; 631081, 2354472; 631034, 2354467; 630645,

2355292; 630645, 2355293; 630644, 2355293; 630484, 2355324; 630483, 2355324; 630482, 2355323; 630455, 2355102; 630455, 2355101; 630642, 2354688; 630575, 2354506; 630566, 2354490; 630493, 2354399; 630486, 2354322; 630453, 2354295; 630390, 2354343; 630473, 2354715; 630473, 2354716; 630187, 2355415; 630193, 2355589; 630102, 2355623; 630101, 2355624; 630101, 2355625; 630100, 2355625; 630099, 2355625; return to starting point.

(ii) **Note:** Map 281 follows:



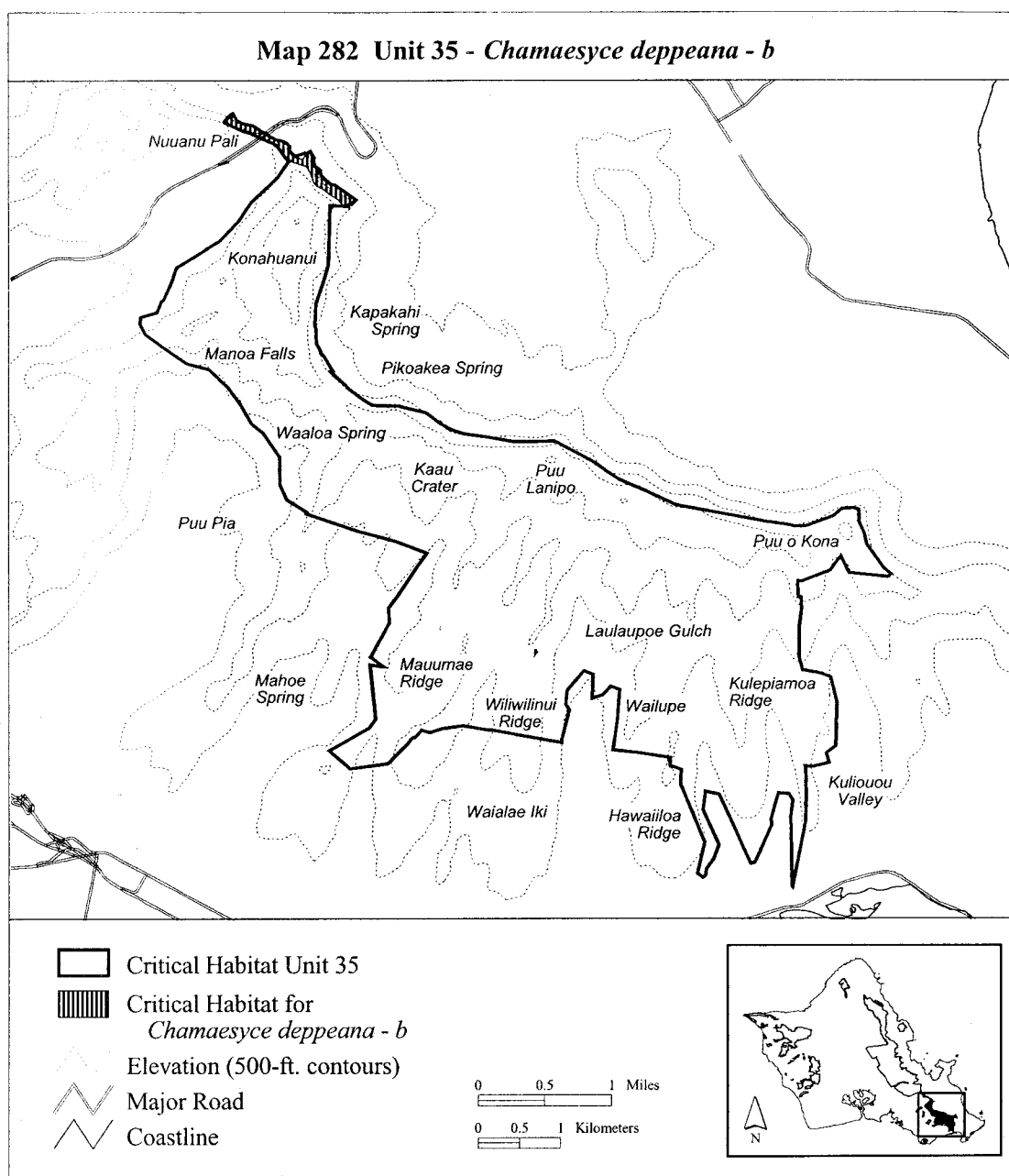
(282) Oahu 35—*Chamaesyce deppeana*—b (19 ha; 47 ac)

(i) Unit consists of the following 71 boundary points: Start at 624710, 2363371; 624704, 2363385; 624721, 2363406; 624754, 2363442; 624783, 2363468; 624809, 2363480; 624859, 2363397; 624925, 2363364; 624987, 2363347; 625052, 2363337; 625116, 2363295; 625176, 2363254; 625290, 2363182; 625335, 2363163; 625376, 2363161; 625417, 2363145; 625460, 2363118; 625486, 2363082; 625483,

2363045; 625510, 2363008; 625547, 2362971; 625588, 2362949; 625624, 2362933; 625650, 2362939; 625665, 2362968; 625690, 2362985; 625703, 2363013; 625729, 2363029; 625730, 2363028; 625777, 2362945; 625776, 2362902; 625784, 2362858; 625829, 2362823; 625853, 2362797; 625843, 2362776; 625853, 2362787; 625872, 2362725; 625896, 2362687; 625924, 2362659; 625955, 2362641; 625994, 2362628; 626024, 2362620; 626028, 2362620; 626279, 2362444; 626232, 2362397; 626194, 2362389; 626136,

2362372; 626088, 2362415; 626075, 2362435; 626062, 2362444; 625972, 2362510; 625888, 2362572; 625805, 2362613; 625771, 2362659; 625752, 2362715; 625733, 2362770; 625738, 2362766; 625724, 2362780; 625698, 2362830; 625671, 2362852; 625595, 2362871; 625540, 2362897; 625464, 2362918; 625438, 2362942; 625390, 2363018; 625328, 2363095; 625293, 2363123; 625231, 2363145; 625131, 2363190; 625004, 2363245; 624904, 2363282; return to starting point.

(ii) **Note:** Map 282 follows:



(283) Oahu 35—*Cyanea crispa*—d
(1,336 ha; 3,301 ac)

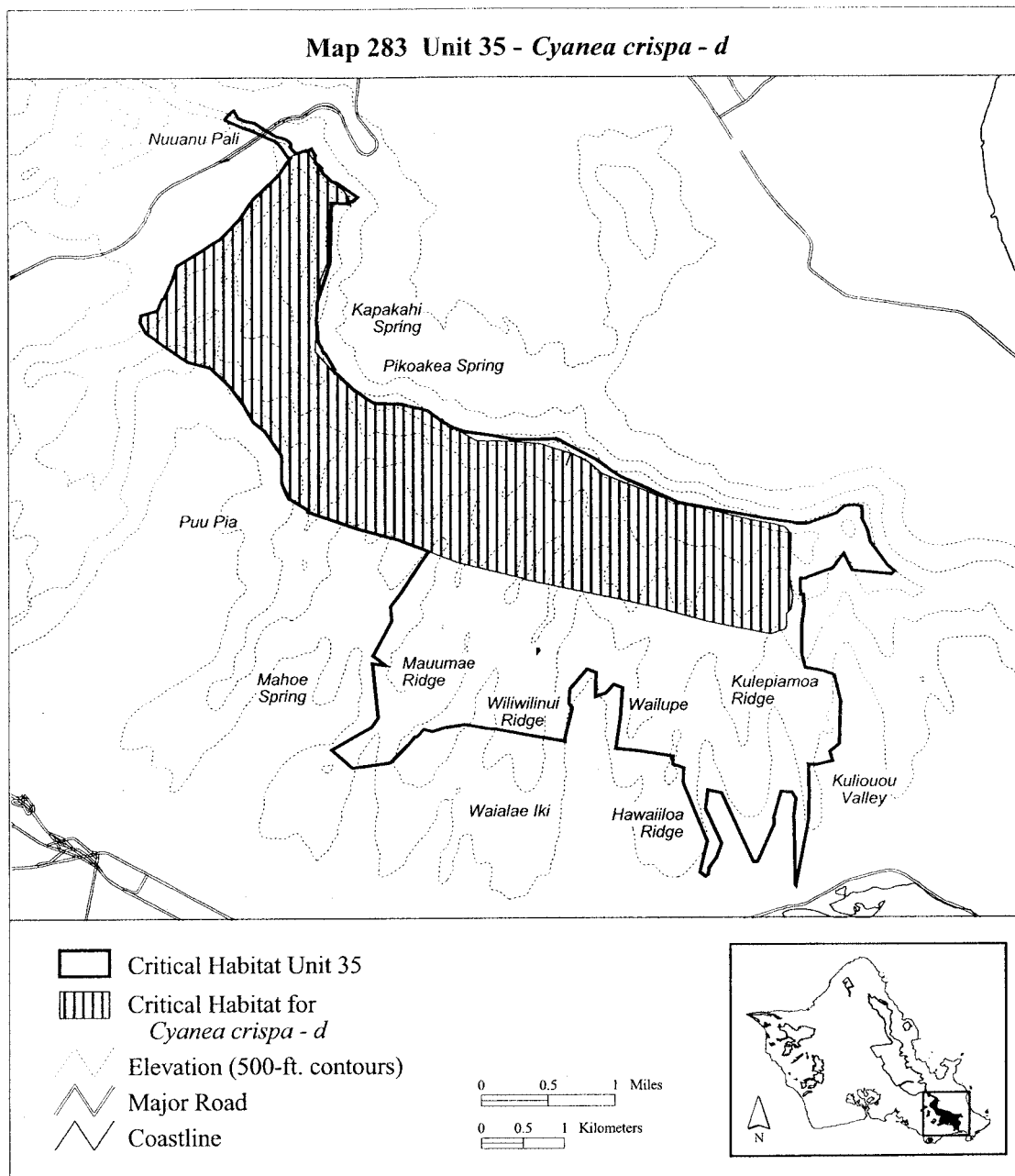
(i) Unit consists of the following 98 boundary points: Start at 623944, 2361231; 623966, 2361243; 624062, 2361457; 624128, 2361633; 624397, 2361796; 624487, 2361853; 624497, 2361858; 624498, 2361858; 624502, 2361863; 624648, 2361955; 624873, 2362180; 625030, 2362416; 625040, 2362426; 625350, 2362723; 625502, 2362941; 625666, 2363011; 625734, 2362935; 625866, 2362736; 625998, 2362617; 626117, 2362524; 626170, 2362445; 626184, 2362366; 625959, 2362379; 625945, 2361955; 625945, 2361730; 625839, 2361465; 625800,

2361201; 625791, 2361007; 625783, 2360976; 625783, 2360975; 625789, 2360950; 625773, 2360605; 625998, 2360354; 626237, 2360115; 626475, 2359983; 626887, 2359949; 627102, 2359895; 627121, 2359883; 627282, 2359763; 627395, 2359699; 627408, 2359690; 627411, 2359689; 627473, 2359654; 627708, 2359529; 628098, 2359518; 628484, 2359486; 628840, 2359373; 628785, 2359224; 628843, 2359377; 629050, 2359268; 629218, 2359127; 629499, 2359010; 629714, 2358932; 629847, 2358866; 630108, 2358784; 630292, 2358725; 630510, 2358694; 630725, 2358631; 630998, 2358573; 631279, 2358518; 631412,

2358483; 631482, 2358393; 631478, 2358089; 631466, 2357898; 631506, 2357656; 631482, 2357496; 631431, 2357429; 631431, 2357293; 631412, 2357250; 631248, 2357195; 630826, 2357273; 630491, 2357343; 629874, 2357511; 629343, 2357636; 628949, 2357714; 628266, 2357862; 628269, 2357871; 627485, 2358059; 626771, 2358332; 626283, 2358472; 625686, 2358675; 625690, 2358695; 625455, 2358843; 625373, 2359027; 625376, 2359349; 625164, 2359653; 625032, 2359759; 624900, 2359996; 624754, 2360181; 624529, 2360406; 624245, 2360483; 623937, 2360701; 623750, 2360834; 623679, 2360963; 623691,

2361043; 623890, 2361096; 623891,

2361096; 623891, 2361097; return to starting point.

(ii) **Note:** Map 283 follows:

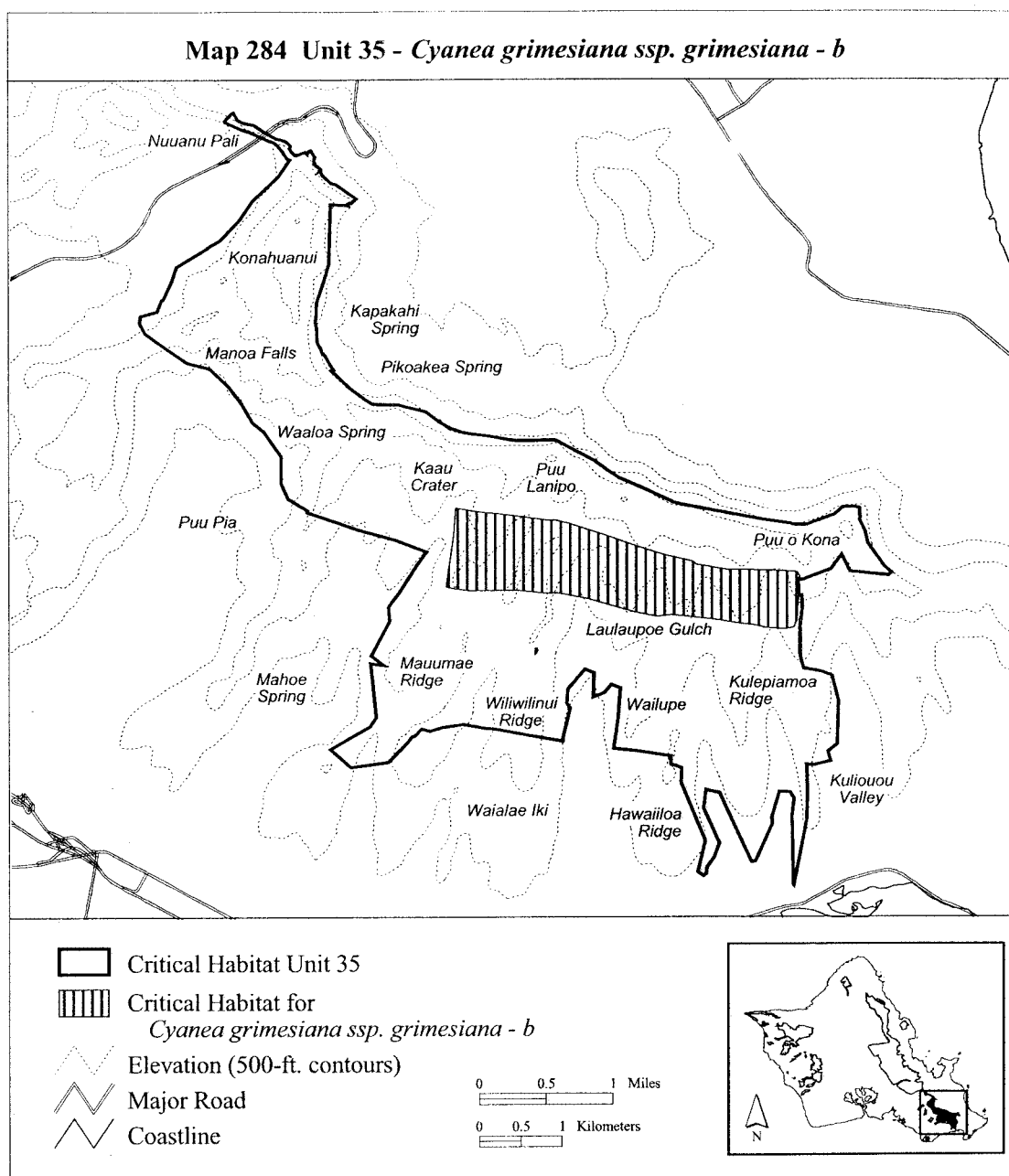
(284) Oahu 35—*Cyanea grimesiana* ssp. *grimesiana*—b (329 ha; 813 ac)

(i) Unit consists of the following 43 boundary points: Start at 627482, 2358725; 627502, 2358723; 627743, 2358682; 628029, 2358650; 628580, 2358576; 628682, 2358576; 628842, 2358539; 628841, 2358537; 629315, 2358380; 629642, 2358266; 629985,

2358159; 630320, 2358086; 630369, 2358045; 630745, 2357984; 631011, 2357980; 631198, 2357972; 631415, 2357968; 631582, 2357955; 631611, 2357898; 631595, 2357837; 631599, 2357682; 631587, 2357502; 631574, 2357371; 631542, 2357285; 631439, 2357265; 631223, 2357277; 631080, 2357310; 630888, 2357330; 630602,

2357379; 630214, 2357420; 630067, 2357432; 629900, 2357412; 629614, 2357473; 629078, 2357628; 628693, 2357706; 628690, 2357694; 628547, 2357698; 628241, 2357731; 627906, 2357732; 627645, 2357732; 627428, 2357760; 627367, 2357780; 627450, 2358384; return to starting point.

(ii) **Note:** Map 284 follows:



(285) Oahu 35—*Cyanea humboldtiana*—e (539 ha; 1,333 ac)

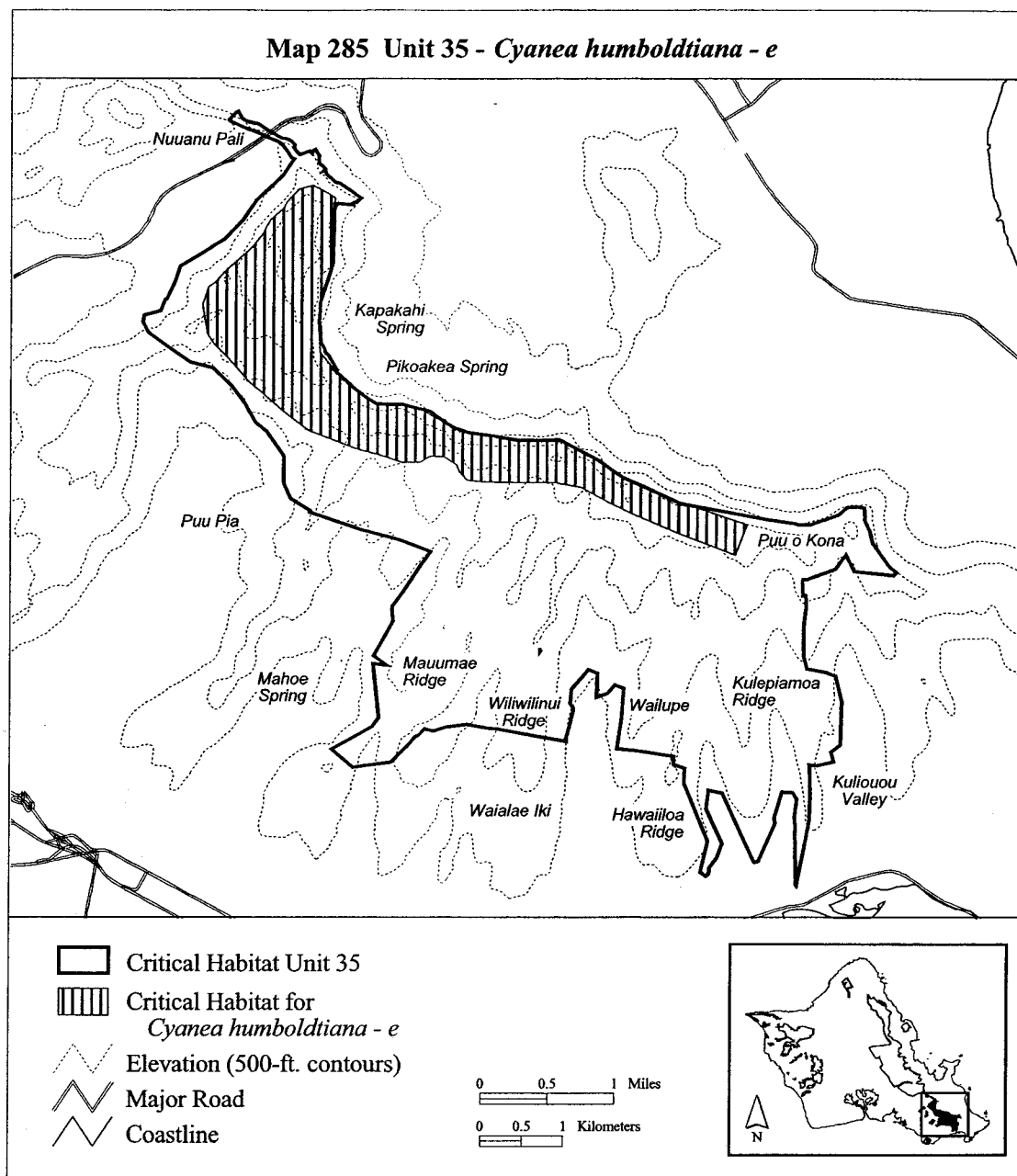
(i) Unit consists of the following 96 boundary points: Start at 625951, 2361660; 625886, 2361457; 625799, 2361195; 625784, 2360979; 625783, 2360976; 625783, 2360975; 625784, 2360974; 625779, 2360900; 625799, 2360606; 625965, 2360402; 626198, 2360174; 626389, 2360033; 626480, 2359983; 626479, 2359983; 626675, 2359975; 626782, 2359975; 626986, 2359924; 627140, 2359829; 627393, 2359697; 627405, 2359693; 627408, 2359690; 627415, 2359689; 627568, 2359634; 627871, 2359597; 628136, 2359543; 628188, 2359542; 628197,

2359540; 628198, 2359540; 628255, 2359541; 628348, 2359539; 628418, 2359542; 628664, 2359545; 628664, 2359537; 628705, 2359530; 628764, 2359501; 629131, 2359305; 629261, 2359211; 629448, 2359086; 629801, 2358933; 630060, 2358809; 630083, 2358796; 630084, 2358796; 630088, 2358795; 630104, 2358787; 630273, 2358739; 630294, 2358740; 630929, 2358526; 630785, 2358154; 630110, 2358417; 629634, 2358615; 629593, 2358630; 629241, 2358804; 628925, 2358974; 628655, 2359024; 628655, 2359028; 628240, 2359032; 627767, 2359036; 627559, 2359057; 627468, 2359169; 627431, 2359244; 627285,

2359340; 627119, 2359352; 626999, 2359273; 626783, 2359277; 626546, 2359356; 626219, 2359447; 625982, 2359539; 625680, 2359657; 625675, 2359655; 625662, 2359664; 625654, 2359667; 625657, 2359669; 625351, 2359896; 625110, 2360116; 624957, 2360240; 624824, 2360394; 624674, 2360560; 624537, 2360693; 624454, 2360826; 624417, 2361017; 624392, 2361170; 624463, 2361382; 624546, 2361436; 624670, 2361573; 624795, 2361685; 624990, 2361855; 625102, 2362000; 625201, 2362179; 625347, 2362308; 625405, 2362407; 625550, 2362557; 625704, 2362598; 625870, 2362511; 625974, 2362449; 625970,

2362364; 625969, 2362363; return to starting point.

(ii) **Note:** Map 285 follows:



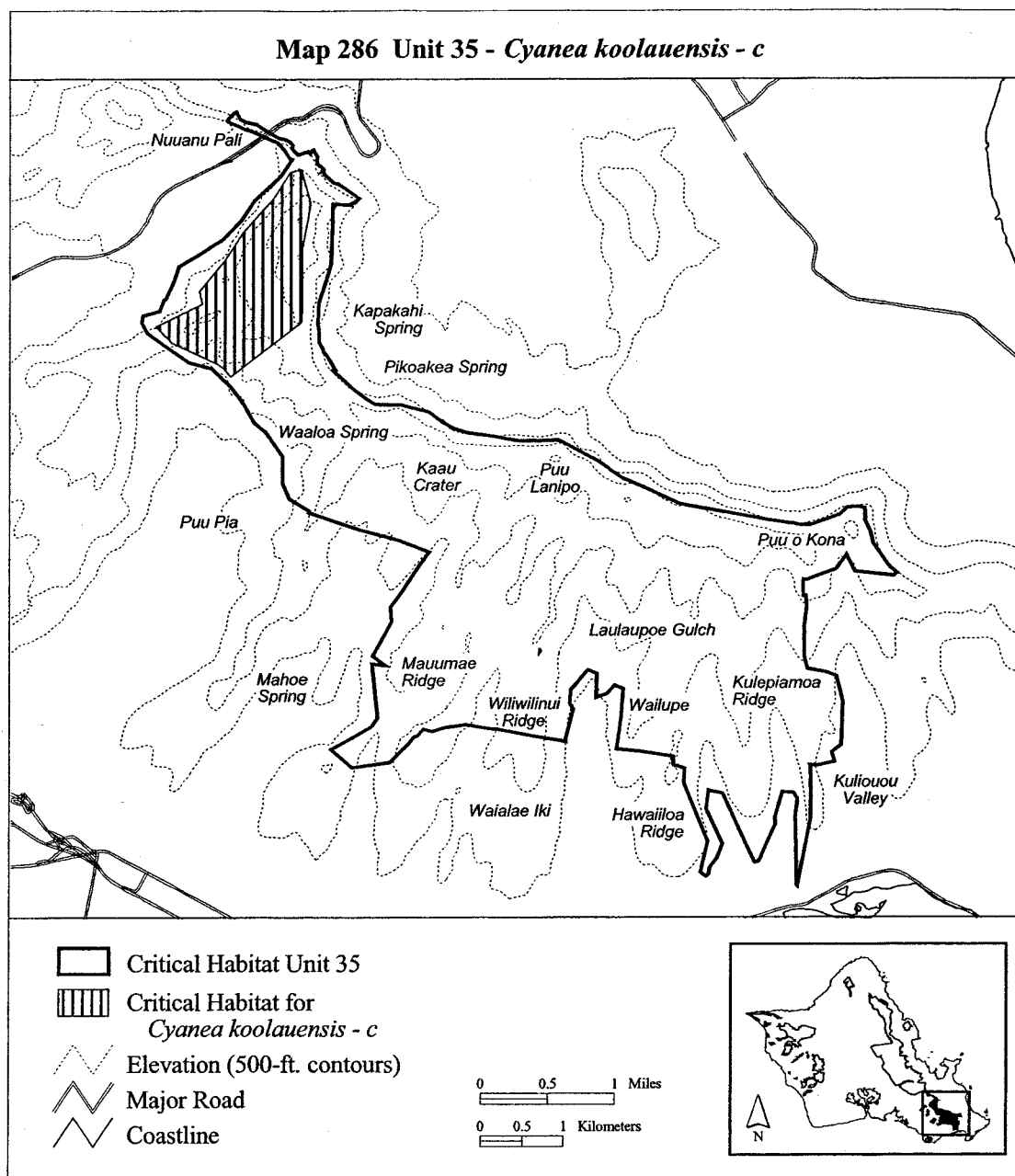
(286) Oahu 35—*Cyanea koolauensis*—c
(209 ha; 517 ac)

(i) Unit consists of the following 16
boundary points: Start at 623850,

2360912; 624406, 2361184; 624371,
2361338; 624678, 2361692; 624891,
2362035; 625258, 2362438; 625459,
2362757; 625589, 2362792; 625695,
2362378; 625601, 2361834; 625601,

2361113; 625594, 2360964; 624749,
2360309; 624669, 2360404; 624595,
2360462; 624039, 2360722; return to
starting point.

(ii) **Note:** Map 286 follows:



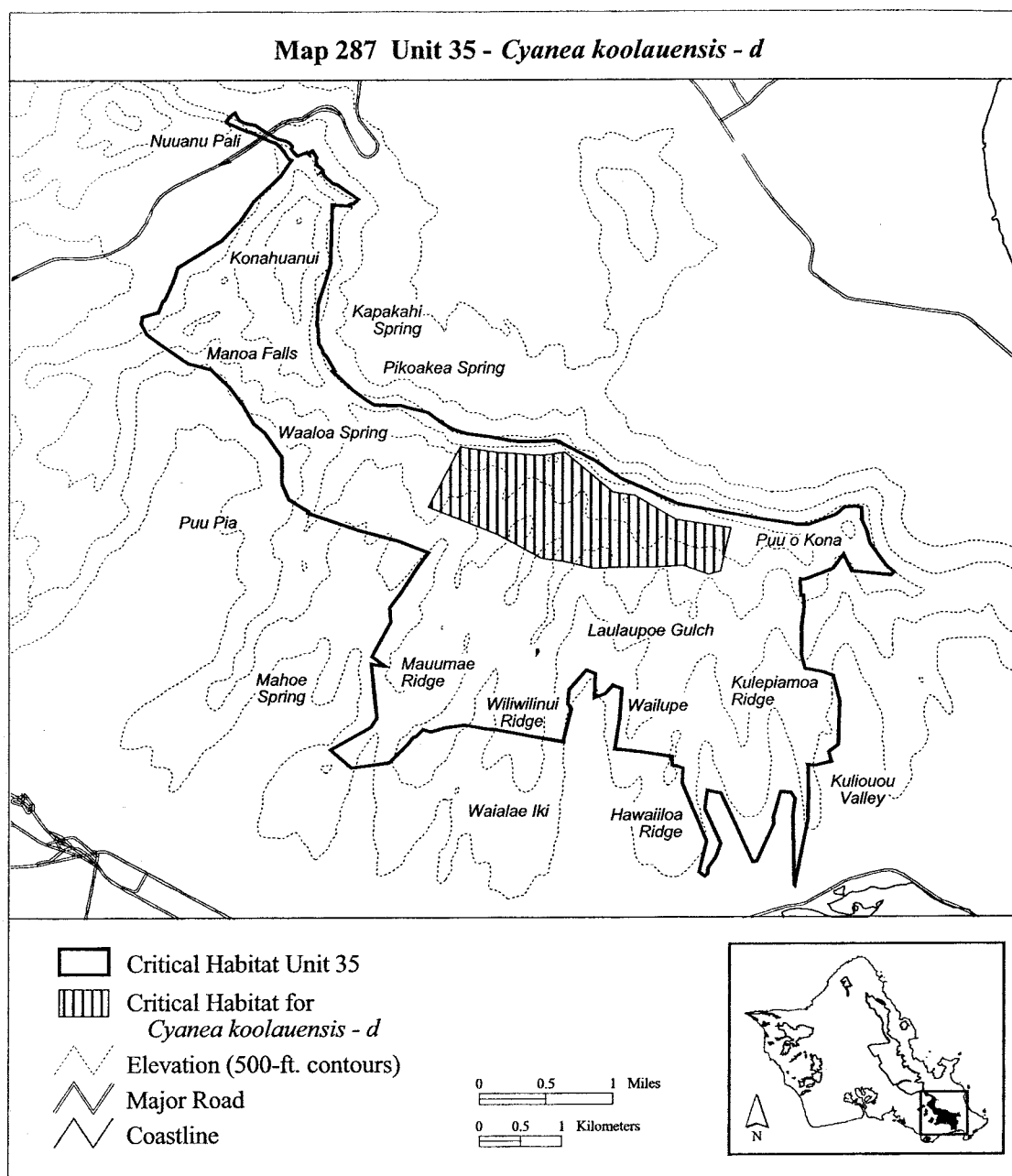
(287) Oahu 35—*Cyanea koolauensis*—d
(312 ha; 770 ac)

(i) Unit consists of the following 18
boundary points: Start at 627127,
2358746; 627509, 2359475; 627960,

2359406; 628481, 2359371; 628776,
2359406; 629349, 2358920; 629609,
2358885; 630095, 2358590; 630755,
2358486; 630633, 2357965; 630494,
2357930; 630182, 2358035; 629835,

2358017; 629349, 2358017; 629123,
2358000; 628759, 2358087; 628498,
2358121; 627960, 2358416; return to
starting point.

(ii) **Note:** Map 287 follows:



(288) Oahu 35—*Cyanea st.-johnii*—b
(135 ha; 333 ac)

(i) Unit consists of the following 130 boundary points: Start at 631368, 2358369; 631225, 2358417; 630942, 2358443; 630644, 2358485; 630309, 2358568; 630157, 2358621; 629922, 2358689; 629644, 2358804; 629414, 2358882; 629294, 2358919; 629105, 2359045; 628875, 2359217; 628671, 2359301; 628498, 2359322; 628211, 2359343; 628211, 2359338; 628130, 2359359; 627971, 2359359; 627800, 2359353; 627739, 2359353; 627541, 2359413; 627345, 2359461; 627279, 2359509; 627240, 2359564; 627120, 2359633; 627042, 2359681; 626985,

2359765; 626894, 2359771; 626654, 2359774; 626368, 2359843; 626188, 2359951; 625986, 2360138; 625854, 2360255; 625791, 2360325; 625791, 2360324; 625782, 2360335; 625770, 2360348; 625770, 2360349; 625743, 2360381; 625674, 2360463; 625620, 2360580; 625604, 2360637; 625601, 2360766; 625589, 2360905; 625550, 2361094; 625550, 2361199; 625544, 2361295; 625517, 2361365; 625511, 2361434; 625535, 2361527; 625535, 2361575; 625529, 2361692; 625598, 2361783; 625617, 2361903; 625605, 2362059; 625604, 2362059; 625556, 2362125; 625505, 2362177; 625493, 2362228; 625532, 2362258; 625562,

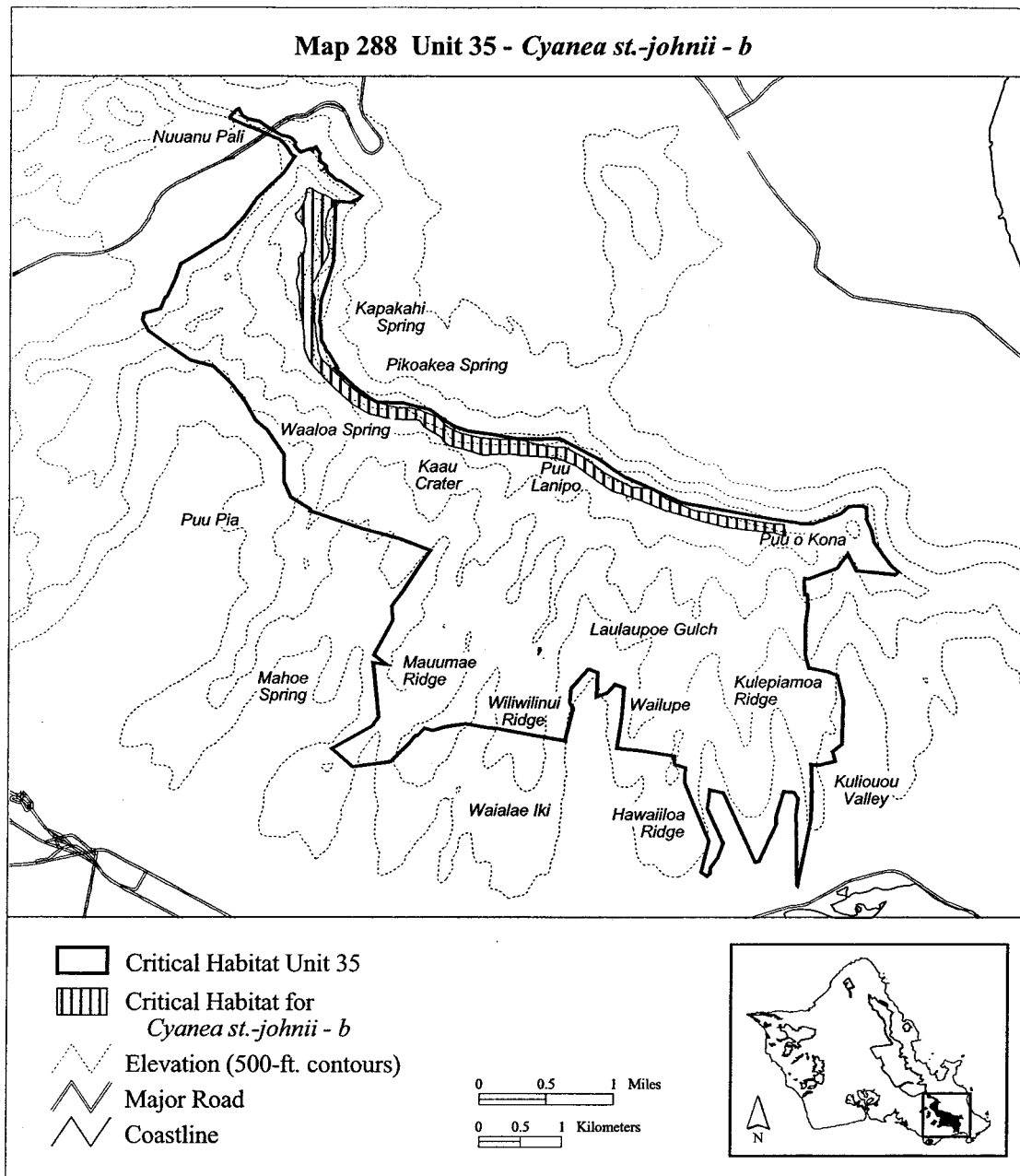
2362309; 625607, 2362414; 625623, 2362519; 625662, 2362540; 625689, 2362525; 625755, 2362489; 625848, 2362450; 625929, 2362408; 625956, 2362378; 625935, 2362312; 625887, 2362264; 625875, 2362219; 625857, 2362161; 625854, 2362080; 625851, 2362080; 625857, 2361951; 625881, 2361867; 625896, 2361774; 625869, 2361698; 625830, 2361629; 625773, 2361539; 625737, 2361449; 625698, 2361392; 625701, 2361298; 625731, 2361220; 625728, 2361151; 625719, 2361061; 625722, 2361004; 625722, 2360947; 625737, 2360896; 625749, 2360781; 625764, 2360664; 625764, 2360607; 625788, 2360550; 625815,

2360502; 625815, 2360499; 625875,
2360436; 626007, 2360306; 626104,
2360210; 626209, 2360129; 626338,
2360033; 626437, 2359991; 626636,
2359930; 626708, 2359918; 626744,
2359906; 626786, 2359912; 626867,
2359912; 626973, 2359891; 627201,

2359801; 627324, 2359681; 627466,
2359615; 627721, 2359552; 628004,
2359530; 628189, 2359539; 628189,
2359542; 628191, 2359541; 628409,
2359474; 628618, 2359442; 628734,
2359448; 628922, 2359343; 629000,
2359296; 629210, 2359134; 629398,

2359034; 629534, 2358966; 629754,
2358945; 629932, 2358830; 630262,
2358684; 630670, 2358610; 631214,
2358526; 631349, 2358518; return to
starting point.

(ii) **Note:** Map 288 follows:



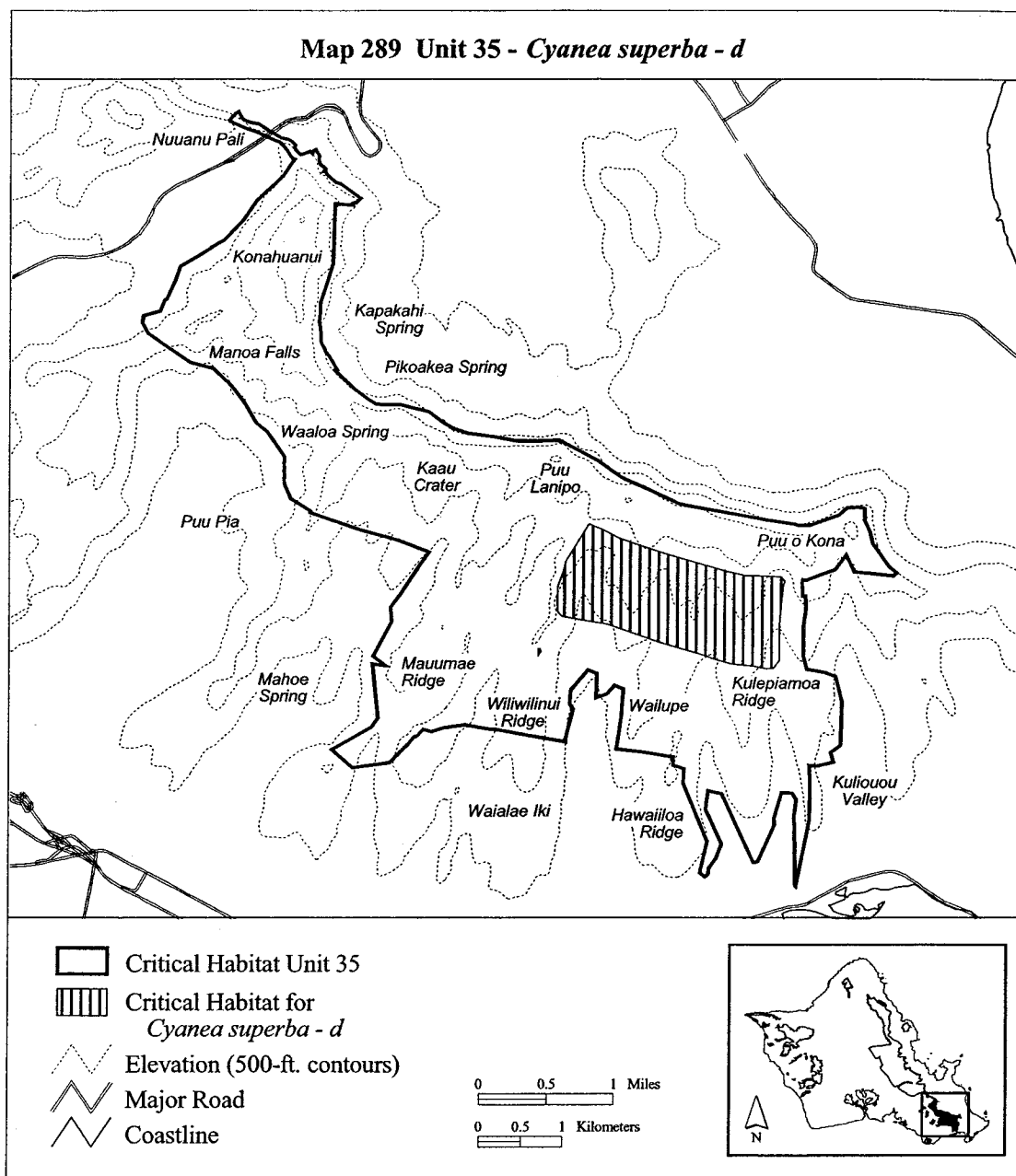
(289) Oahu 35—*Cyanea superba*—d
(282 ha; 697 ac)

(i) Unit consists of the following 38
boundary points: Start at 629040,
2358537; 629196, 2358469; 629405,
2358358; 629686, 2358265; 629978,
2358173; 630357, 2358061; 630692,
2357969; 630926, 2357915; 631052,

2357911; 631241, 2357906; 631348,
2357901; 631387, 2357847; 631373,
2357799; 631363, 2357706; 631343,
2357517; 631329, 2357327; 631329,
2357114; 631329, 2356890; 631261,
2356798; 631169, 2356793; 631023,
2356822; 630911, 2356837; 630765,
2356846; 630561, 2356905; 630372,
2356968; 630109, 2357046; 629866,

2357118; 629536, 2357235; 629254,
2357332; 628943, 2357386; 628714,
2357425; 628666, 2357488; 628666,
2357585; 628666, 2357687; 628666,
2357770; 628695, 2357852; 628744,
2357979; 628763, 2358081; return to
starting point.

(ii) **Note:** Map 289 follows:



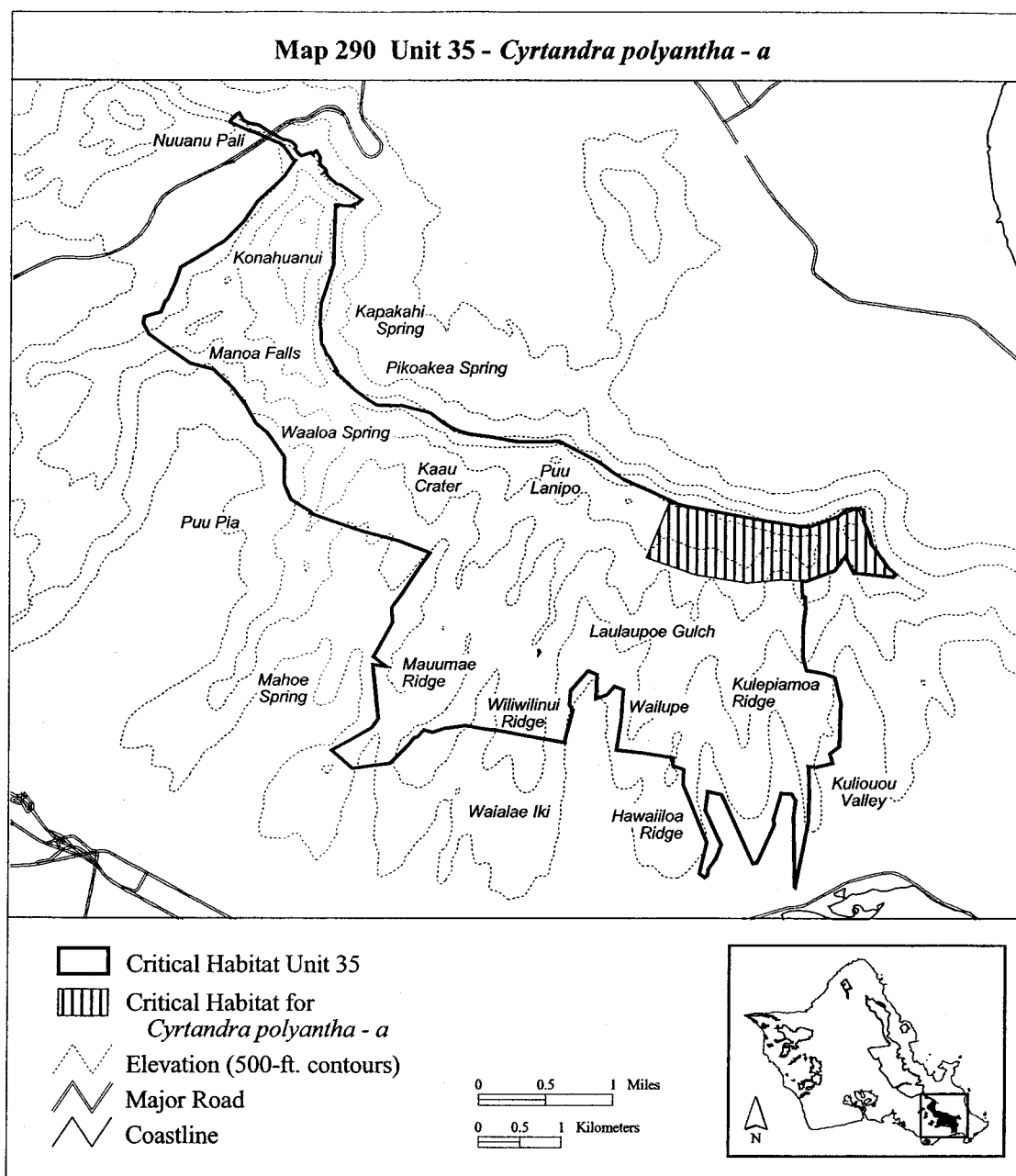
(290) Oahu 35—*Cyrtandra polyantha*—
a (190 ha; 469 ac)

(i) Unit consists of the following 21
boundary points: Start at 632692,
2357913; 632214, 2357962; 632118,

2358162; 631987, 2357985; 631642,
2357861; 631352, 2357878; 630945,
2357838; 630320, 2357935; 629723,
2358144; 629995, 2358800; 630879,
2358635; 631175, 2358587; 631506,
2358538; 631537, 2358522; 631694,

2358524; 632037, 2358651; 632266,
2358737; 632397, 2358444; 632436,
2358300; 632639, 2358025; 632725,
2357947; return to starting point.

(ii) **Note:** Map 290 follows:



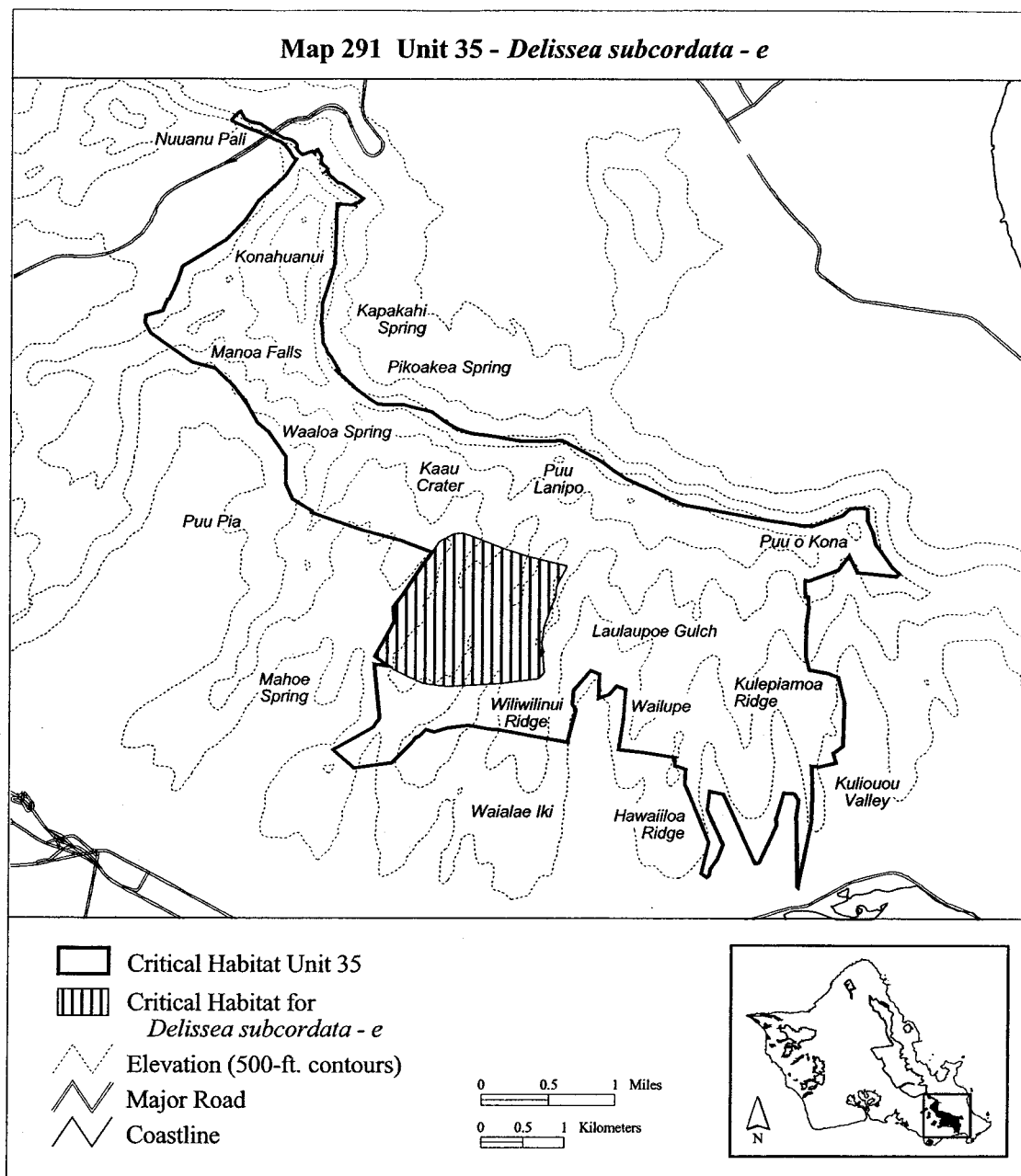
(291) Oahu 35—*Delissea subcordata*—e
(292 ha; 721 ac)

(i) Unit consists of the following 25
boundary points: Start at 626664,
2357534; 626795, 2357704; 627029,
2358053; 627224, 2358336; 627392,

2358423; 627502, 2358427; 627630,
2358379; 627953, 2358255; 628276,
2358149; 628736, 2358038; 628729,
2357998; 628614, 2357777; 628604,
2357670; 628469, 2357323; 628440,
2357112; 628469, 2356746; 628407,

2356682; 627935, 2356616; 627308,
2356585; 627034, 2356621; 626808,
2356718; 626676, 2356789; 626455,
2356942; 626679, 2357357; 626679,
2357358; return to starting point.

(ii) **Note:** Map 291 follows:



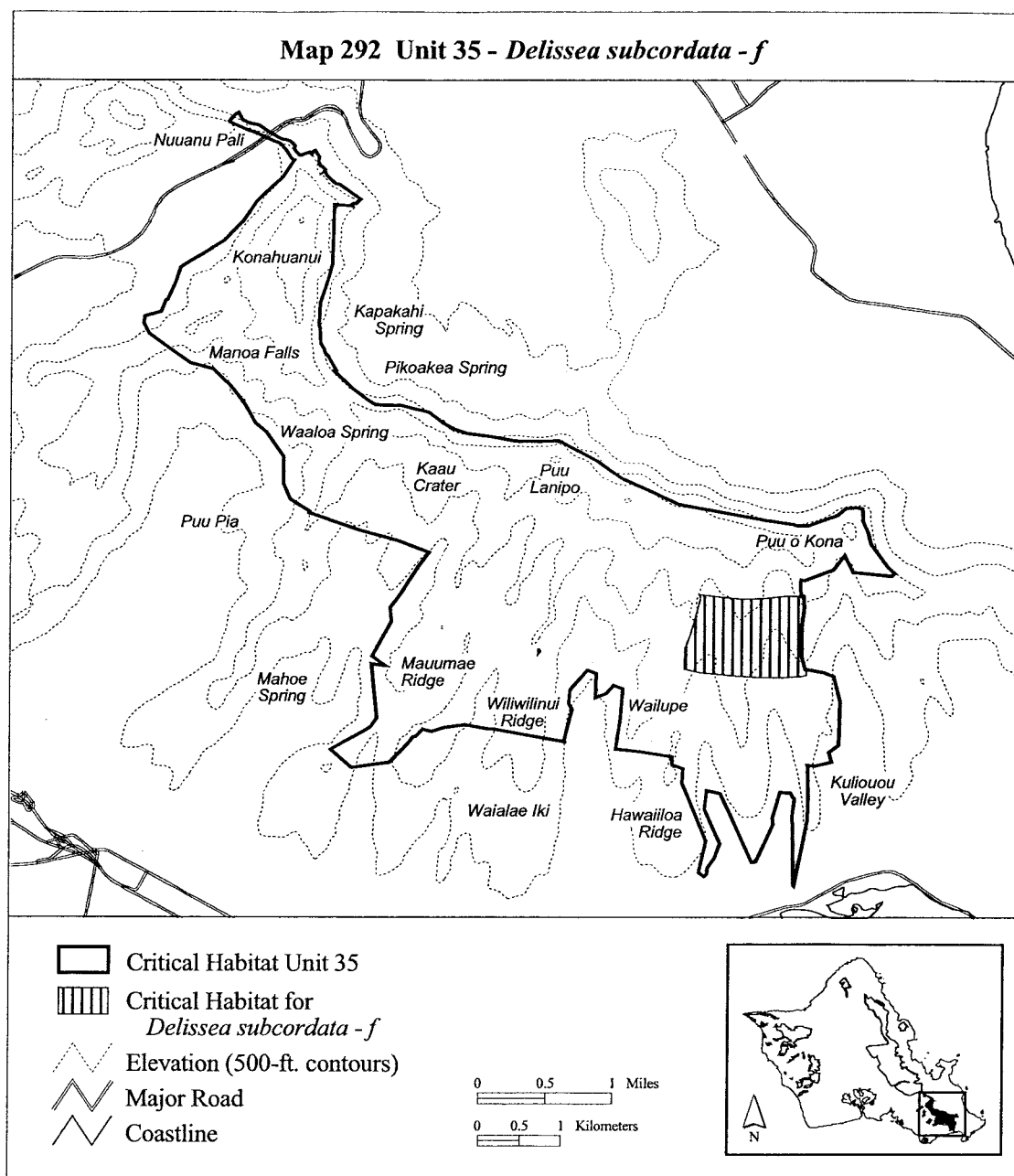
(292) Oahu 35—*Delissea subcordata*—f
(129 ha; 318 ac)

(i) Unit consists of the following 25 boundary points: Start at 630377, 2357689; 630601, 2357663; 630893, 2357636; 631140, 2357641; 631405,

2357672; 631635, 2357672; 631639, 2357530; 631617, 2357300; 631617, 2357133; 631616, 2357125; 631616, 2357124; 631617, 2357123; 631617, 2357097; 631613, 2356938; 631666, 2356743; 631666, 2356712; 631604,

2356699; 631374, 2356686; 631105, 2356686; 630791, 2356704; 630406, 2356739; 630195, 2356788; 630204, 2357034; 630272, 2357217; 630397, 2357642; return to starting point.

(ii) **Note:** Map 292 follows:



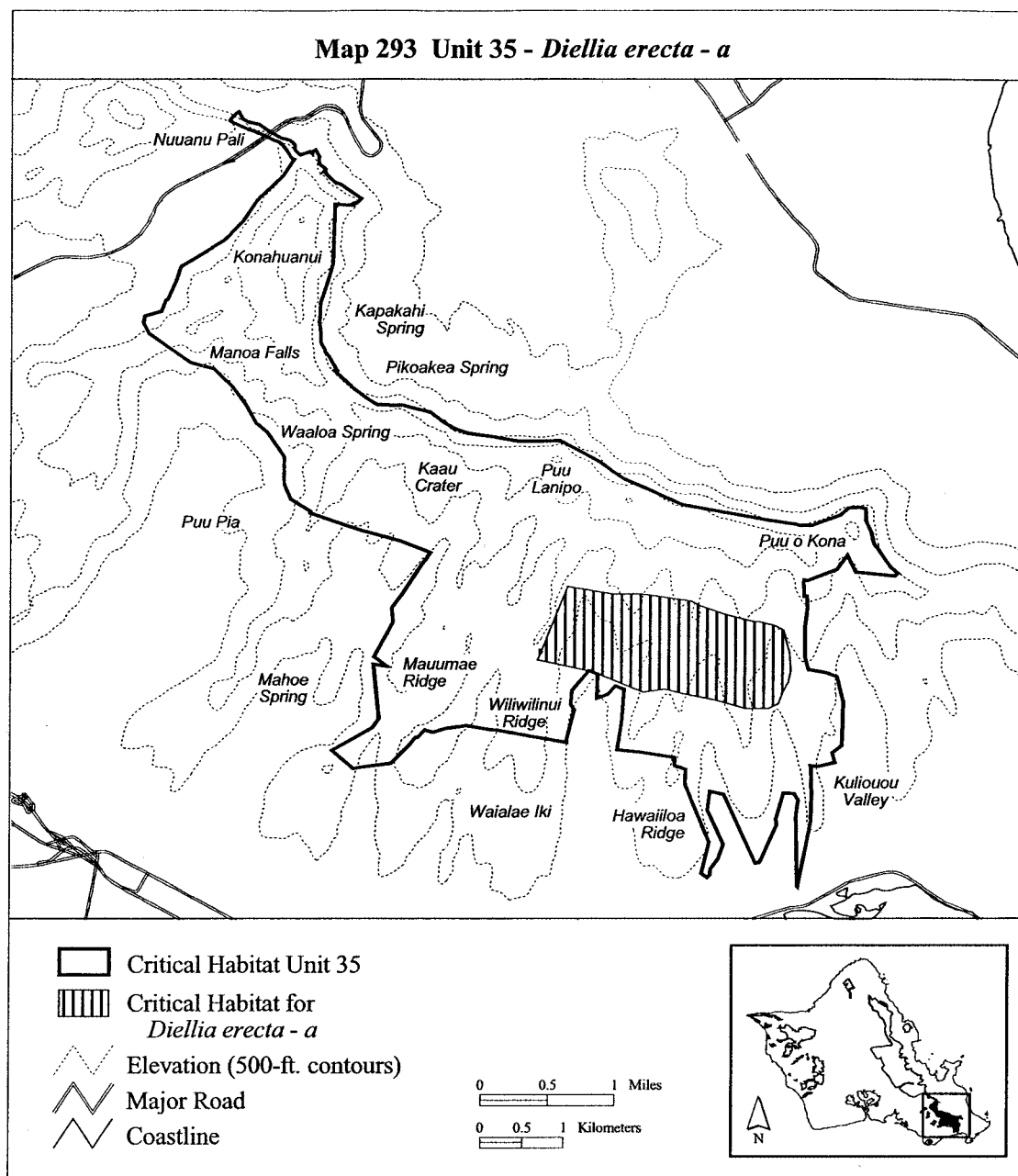
(293) Oahu 35—*Diellia erecta*—a (295 ha; 730 ac)

(i) Unit consists of the following 32 boundary points: Start at 629037, 2356776; 629036, 2356775; 629032, 2356777; 629030, 2356775; 628423, 2356903; 628417, 2356907; 628775,

2357794; 628842, 2357777; 629314, 2357699; 629642, 2357705; 629963, 2357653; 630249, 2357616; 630353, 2357564; 630664, 2357450; 630981, 2357372; 631080, 2357367; 631256, 2357320; 631355, 2357263; 631391, 2357118; 631433, 2356983; 631443, 2356765; 631417, 2356635; 631349,

2356511; 631298, 2356376; 631178, 2356319; 631043, 2356319; 630908, 2356319; 630540, 2356422; 630145, 2356505; 629943, 2356552; 629681, 2356520; 629147, 2356731; return to starting point.

(ii) **Note:** Map 293 follows:



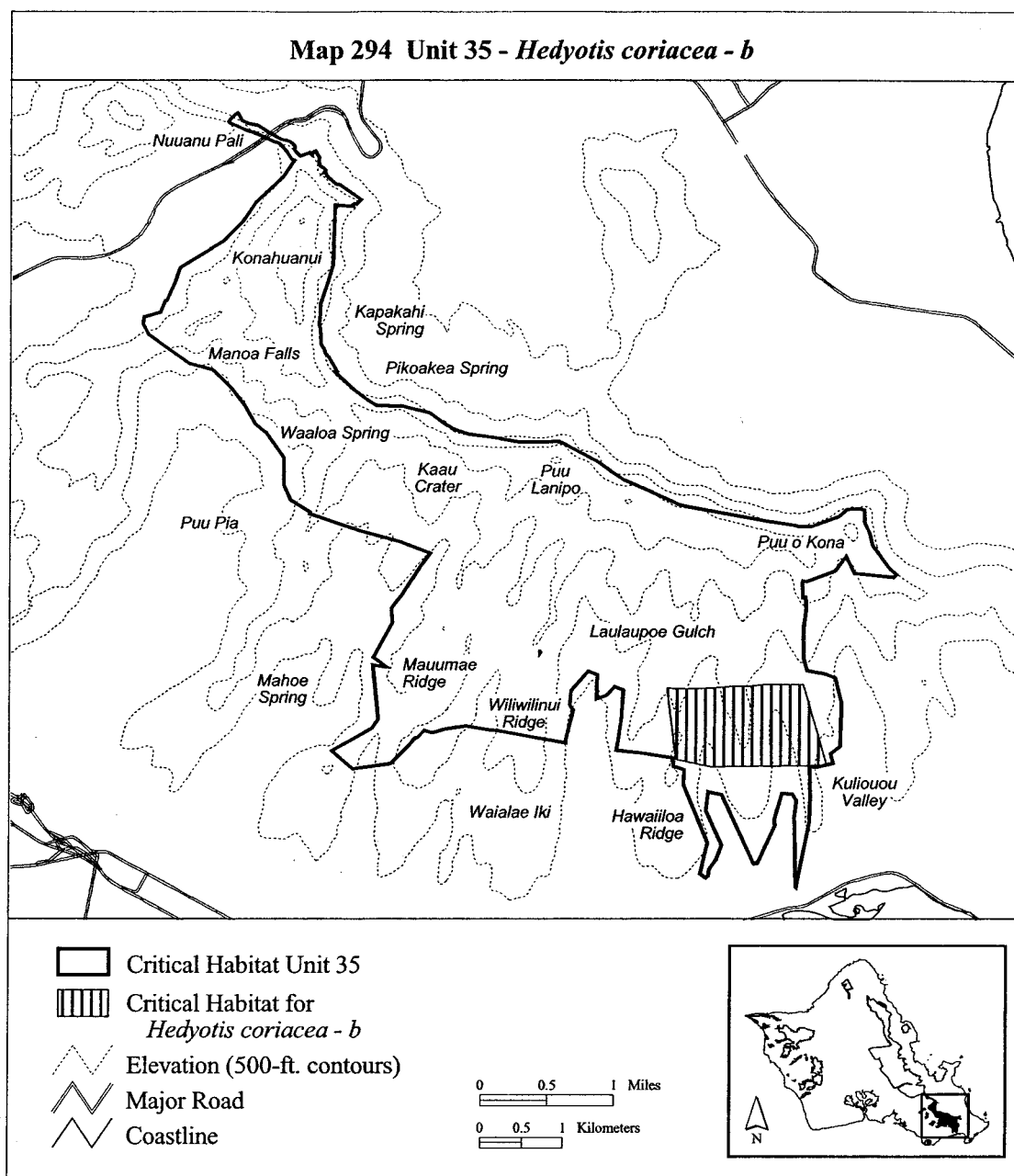
(294) Oahu 35—*Hedyotis coriacea*—b
(163 ha; 403 ac)

(i) Unit consists of the following 13
boundary points: Start at 629982,

2356572; 630184, 2356567; 630523,
2356580; 630771, 2356596; 630972,
2356596; 631144, 2356617; 631391,
2356622; 631609, 2356622; 631611,

2356622; 631896, 2355651; 631866,
2355644; 630509, 2355630; 630091,
2355715; return to starting point.

(ii) **Note:** Map 294 follows:



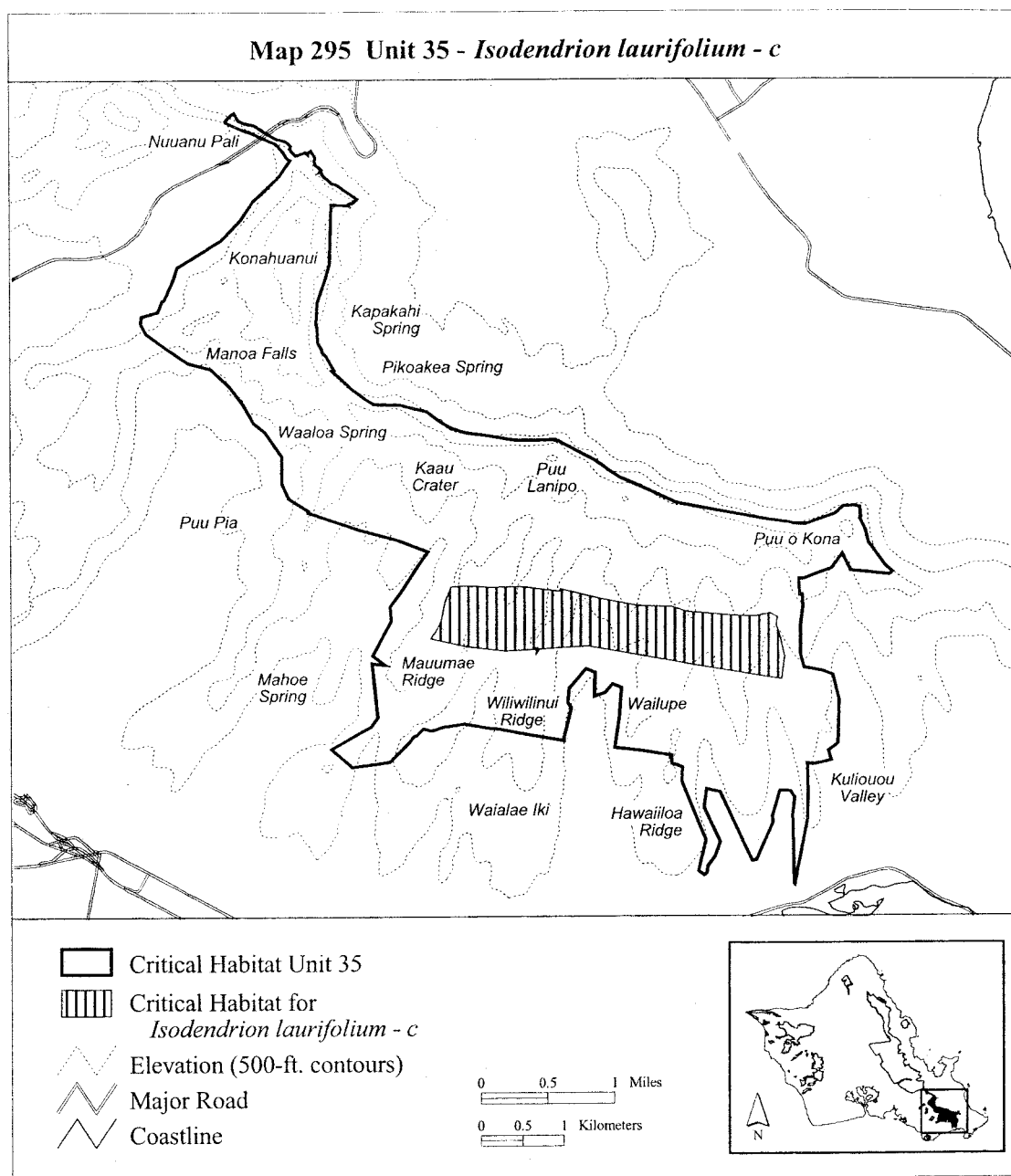
(295) Oahu 35—*Isodendron laurifolium*—c (277 ha; 685 ac)

(i) Unit consists of the following 31 boundary points: Start at 628725, 2357745; 629204, 2357630; 629647, 2357539; 630066, 2357524; 630242, 2357463; 630696, 2357423; 630898,

2357413; 631089, 2357413; 631256, 2357443; 631336, 2357398; 631321, 2357302; 631377, 2357140; 631427, 2356914; 631397, 2356712; 631390, 2356646; 630446, 2356803; 629057, 2357055; 628070, 2356995; 627577, 2357056; 627161, 2357148; 627222,

2357227; 627293, 2357373; 627333, 2357585; 627409, 2357772; 627540, 2357782; 627691, 2357777; 627868, 2357767; 628201, 2357771; 6282611, 628553, 2357740; 628721, 2357717; return to starting point.

(ii) **Note:** Map 295 follows:



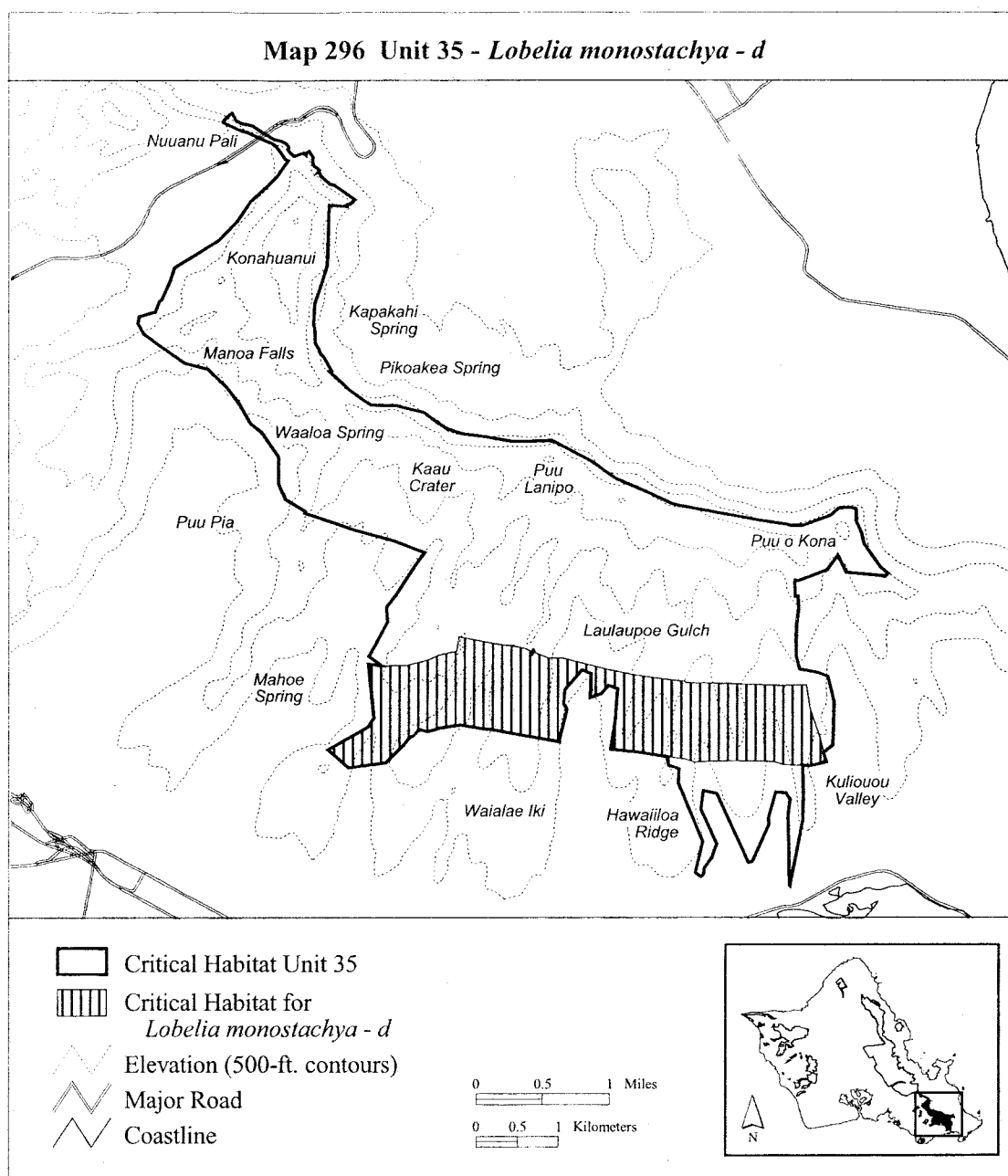
(296) Oahu 35—*Lobelia monostachya*—
d (492 ha; 1,216 ac)

(i) Unit consists of the following 69 boundary points: Start at 628771, 2355914; 628330, 2355988; 627926, 2356061; 627899, 2356066; 627897, 2356061; 627827, 2356068; 627571, 2356120; 627329, 2356083; 627168, 2356034; 627070, 2356065; 627069, 2356065; 626983, 2355978; 626965, 2355973; 626932, 2355944; 626890, 2355885; 626668, 2355663; 626214, 2355601; 625964, 2355819; 626441,

2356092; 626441, 2356093; 626521, 2356196; 626521, 2356197; 626450, 2356847; 626599, 2356831; 626914, 2356839; 627171, 2356897; 627303, 2356956; 627519, 2357004; 627545, 2357180; 627996, 2357095; 628115, 2357076; 628205, 2357073; 628202, 2357063; 628341, 2357040; 628623, 2356927; 628796, 2356927; 629324, 2356786; 629687, 2356713; 629991, 2356676; 630266, 2356636; 630266, 2356629; 630905, 2356614; 631414, 2356592; 631733, 2356599; 631785, 2356317; 631898, 2355976; 631979,

2355672; 631786, 2355624; 631477, 2355638; 631352, 2355671; 631183, 2355675; 630849, 2355682; 630596, 2355679; 630365, 2355668; 630259, 2355709; 630259, 2355704; 629683, 2355793; 629380, 2355827; 629412, 2356050; 629470, 2356546; 629349, 2356595; 629262, 2356488; 629132, 2356446; 629144, 2356746; 629042, 2356789; 628826, 2356538; 628817, 2356371; 628855, 2356304; 628771, 2355955; return to starting point.

(ii) **Note:** Map 296 follows:



(297) Oahu 35—*Lobelia oahuensis*—b
(151 ha; 373 ac)

(i) Unit consists of the following 140 boundary points: Start at 632026, 2358647; 632130, 2358731; 632266, 2358741; 632334, 2358725; 632340, 2358600; 632313, 2358547; 632193, 2358537; 631869, 2358401; 631670, 2358364; 631382, 2358364; 631225, 2358417; 630942, 2358443; 630644, 2358485; 630309, 2358568; 630157, 2358621; 629922, 2358689; 629644, 2358804; 629414, 2358882; 629294, 2358919; 629105, 2359045; 628875, 2359217; 628671, 2359301; 628498, 2359322; 628211, 2359343; 628211, 2359338; 628130, 2359359; 627971,

2359359; 627800, 2359353; 627739, 2359353; 627541, 2359413; 627345, 2359461; 627279, 2359509; 627240, 2359564; 627120, 2359633; 627042, 2359681; 626985, 2359765; 626894, 2359771; 626654, 2359774; 626368, 2359843; 626188, 2359951; 625986, 2360138; 625854, 2360255; 625791, 2360325; 625791, 2360324; 625782, 2360335; 625770, 2360348; 625770, 2360349; 625743, 2360381; 625674, 2360463; 625620, 2360580; 625604, 2360637; 625601, 2360766; 625589, 2360905; 625550, 2361094; 625550, 2361199; 625544, 2361295; 625517, 2361365; 625511, 2361434; 625535, 2361527; 625535, 2361575; 625529,

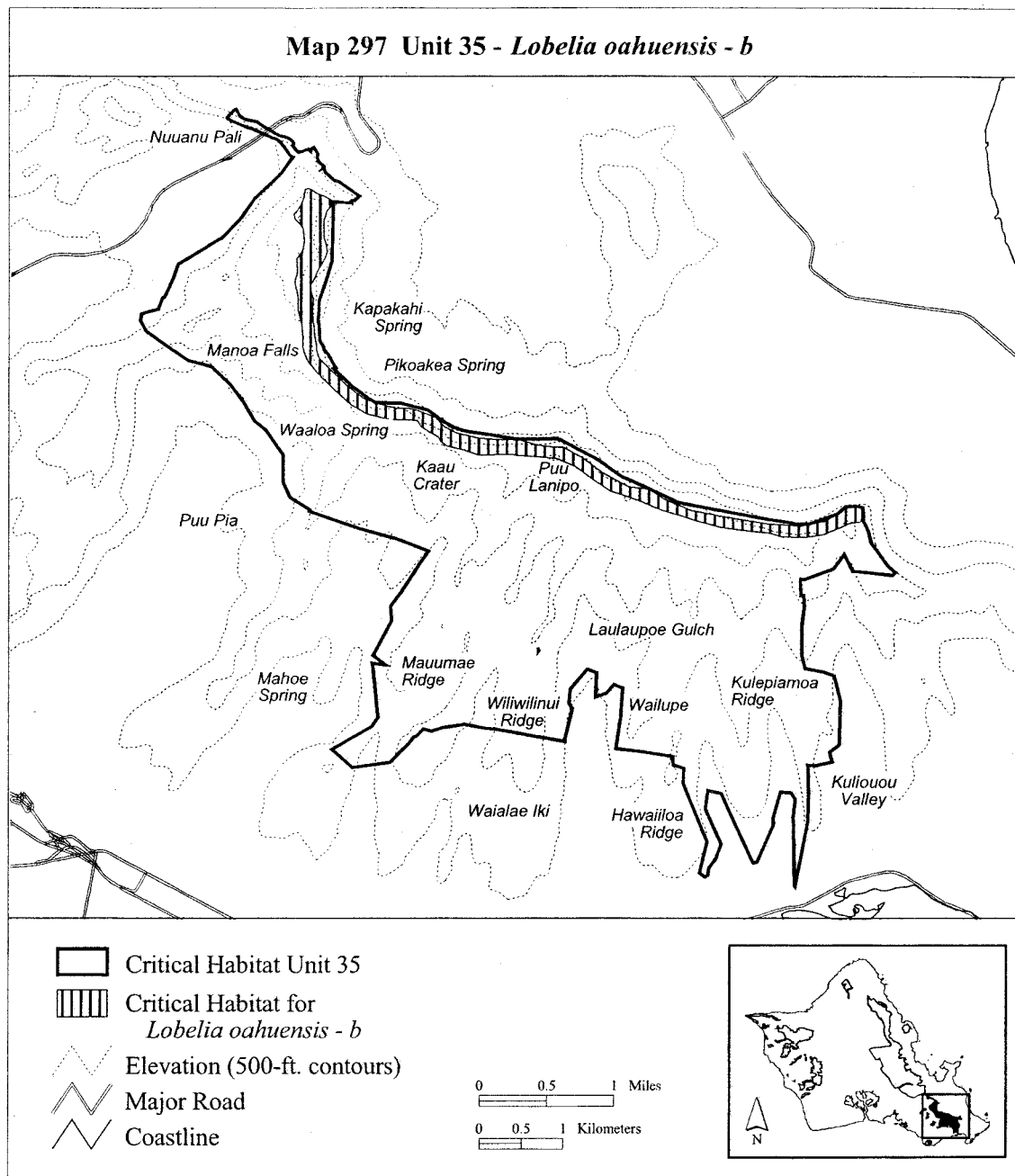
2361692; 625598, 2361783; 625617, 2361903; 625605, 2362059; 625604, 2362059; 625556, 2362125; 625505, 2362177; 625493, 2362228; 625532, 2362258; 625562, 2362309; 625607, 2362414; 625623, 2362519; 625662, 2362540; 625689, 2362525; 625755, 2362489; 625848, 2362450; 625929, 2362408; 625956, 2362378; 625935, 2362312; 625887, 2362264; 625875, 2362219; 625857, 2362161; 625854, 2362080; 625851, 2362080; 625857, 2361951; 625881, 2361867; 625896, 2361774; 625869, 2361698; 625830, 2361629; 625773, 2361539; 625737, 2361449; 625698, 2361392; 625701, 2361298; 625731, 2361220; 625728,

2361151; 625719, 2361061; 625722,
2361004; 625722, 2360947; 625737,
2360896; 625749, 2360781; 625764,
2360664; 625764, 2360607; 625788,
2360550; 625815, 2360502; 625815,
2360499; 625875, 2360436; 626007,
2360306; 626104, 2360210; 626209,
2360129; 626338, 2360033; 626437,
2359991; 626636, 2359930; 626708,

2359918; 626744, 2359906; 626786,
2359912; 626867, 2359912; 626973,
2359891; 627201, 2359801; 627324,
2359681; 627466, 2359615; 627721,
2359552; 628004, 2359530; 628189,
2359539; 628189, 2359542; 628191,
2359541; 628409, 2359474; 628618,
2359442; 628734, 2359448; 628922,
2359343; 629000, 2359296; 629210,

2359134; 629398, 2359034; 629534,
2358966; 629754, 2358945; 629932,
2358830; 630262, 2358684; 630670,
2358610; 631214, 2358526; 631607,
2358500; 631900, 2358563; return to
starting point.

(ii) **Note:** Map 297 follows:



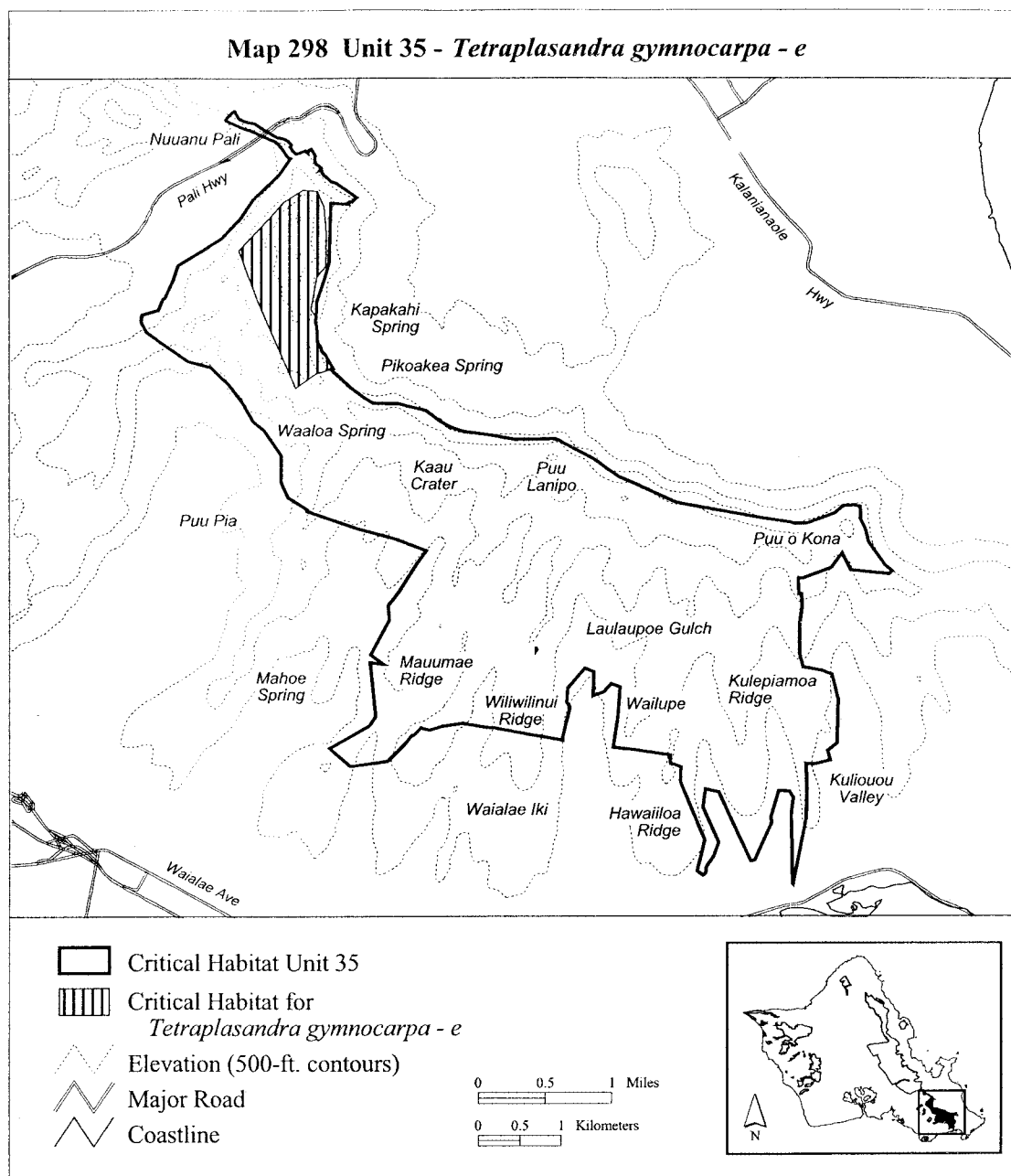
(298) Oahu 35—*Tetraplasandra gymnocarpa*—e (152 ha; 376 ac)

(i) Unit consists of the following 26 boundary points: Start at 625799, 2360900; 625804, 2360726; 625853,

2360646; 625861, 2360607; 625862, 2360607; 625910, 2360553; 626000, 2360395; 625793, 2360330; 625546, 2360155; 625079, 2361221; 625083, 2361221; 624866, 2361796; 624857, 2361800; 624927, 2361880; 625243,

2362209; 625408, 2362394; 625639, 2362532; 625810, 2362519; 625889, 2362334; 625916, 2361992; 625909, 2361622; 625797, 2361484; 625731, 2361115;

(ii) **Note:** Map 298 follows:



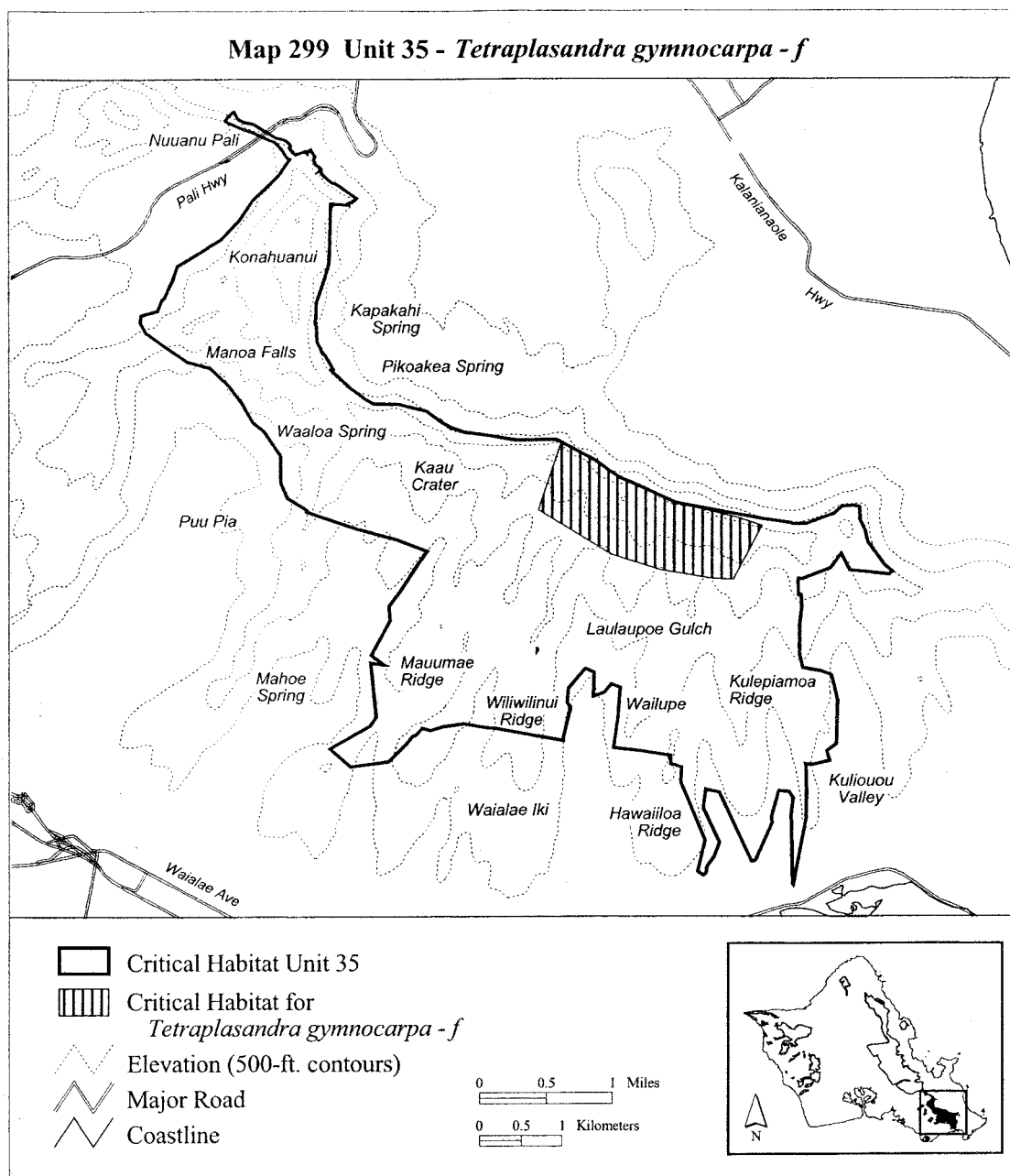
(299) Oahu 35—*Tetraplasandra gymnocarpa*—f (214 ha; 528 ac)

(i) Unit consists of the following 12 boundary points: Start at 628462,

2358693; 628739, 2359501; 629145, 2359298; 629149, 2359295; 629426, 2359091; 630077, 2358784; 630872, 2358597; 631161, 2358501; 630812,

2357850; 630522, 2357874; 629956, 2357970; 629330, 2358163; return to starting point.

(ii) **Note:** Map 299 follows:



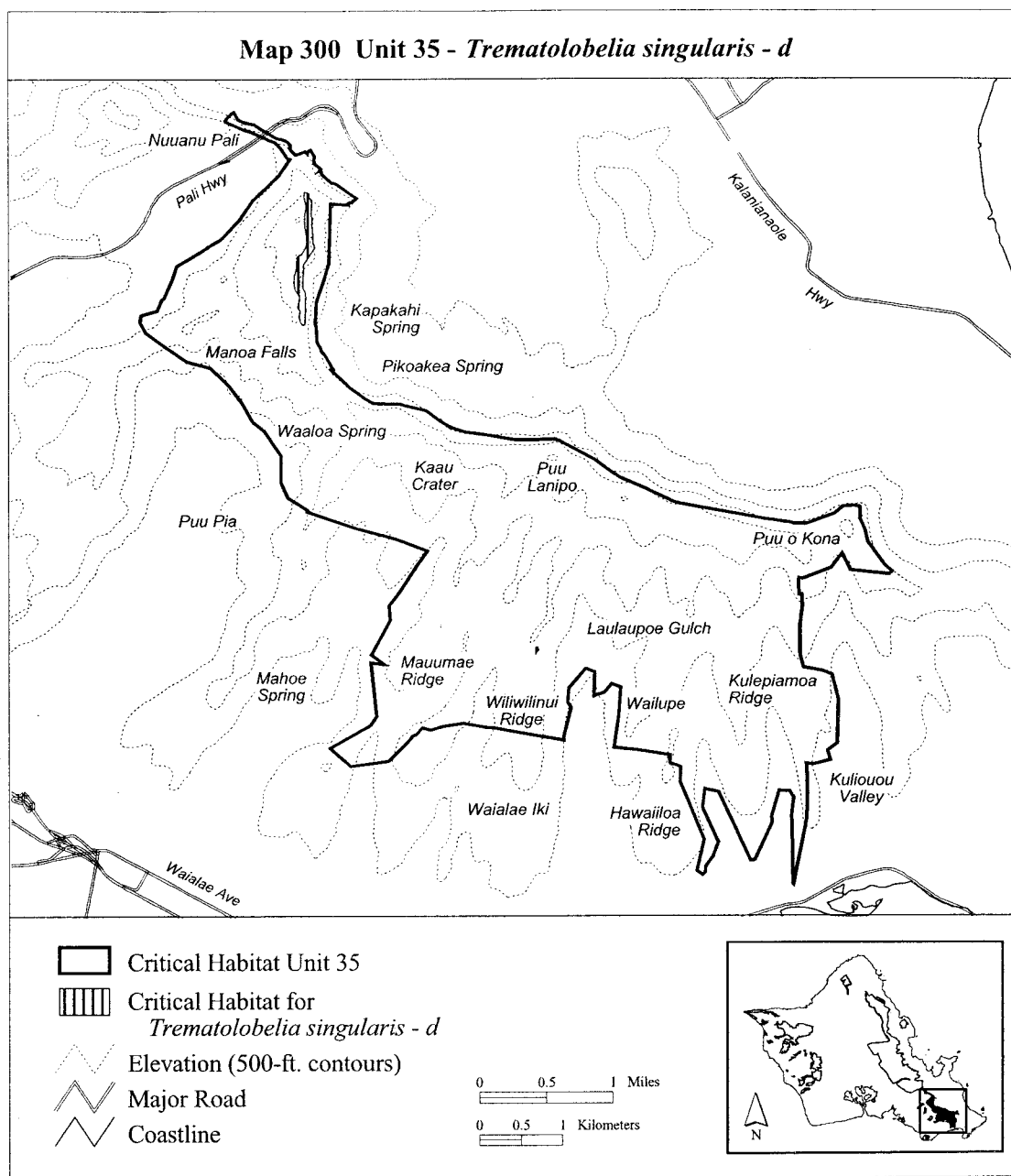
(300) Oahu 35—*Trematolobelia singularis*—d (14 ha; 33 ac)

(i) Unit consists of the following 52 boundary points: Start at 625675, 2362515; 625712, 2362499; 625712, 2362459; 625743, 2362418; 625743, 2362337; 625737, 2362257; 625750, 2362185; 625743, 2362126; 625759, 2362005; 625759, 2361924; 625778, 2361843; 625725, 2361759; 625690,

2361713; 625647, 2361644; 625641, 2361545; 625635, 2361458; 625635, 2361377; 625663, 2361327; 625669, 2361253; 625666, 2361153; 625672, 2361088; 625666, 2361057; 625666, 2360991; 625664, 2360972; 625659, 2360932; 625628, 2360932; 625600, 2360973; 625588, 2361019; 625603, 2361094; 625582, 2361122; 625579, 2361141; 625591, 2361212; 625597, 2361268; 625575, 2361299; 625544,

2361358; 625529, 2361427; 625526, 2361504; 625551, 2361554; 625566, 2361607; 625566, 2361682; 625569, 2361731; 625579, 2361747; 625625, 2361775; 625669, 2361849; 625684, 2361927; 625678, 2362005; 625663, 2362079; 625659, 2362157; 625659, 2362238; 625681, 2362341; 625653, 2362459; 625656, 2362521; return to starting point.

(ii) **Note:** Map 300 follows:



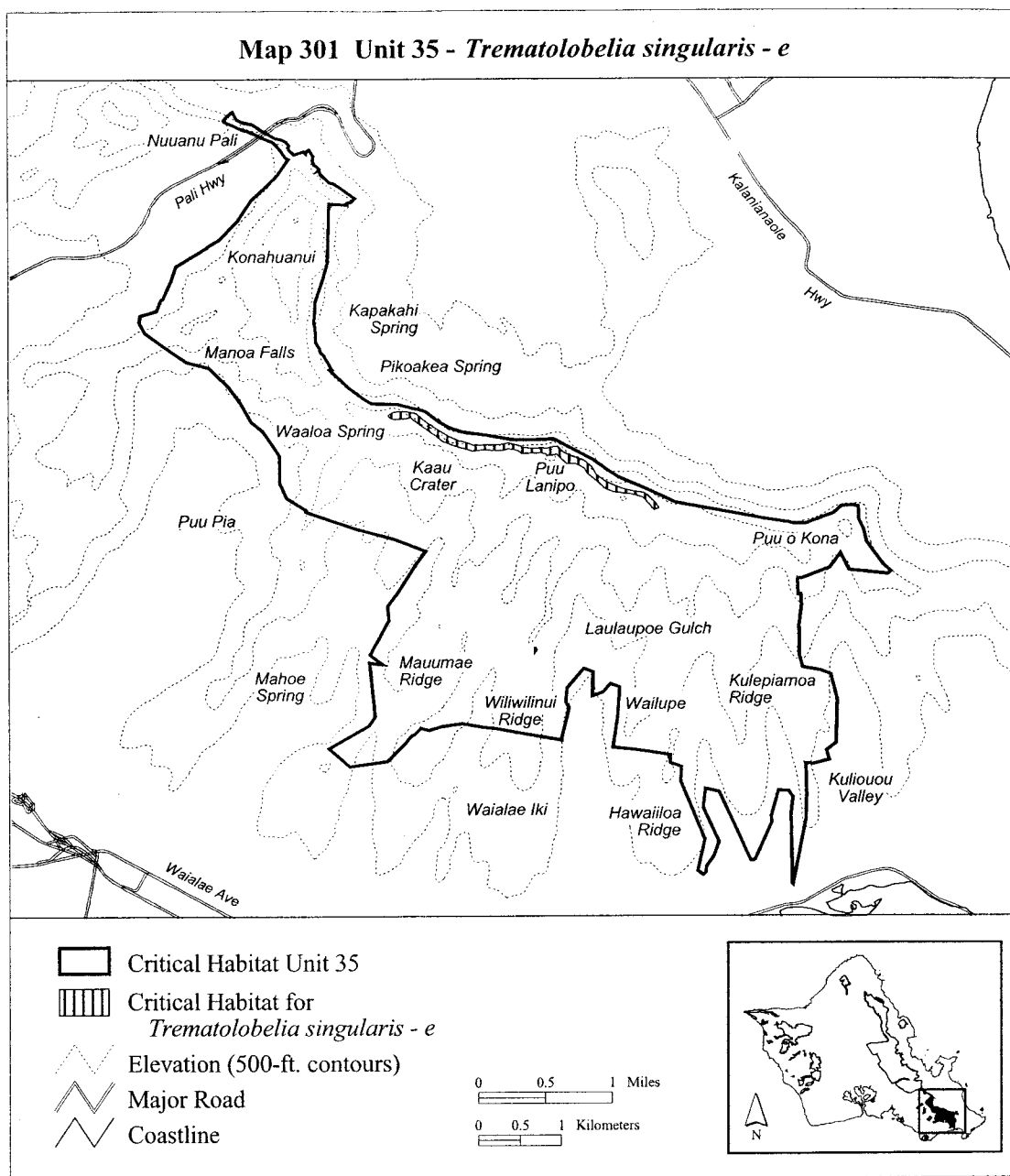
(301) Oahu 35—*Trematolobelia singularis*—e (14 ha; 33 ac)

(i) Unit consists of the following 52 boundary points: Start at 625675, 2362515; 625712, 2362499; 625712, 2362459; 625743, 2362418; 625743, 2362337; 625737, 2362257; 625750, 2362185; 625743, 2362126; 625759, 2362005; 625759, 2361924; 625778, 2361843; 625725, 2361759; 625690,

2361713; 625647, 2361644; 625641, 2361545; 625635, 2361458; 625635, 2361377; 625663, 2361327; 625669, 2361253; 625666, 2361153; 625672, 2361088; 625666, 2361057; 625666, 2360991; 625664, 2360972; 625659, 2360932; 625628, 2360932; 625600, 2360973; 625588, 2361019; 625603, 2361094; 625582, 2361122; 625579, 2361141; 625591, 2361212; 625597, 2361268; 625575, 2361299; 625544,

2361358; 625529, 2361427; 625526, 2361504; 625551, 2361554; 625566, 2361607; 625566, 2361682; 625569, 2361731; 625579, 2361747; 625625, 2361775; 625669, 2361849; 625684, 2361927; 625678, 2362005; 625663, 2362079; 625659, 2362157; 625659, 2362238; 625681, 2362341; 625653, 2362459; 625656, 2362521; return to starting point.

(ii) **Note:** Map 301 follows:



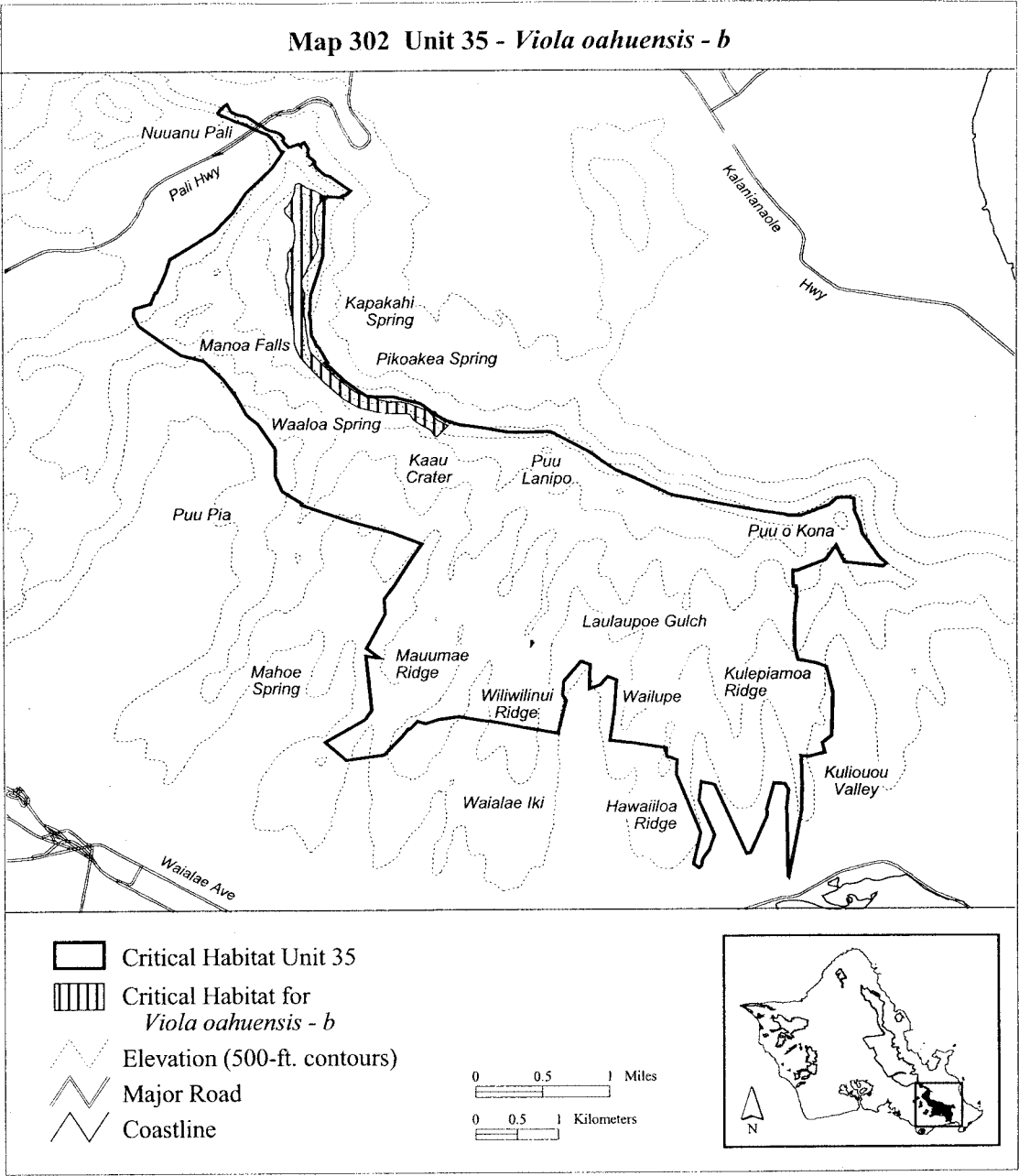
(302) Oahu 35—*Viola oahuensis*—b (75 ha; 186 ac)

(i) Unit consists of the following 90 boundary points: Start at 627315, 2359484; 627279, 2359509; 627240, 2359564; 627120, 2359633; 627042, 2359681; 626985, 2359765; 626894, 2359771; 626654, 2359774; 626368, 2359843; 626188, 2359951; 625986, 2360138; 625854, 2360255; 625791, 2360325; 625791, 2360324; 625782, 2360335; 625770, 2360348; 625770, 2360349; 625743, 2360381; 625674, 2360463; 625620, 2360580; 625604, 2360637; 625601, 2360766; 625589, 2360905; 625550, 2361094; 625550, 2361199; 625544, 2361295; 625517,

2361365; 625511, 2361434; 625535, 2361527; 625535, 2361575; 625529, 2361692; 625598, 2361783; 625617, 2361903; 625605, 2362059; 625604, 2362059; 625556, 2362125; 625505, 2362177; 625493, 2362228; 625532, 2362258; 625562, 2362309; 625607, 2362414; 625623, 2362519; 625662, 2362540; 625689, 2362525; 625755, 2362489; 625848, 2362450; 625929, 2362408; 625956, 2362378; 625935, 2362312; 625887, 2362264; 625875, 2362219; 625857, 2362161; 625854, 2362080; 625851, 2362080; 625857, 2361951; 625881, 2361867; 625896, 2361774; 625869, 2361698; 625830, 2361629; 625773, 2361539; 625737,

2361449; 625698, 2361392; 625701, 2361298; 625731, 2361220; 625728, 2361151; 625719, 2361061; 625722, 2361004; 625722, 2360947; 625737, 2360896; 625749, 2360781; 625764, 2360664; 625764, 2360607; 625788, 2360550; 625815, 2360502; 625815, 2360499; 625875, 2360436; 626007, 2360306; 626104, 2360210; 626209, 2360129; 626338, 2360033; 626437, 2359991; 626636, 2359930; 626708, 2359918; 626744, 2359906; 626786, 2359912; 626867, 2359912; 626973, 2359891; 627201, 2359801; 627324, 2359681; 627454, 2359620; return to starting point.

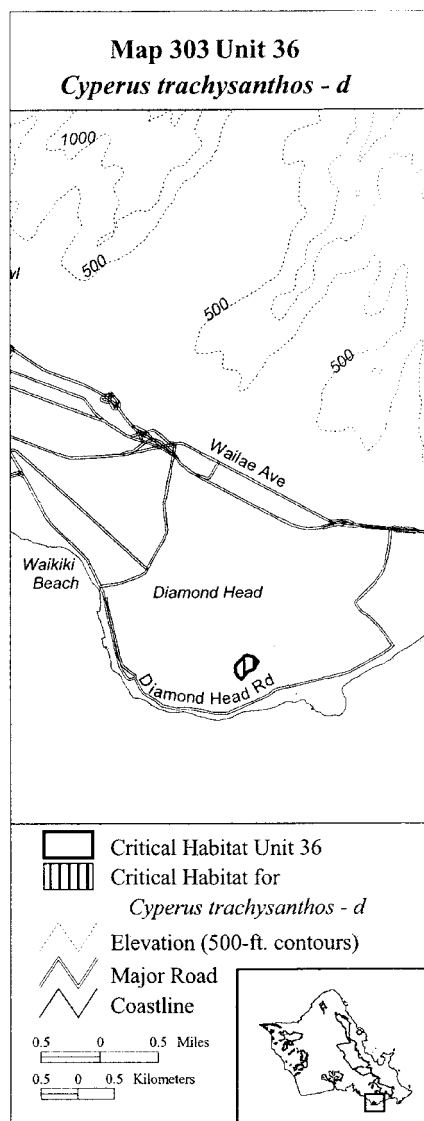
(ii) **Note:** Map 302 follows:



(303) Oahu 36—*Cyperus trachysanthos*—d (5 ha; 13 ac)

(i) Unit consists of the following 12 boundary points: Start at 624088, 2351393; 624025, 2351406; 623980, 2351471; 623984, 2351554; 624095, 2351675; 624119, 2351675; 624179, 2351675; 624234, 2351635; 624272, 2351572; 624224, 2351497; 624161, 2351479; 624161, 2351478; return to starting point.

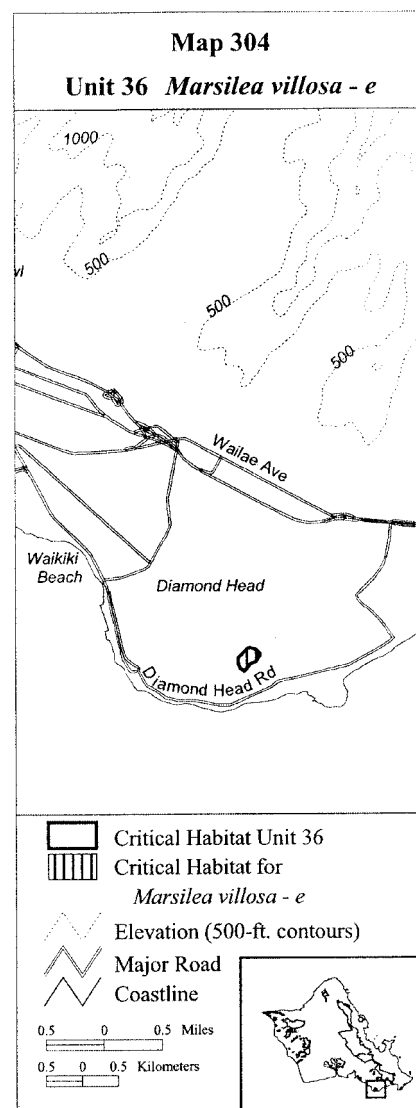
(ii) **Note:** Map 303 follows:



(304) Oahu 36—*Marsilea villosa*—e (6 ha; 14 ac)

(i) Unit consists of the following 13 boundary points: Start at 624140, 2351695; 624165, 2351693; 624226, 2351679; 624288, 2351612; 624292, 2351603; 624224, 2351497; 624161, 2351479; 624161, 2351478; 624071, 2351374; 624013, 2351406; 624000, 2351487; 624000, 2351571; 624112, 2351693; return to starting point.

(ii) **Note:** Map 304 follows:



BILLING CODE 4310-55-C

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

Unit name	Species occupied	Species unoccupied
Oahu 4— <i>Abutilon sandwicense</i> —a	<i>Abutilon sandwicense</i> .	<i>Adenophorus periens</i> .
Oahu 4— <i>Abutilon sandwicense</i> —b	<i>Abutilon sandwicense</i> .	
Oahu 4— <i>Abutilon sandwicense</i> —c	<i>Abutilon sandwicense</i> .	
Oahu 15— <i>Abutilon sandwicense</i> —d	<i>Abutilon sandwicense</i> .	
Oahu 15— <i>Abutilon sandwicense</i> —e	<i>Abutilon sandwicense</i> .	
Oahu 17— <i>Abutilon sandwicense</i> —f	<i>Abutilon sandwicense</i> .	
Oahu 20— <i>Adenophorus periens</i> —a .....	.....	
Oahu 4— <i>Alectryon macrococcus</i> —a	<i>Alectryon macrococcus</i> .	

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

Unit name	Species occupied	Species unoccupied
Oahu 15— <i>Alectryon macrococcus</i> —b	<i>Alectryon macrococcus</i> .	
Oahu 4— <i>Alsinidendron obovatum</i> —a	<i>Alsinidendron obovatum</i> .	
Oahu 4— <i>Alsinidendron obovatum</i> —b	<i>Alsinidendron obovatum</i>	<i>Alsinidendron obovatum</i> .
Oahu 15— <i>Alsinidendron obovatum</i> —c .....	.....	<i>Alsinidendron obovatum</i> .
Oahu 4— <i>Alsinidendron trinerve</i> —a	<i>Alsinidendron trinerve</i> .	
Oahu 2— <i>Bonamia menziesii</i> —a	<i>Bonamia menziesii</i> .	
Oahu 3— <i>Bonamia menziesii</i> —b	<i>Bonamia menziesii</i> .	
Oahu 4— <i>Bonamia menziesii</i> —c	<i>Bonamia menziesii</i> .	
Oahu 17— <i>Bonamia menziesii</i> —d	<i>Bonamia menziesii</i> .	
Oahu 35— <i>Bonamia menziesii</i> —e	<i>Bonamia menziesii</i> .	
Oahu 4— <i>Cenchrus agrimonioides</i> —a	<i>Cenchrus agrimonioides</i> .	
Oahu 4— <i>Cenchrus agrimonioides</i> —b	<i>Cenchrus agrimonioides</i> .	
Oahu 15— <i>Cenchrus agrimonioides</i> —c	<i>Cenchrus agrimonioides</i> .	
Oahu 15— <i>Cenchrus agrimonioides</i> —d	<i>Cenchrus agrimonioides</i> .	
Oahu 1— <i>Centaurium sebaeoides</i> —a .....	.....	<i>Centaurium sebaeoides</i> .
Oahu 27— <i>Centaurium sebaeoides</i> —b .....	.....	<i>Centaurium sebaeoides</i> .
Oahu 1— <i>Chamaesyce celastroides</i> var. <i>kaenana</i> —a	<i>Chamaesyce celastroides</i> var. <i>kaenana</i> .	
Oahu 3— <i>Chamaesyce celastroides</i> var. <i>kaenana</i> —b	<i>Chamaesyce celastroides</i> var. <i>kaenana</i> ..	
Oahu 4— <i>Chamaesyce celastroides</i> var. <i>kaenana</i> —c .....	.....	<i>Chamaesyce celastroides</i> var. <i>kaenana</i> .
Oahu 5— <i>Chamaesyce celastroides</i> var. <i>kaenana</i> —d	<i>Chamaesyce celastroides</i> var. <i>kaenana</i> .	
Oahu 35— <i>Chamaesyce celastroides</i> var. <i>kaenana</i> —e .....	.....	<i>Chamaesyce celastroides</i> var. <i>kaenana</i> .
Oahu 20— <i>Chamaesyce deppeana</i> —a .....	.....	<i>Chamaesyce deppeana</i> .
Oahu 35— <i>Chamaesyce deppeana</i> —b	<i>Chamaesyce deppeana</i> .	
Oahu 4— <i>Chamaesyce herbstii</i> —a	<i>Chamaesyce herbstii</i> .	
Oahu 15— <i>Chamaesyce herbstii</i> —b .....	.....	<i>Chamaesyce herbstii</i> .
Oahu 15— <i>Chamaesyce herbstii</i> —c	<i>Chamaesyce herbstii</i> .	
Oahu 9— <i>Chamaesyce kuwaleana</i> —a	<i>Chamaesyce kuwaleana</i> .	
Oahu 11— <i>Chamaesyce kuwaleana</i> —b	<i>Chamaesyce kuwaleana</i> .	
Oahu 12— <i>Chamaesyce kuwaleana</i> —c	<i>Chamaesyce kuwaleana</i> .	
Oahu 15— <i>Chamaesyce kuwaleana</i> —d .....	.....	<i>Chamaesyce kuwaleana</i> .
Oahu 22— <i>Chamaesyce kuwaleana</i> —e .....	.....	<i>Chamaesyce kuwaleana</i> .
Oahu 23— <i>Chamaesyce kuwaleana</i> —f .....	.....	<i>Chamaesyce kuwaleana</i> .
Oahu 26— <i>Chamaesyce kuwaleana</i> —g .....	.....	<i>Chamaesyce kuwaleana</i> .
Oahu 20— <i>Chamaesyce rockii</i> —a	<i>Chamaesyce rockii</i> .	
Oahu 20— <i>Chamaesyce rockii</i> —b .....	.....	<i>Chamaesyce rockii</i> .
Oahu 20— <i>Chamaesyce rockii</i> —c	<i>Chamaesyce rockii</i> .	
Oahu 4— <i>Colubrina oppositifolia</i> —a	<i>Colubrina oppositifolia</i> .	
Oahu 4— <i>Ctenitis squamigera</i> —a	<i>Ctenitis squamigera</i> .	
Oahu 4— <i>Cyanea acuminata</i> —a	<i>Cyanea acuminata</i> .	
Oahu 20— <i>Cyanea acuminata</i> —b	<i>Cyanea acuminata</i> .	
Oahu 20— <i>Cyanea crispa</i> —a	<i>Cyanea crispa</i> .	
Oahu 20— <i>Cyanea crispa</i> —b .....	.....	<i>Cyanea crispa</i> .
Oahu 21— <i>Cyanea crispa</i> —c	<i>Cyanea crispa</i> .	
Oahu 35— <i>Cyanea crispa</i> —d	<i>Cyanea crispa</i> .	
Oahu 20— <i>Cyanea grimesiana</i> ssp. <i>grimesiana</i> —a .....	.....	<i>Cyanea grimesiana</i> ssp. <i>grimesiana</i> .
Oahu 35— <i>Cyanea grimesiana</i> ssp. <i>grimesiana</i> —b	<i>Cyanea grimesiana</i> ssp. <i>grimesiana</i> .	
Oahu 4— <i>Cyanea grimesiana</i> ssp. <i>obatae</i> —a	<i>Cyanea grimesiana</i> ssp. <i>obatae</i> .	
Oahu 15— <i>Cyanea grimesiana</i> ssp. <i>obatae</i> —b	<i>Cyanea grimesiana</i> ssp. <i>obatae</i> .	
Oahu 15— <i>Cyanea grimesiana</i> ssp. <i>obatae</i> —c	<i>Cyanea grimesiana</i> ssp. <i>obatae</i> .	
Oahu 15— <i>Cyanea grimesiana</i> ssp. <i>obatae</i> —d	<i>Cyanea grimesiana</i> ssp. <i>obatae</i> .	
Oahu 20— <i>Cyanea humboltiana</i> —a	<i>Cyanea humboltiana</i> .	
Oahu 20— <i>Cyanea humboltiana</i> —b .....	.....	<i>Cyanea humboltiana</i> .
Oahu 20— <i>Cyanea humboltiana</i> —c .....	.....	<i>Cyanea humboltiana</i> .
Oahu 20— <i>Cyanea humboltiana</i> —d	<i>Cyanea humboltiana</i> .	
Oahu 35— <i>Cyanea humboltiana</i> —e	<i>Cyanea humboltiana</i> .	
Oahu 20— <i>Cyanea koolauensis</i> —a	<i>Cyanea koolauensis</i> .	
Oahu 20— <i>Cyanea koolauensis</i> —b	<i>Cyanea koolauensis</i> .	
Oahu 35— <i>Cyanea koolauensis</i> —c	<i>Cyanea koolauensis</i> .	
Oahu 35— <i>Cyanea koolauensis</i> —d	<i>Cyanea koolauensis</i> .	
Oahu 4— <i>Cyanea longiflora</i> —a	<i>Cyanea longiflora</i> .	
Oahu 4— <i>Cyanea longiflora</i> —b	<i>Cyanea longiflora</i> .	
Oahu 19— <i>Cyanea longiflora</i> —c .....	.....	<i>Cyanea longiflora</i> .
Oahu 15— <i>Cyanea pinnatifida</i> —a .....	.....	<i>Cyanea pinnatifida</i> .
Oahu 15— <i>Cyanea pinnatifida</i> —b .....	.....	<i>Cyanea pinnatifida</i> .
Oahu 15— <i>Cyanea pinnatifida</i> —c .....	.....	<i>Cyanea pinnatifida</i> .
Oahu 20— <i>Cyanea st.-johnii</i> —a	<i>Cyanea st.-johnii</i> .	
Oahu 35— <i>Cyanea st.-johnii</i> —b	<i>Cyanea st.-johnii</i> .	
Oahu 4— <i>Cyanea superba</i> —a .....	.....	<i>Cyanea superba</i> .
Oahu 4— <i>Cyanea superba</i> —b .....	.....	<i>Cyanea superba</i> .
Oahu 4— <i>Cyanea superba</i> —c .....	.....	<i>Cyanea superba</i> .
Oahu 35— <i>Cyanea superba</i> —d .....	.....	<i>Cyanea superba</i> .

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

Unit name	Species occupied	Species unoccupied
Oahu 20— <i>Cyanea truncata</i> —a	<i>Cyanea truncata</i> .	
Oahu 21— <i>Cyanea truncata</i> —b	<i>Cyanea truncata</i> .	
Oahu 1— <i>Cyperus trachysanthos</i> —a	<i>Cyperus trachysanthos</i> .	
Oahu 28— <i>Cyperus trachysanthos</i> —b		<i>Cyperus trachysanthos</i> .
Oahu 29— <i>Cyperus trachysanthos</i> —c		<i>Cyperus trachysanthos</i> .
Oahu 36— <i>Cyperus trachysanthos</i> —d	<i>Cyperus trachysanthos</i> .	
Oahu 4— <i>Cyrtandra dentata</i> —a	<i>Cyrtandra dentata</i> .	
Oahu 35— <i>Cyrtandra polyantha</i> —a	<i>Cyrtandra polyantha</i> .	
Oahu 20— <i>Cyrtandra subumbellata</i> —a	<i>Cyrtandra subumbellata</i> .	
Oahu 20— <i>Cyrtandra subumbellata</i> —b		<i>Cyrtandra subumbellata</i> .
Oahu 20— <i>Cyrtandra viridiflora</i> —a	<i>Cyrtandra viridiflora</i> .	
Oahu 4— <i>Delissea subcordata</i> —a	<i>Delissea subcordata</i> .	
Oahu 15— <i>Delissea subcordata</i> —b	<i>Delissea subcordata</i> .	
Oahu 15— <i>Delissea subcordata</i> —c	<i>Delissea subcordata</i> .	
Oahu 15— <i>Delissea subcordata</i> —d	<i>Delissea subcordata</i> .	
Oahu 35— <i>Delissea subcordata</i> —e		<i>Delissea subcordata</i> .
Oahu 35— <i>Delissea subcordata</i> —f		<i>Delissea subcordata</i> .
Oahu 35— <i>Diellia erecta</i> —a	<i>Diellia erecta</i> .	
Oahu 4— <i>Diellia falcata</i> —a		<i>Diellia falcata</i> .
Oahu 4— <i>Diellia falcata</i> —b	<i>Diellia falcata</i> .	
Oahu 15— <i>Diellia falcata</i> —c	<i>Diellia falcata</i> .	
Oahu 15— <i>Diellia falcata</i> —d	<i>Diellia falcata</i> .	
Oahu 15— <i>Diellia unisora</i> —a	<i>Diellia unisora</i> .	
Oahu 4— <i>Diplazium molokaiense</i> —a		<i>Diplazium molokaiense</i> .
Oahu 4— <i>Dubautia herbstobatae</i> —a		<i>Dubautia herbstobatae</i> .
Oahu 4— <i>Dubautia herbstobatae</i> —b		<i>Dubautia herbstobatae</i> .
Oahu 7— <i>Dubautia herbstobatae</i> —c		<i>Dubautia herbstobatae</i> .
Oahu 4— <i>Eragrostis fosbergii</i> —a	<i>Eragrostis fosbergii</i> .	
Oahu 4— <i>Eugenia koolauensis</i> —a	<i>Eugenia koolauensis</i> .	
Oahu 19— <i>Eugenia koolauensis</i> —b	<i>Eugenia koolauensis</i> .	
Oahu 20— <i>Eugenia koolauensis</i> —c	<i>Eugenia koolauensis</i> .	
Oahu 3— <i>Euphorbia haeleeeleana</i> —a	<i>Euphorbia haeleeeleana</i> .	
Oahu 4— <i>Euphorbia haeleeeleana</i> —b	<i>Euphorbia haeleeeleana</i> .	
Oahu 4— <i>Flueggea neowawraea</i> —a	<i>Flueggea neowawraea</i> .	
Oahu 15— <i>Gardenia mannii</i> —a	<i>Gardenia mannii</i> .	
Oahu 20— <i>Gardenia mannii</i> —b	<i>Gardenia mannii</i> .	
Oahu 20— <i>Gardenia mannii</i> —c		<i>Gardenia mannii</i> .
Oahu 4— <i>Gouania meyenii</i> —a	<i>Gouania meyenii</i> .	
Oahu 4— <i>Gouania meyenii</i> —b	<i>Gouania meyenii</i> .	
Oahu 15— <i>Gouania meyenii</i> —c		<i>Gouania meyenii</i> .
Oahu 31— <i>Gouania meyenii</i> —d		<i>Gouania meyenii</i> .
Oahu 2— <i>Gouania vitifolia</i> —a		<i>Gouania vitifolia</i> .
Oahu 3— <i>Gouania vitifolia</i> —b		<i>Gouania vitifolia</i> .
Oahu 5— <i>Gouania vitifolia</i> —c		<i>Gouania vitifolia</i> .
Oahu 4— <i>Gouania vitifolia</i> —d		<i>Gouania vitifolia</i> .
Oahu 4— <i>Gouania vitifolia</i> —e		<i>Gouania vitifolia</i> .
Oahu 4— <i>Gouania vitifolia</i> —f	<i>Gouania vitifolia</i> .	
Oahu 4— <i>Gouania vitifolia</i> —g		<i>Gouania vitifolia</i> .
Oahu 8— <i>Gouania vitifolia</i> —h	<i>Gouania vitifolia</i> .	
Oahu 15— <i>Hedyotis coriacea</i> —a		<i>Hedyotis coriacea</i> .
Oahu 35— <i>Hedyotis coriacea</i> —b		<i>Hedyotis coriacea</i> .
Oahu 4— <i>Hedyotis degeneri</i> —a	<i>Hedyotis degeneri</i> .	
Oahu 4— <i>Hedyotis degeneri</i> —b	<i>Hedyotis degeneri</i> .	
Oahu 4— <i>Hedyotis parvula</i> —a	<i>Hedyotis parvula</i> .	
Oahu 15— <i>Hedyotis parvula</i> —b		<i>Hedyotis parvula</i> .
Oahu 15— <i>Hedyotis parvula</i> —c		<i>Hedyotis parvula</i> .
Oahu 15— <i>Hedyotis parvula</i> —d	<i>Hedyotis parvula</i> .	
Oahu 4— <i>Hesperomannia arborescens</i> —a	<i>Hesperomannia arborescens</i> .	
Oahu 20— <i>Hesperomannia arborescens</i> —b	<i>Hesperomannia arborescens</i> .	
Oahu 4— <i>Hesperomannia arbuscula</i> —a	<i>Hesperomannia arbuscula</i> .	
Oahu 4— <i>Hesperomannia arbuscula</i> —b	<i>Hesperomannia arbuscula</i> .	
Oahu 15— <i>Hesperomannia arbuscula</i> —c		<i>Hesperomannia arbuscula</i> .
Oahu 15— <i>Hesperomannia arbuscula</i> —d		<i>Hesperomannia arbuscula</i> .
Oahu 15— <i>Hesperomannia arbuscula</i> —e	<i>Hesperomannia arbuscula</i> .	
Oahu 1— <i>Hibiscus brackenridgei</i> —a	<i>Hibiscus brackenridgei</i> .	
Oahu 4— <i>Hibiscus brackenridgei</i> —b	<i>Hibiscus brackenridgei</i> .	
Oahu 5— <i>Hibiscus brackenridgei</i> —c	<i>Hibiscus brackenridgei</i> .	
Oahu 4— <i>Isodendron laurifolium</i> —a	<i>Isodendron laurifolium</i> .	
Oahu 4— <i>Isodendron laurifolium</i> —b	<i>Isodendron laurifolium</i> .	
Oahu 35— <i>Isodendron laurifolium</i> —c		<i>Isodendron laurifolium</i> .
Oahu 4— <i>Isodendron longifolium</i> —a	<i>Isodendron longifolium</i> .	
Oahu 20— <i>Isodendron longifolium</i> —b		<i>Isodendron longifolium</i> .

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

Unit name	Species occupied	Species unoccupied
Oahu 5— <i>Isodendron pyriformis</i> —a		<i>Isodendron pyriformis</i> .
Oahu 16— <i>Isodendron pyriformis</i> —b		<i>Isodendron pyriformis</i> .
Oahu 17— <i>Isodendron pyriformis</i> —c		<i>Isodendron pyriformis</i> .
Oahu 4— <i>Labordia cyrtandrae</i> —a	<i>Labordia cyrtandrae</i> .	
Oahu 20— <i>Labordia cyrtandrae</i> —b		<i>Labordia cyrtandrae</i> .
Oahu 20— <i>Labordia cyrtandrae</i> —c	<i>Labordia cyrtandrae</i> .	
Oahu 4— <i>Lepidium arbuscula</i> —a	<i>Lepidium arbuscula</i> .	
Oahu 15— <i>Lepidium arbuscula</i> —b	<i>Lepidium arbuscula</i> .	
Oahu 15— <i>Lepidium arbuscula</i> —c	<i>Lepidium arbuscula</i> .	
Oahu 4— <i>Lipochaeta lobata</i> var. <i>leptophylla</i> —a	<i>Lipochaeta lobata</i> var. <i>leptophylla</i> .	
Oahu 15— <i>Lipochaeta lobata</i> var. <i>leptophylla</i> —b	<i>Lipochaeta lobata</i> var. <i>leptophylla</i> .	
Oahu 4— <i>Lipochaeta tenuifolia</i> —a	<i>Lipochaeta tenuifolia</i> .	
Oahu 4— <i>Lipochaeta tenuifolia</i> —b	<i>Lipochaeta tenuifolia</i> .	
Oahu 4— <i>Lipochaeta tenuifolia</i> —c	<i>Lipochaeta tenuifolia</i> .	
Oahu 20— <i>Lobelia gaudichaudii</i> ssp. <i>koolauensis</i> —a	<i>Lobelia gaudichaudii</i> ssp. <i>koolauensis</i> .	
Oahu 30— <i>Lobelia monostachya</i> —a		<i>Lobelia monostachya</i> .
Oahu 22— <i>Lobelia monostachya</i> —b	<i>Lobelia monostachya</i> .	
Oahu 33— <i>Lobelia monostachya</i> —c		<i>Lobelia monostachya</i> .
Oahu 35— <i>Lobelia monostachya</i> —d		<i>Lobelia monostachya</i> .
Oahu 4— <i>Lobelia niihauensis</i> —a	<i>Lobelia niihauensis</i> .	
Oahu 17— <i>Lobelia niihauensis</i> —b	<i>Lobelia niihauensis</i> .	
Oahu 20— <i>Lobelia oahuensis</i> —a	<i>Lobelia oahuensis</i> .	
Oahu 35— <i>Lobelia oahuensis</i> —b	<i>Lobelia oahuensis</i> .	
Oahu 20— <i>Lysimachia filifolia</i> —a	<i>Lysimachia filifolia</i> .	
Oahu 4— <i>Mariscus pennatiformis</i> —a		<i>Mariscus pennatiformis</i> .
Oahu 4— <i>Mariscus pennatiformis</i> —b		<i>Mariscus1 pennatiformis</i> .
Oahu 13— <i>Marsilea villosa</i> —a	<i>Marsilea villosa</i> .	
Oahu 14— <i>Marsilea villosa</i> —b	<i>Marsilea villosa</i> .	
Oahu 28— <i>Marsilea villosa</i> —c	<i>Marsilea villosa</i> .	
Oahu 29— <i>Marsilea villosa</i> —d		<i>Marsilea villosa</i> .
Oahu 36— <i>Marsilea villosa</i> —e		<i>Marsilea villosa</i> .
Oahu 20— <i>Melicope lydgatei</i> —a	<i>Melicope lydgatei</i> .	
Oahu 4— <i>Melicope pallida</i> —a		<i>Melicope pallida</i> .
Oahu 15— <i>Melicope pallida</i> —b		<i>Melicope pallida</i> .
Oahu 15— <i>Melicope pallida</i> —c		<i>Melicope pallida</i> .
Oahu 15— <i>Melicope pallida</i> —d		<i>Melicope pallida</i> .
Oahu 15— <i>Melicope pallida</i> —e	<i>Melicope pallida</i> .	
Oahu 15— <i>Melicope saint-johnii</i> —a	<i>Melicope saint-johnii</i> .	
Oahu 15— <i>Melicope saint-johnii</i> —b	<i>Melicope saint-johnii</i> .	
Oahu 20— <i>Myrsine juddii</i> —a	<i>Myrsine juddii</i> .	
Oahu 3— <i>Neraudia angulata</i> —a	<i>Neraudia angulata</i> .	
Oahu 4— <i>Neraudia angulata</i> —b	<i>Neraudia angulata</i> .	
Oahu 4— <i>Neraudia angulata</i> —c		<i>Neraudia angulata</i> .
Oahu 4— <i>Neraudia angulata</i> —d	<i>Neraudia angulata</i> .	
Oahu 4— <i>Neraudia angulata</i> —e	<i>Neraudia angulata</i> .	
Oahu 15— <i>Neraudia angulata</i> —f	<i>Neraudia angulata</i> .	
Oahu 3— <i>Nototrichium humile</i> —a	<i>Nototrichium humile</i> .	
Oahu 4— <i>Nototrichium humile</i> —b	<i>Nototrichium humile</i> .	
Oahu 4— <i>Nototrichium humile</i> —c	<i>Nototrichium humile</i> .	
Oahu 4— <i>Nototrichium humile</i> —d	<i>Nototrichium humile</i> .	
Oahu 4— <i>Peucedanum sandwicense</i> —a	<i>Peucedanum sandwicense</i> .	
Oahu 20— <i>Phlegmariurus nutans</i> —a	<i>Phlegmariurus nutans</i> .	
Oahu 4— <i>Phyllostegia hirsuta</i> —a	<i>Phyllostegia hirsuta</i> .	
Oahu 15— <i>Phyllostegia hirsuta</i> —b	<i>Phyllostegia hirsuta</i> .	
Oahu 15— <i>Phyllostegia hirsuta</i> —c	<i>Phyllostegia hirsuta</i> .	
Oahu 20— <i>Phyllostegia hirsuta</i> —d	<i>Phyllostegia hirsuta</i> .	
Oahu 4— <i>Phyllostegia kaalaensis</i> —a	<i>Phyllostegia kaalaensis</i> .	
Oahu 4— <i>Phyllostegia kaalaensis</i> —b	<i>Phyllostegia kaalaensis</i> .	
Oahu 4— <i>Phyllostegia kaalaensis</i> —c	<i>Phyllostegia kaalaensis</i> .	
Oahu 4— <i>Phyllostegia kaalaensis</i> —d		<i>Phyllostegia kaalaensis</i> .
Oahu 4— <i>Phyllostegia kaalaensis</i> —e	<i>Phyllostegia kaalaensis</i> .	
Oahu 15— <i>Phyllostegia kaalaensis</i> —f	<i>Phyllostegia kaalaensis</i> .	
Oahu 15— <i>Phyllostegia mollis</i> —a	<i>Phyllostegia mollis</i> .	
Oahu 15— <i>Phyllostegia mollis</i> —b	<i>Phyllostegia mollis</i> .	
Oahu 15— <i>Phyllostegia parviflora</i> —a		<i>Phyllostegia parviflora</i> .
Oahu 15— <i>Phyllostegia parviflora</i> —b	<i>Phyllostegia parviflora</i> .	
Oahu 15— <i>Phyllostegia parviflora</i> —c	<i>Phyllostegia parviflora</i> .	
Oahu 20— <i>Phyllostegia parviflora</i> —d	<i>Phyllostegia parviflora</i> .	
Oahu 4— <i>Plantago princeps</i> —a	<i>Plantago princeps</i> .	
Oahu 4— <i>Plantago princeps</i> —b		<i>Plantago princeps</i> .
Oahu 15— <i>Plantago princeps</i> —c	<i>Plantago princeps</i> .	
Oahu 20— <i>Plantago princeps</i> —d	<i>Plantago princeps</i> .	

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

Unit name	Species occupied	Species unoccupied
Oahu 20— <i>Plantago princeps</i> —e .....	.....	<i>Plantago princeps</i> .
Oahu 20— <i>Platanthera holochila</i> —a .....	.....	<i>Platanthera holochila</i> .
Oahu 20— <i>Platanthera holochila</i> —b .....	.....	<i>Platanthera holochila</i> .
Oahu 20— <i>Pteris lidgatei</i> —a	<i>Pteris lidgatei</i> .	
Oahu 20— <i>Pteris lidgatei</i> —b	<i>Pteris lidgatei</i> .	
Oahu 20— <i>Pteris lidgatei</i> —c	<i>Pteris lidgatei</i> .	
Oahu 4— <i>Sanicula mariversa</i> —a .....	.....	<i>Sanicula mariversa</i> .
Oahu 4— <i>Sanicula mariversa</i> —b .....	.....	<i>Sanicula mariversa</i> .
Oahu 4— <i>Sanicula mariversa</i> —c	<i>Sanicula mariversa</i> .	
Oahu 6— <i>Sanicula mariversa</i> —d	<i>Sanicula mariversa</i> .	
Oahu 15— <i>Sanicula mariversa</i> —e .....	.....	<i>Sanicula mariversa</i> .
Oahu 15— <i>Sanicula mariversa</i> —f .....	.....	<i>Sanicula mariversa</i> .
Oahu 20— <i>Sanicula purpurea</i> —a	<i>Sanicula purpurea</i> .	
Oahu 3— <i>Schiedea hookeri</i> —a	<i>Schiedea hookeri</i> .	
Oahu 4— <i>Schiedea hookeri</i> —b	<i>Schiedea hookeri</i> .	
Oahu 4— <i>Schiedea hookeri</i> —c	<i>Schiedea hookeri</i> .	
Oahu 4— <i>Schiedea hookeri</i> —d	<i>Schiedea hookeri</i> .	
Oahu 15— <i>Schiedea hookeri</i> —e	<i>Schiedea hookeri</i> .	
Oahu 15— <i>Schiedea hookeri</i> —f	<i>Schiedea hookeri</i> .	
Oahu 15— <i>Schiedea hookeri</i> —g	<i>Schiedea hookeri</i> .	
Oahu 4— <i>Schiedea kaalae</i> —a	<i>Schiedea kaalae</i> .	
Oahu 15— <i>Schiedea kaalae</i> —b	<i>Schiedea kaalae</i> .	
Oahu 15— <i>Schiedea kaalae</i> —c	<i>Schiedea kaalae</i> .	
Oahu 15— <i>Schiedea kaalae</i> —d	<i>Schiedea kaalae</i> .	
Oahu 20— <i>Schiedea kaalae</i> —e	<i>Schiedea kaalae</i> .	
Oahu 21— <i>Schiedea kaalae</i> —f	<i>Schiedea kaalae</i> .	
Oahu 1— <i>Schiedea kealiae</i> —a	<i>Schiedea kealiae</i> .	
Oahu 4— <i>Schiedea nuttallii</i> —a	<i>Schiedea nuttallii</i> .	
Oahu 15— <i>Schiedea nuttallii</i> —b .....	.....	<i>Schiedea nuttallii</i> .
Oahu 15— <i>Schiedea nuttallii</i> —c .....	.....	<i>Schiedea nuttallii</i> .
Oahu 1— <i>Sesbania tomentosa</i> —a	<i>Sesbania tomentosa</i> .	
Oahu 18— <i>Sesbania tomentosa</i> —b .....	.....	<i>Sesbania tomentosa</i> .
Oahu 4— <i>Silene lanceolata</i> —a	<i>Silene lanceolata</i> .	
Oahu 15— <i>Silene perlmannii</i> —a .....	.....	<i>Silene perlmannii</i> .
Oahu 15— <i>Silene perlmannii</i> —b .....	.....	<i>Silene perlmannii</i> .
Oahu 15— <i>Silene perlmannii</i> —c .....	.....	<i>Silene perlmannii</i> .
Oahu 15— <i>Silene perlmannii</i> —d .....	.....	<i>Silene perlmannii</i> .
Oahu 4— <i>Solanum sandwicense</i> —a .....	.....	<i>Solanum sandwicense</i> .
Oahu 15— <i>Solanum sandwicense</i> —b .....	.....	<i>Solanum sandwicense</i> .
Oahu 15— <i>Solanum sandwicense</i> —c	<i>Solanum sandwicense</i> .	
Oahu 5— <i>Spermolepis hawaiiensis</i> —a	<i>Spermolepis hawaiiensis</i> .	
Oahu 31— <i>Spermolepis hawaiiensis</i> —b	<i>Spermolepis hawaiiensis</i> .	
Oahu 15— <i>Stenogyne kanehoana</i> —a	<i>Stenogyne kanehoana</i> .	
Oahu 15— <i>Stenogyne kanehoana</i> —b .....	.....	<i>Stenogyne kanehoana</i> .
Oahu 4— <i>Tetramolopium filiforme</i> —a	<i>Tetramolopium filiforme</i> .	
Oahu 4— <i>Tetramolopium filiforme</i> —b	<i>Tetramolopium filiforme</i> .	
Oahu 4— <i>Tetramolopium lepidotum</i> ssp. <i>lepidotum</i> —a .....	.....	<i>Tetramolopium lepidotum</i> ssp. <i>lepidotum</i> .
Oahu 4— <i>Tetramolopium lepidotum</i> ssp. <i>lepidotum</i> —b	<i>Tetramolopium lepidotum</i> ssp. <i>lepidotum</i> .	
Oahu 15— <i>Tetramolopium lepidotum</i> ssp. <i>lepidotum</i> —c .....	.....	<i>Tetramolopium lepidotum</i> ssp. <i>lepidotum</i> .
Oahu 15— <i>Tetramolopium lepidotum</i> ssp. <i>lepidotum</i> —d .....	.....	<i>Tetramolopium lepidotum</i> ssp. <i>lepidotum</i> .
Oahu 15— <i>Tetramolopium lepidotum</i> ssp. <i>lepidotum</i> —e .....	.....	<i>Tetramolopium lepidotum</i> ssp. <i>lepidotum</i> .
Oahu 15— <i>Tetramolopium lepidotum</i> ssp. <i>lepidotum</i> —f .....	.....	<i>Tetramolopium lepidotum</i> ssp. <i>lepidotum</i> .
Oahu 20— <i>Tetraplasandra gymnocarpa</i> —a	<i>Tetraplasandra gymnocarpa</i> .	
Oahu 20— <i>Tetraplasandra gymnocarpa</i> —b	<i>Tetraplasandra gymnocarpa</i> .	
Oahu 20— <i>Tetraplasandra gymnocarpa</i> —c	<i>Tetraplasandra gymnocarpa</i> .	
Oahu 20— <i>Tetraplasandra gymnocarpa</i> —d	<i>Tetraplasandra gymnocarpa</i> .	
Oahu 35— <i>Tetraplasandra gymnocarpa</i> —e	<i>Tetraplasandra gymnocarpa</i> .	
Oahu 35— <i>Tetraplasandra gymnocarpa</i> —f	<i>Tetraplasandra gymnocarpa</i> .	
Oahu 20— <i>Trematolobelia singularis</i> —a .....	.....	<i>Trematolobelia singularis</i> .
Oahu 20— <i>Trematolobelia singularis</i> —b	<i>Trematolobelia singularis</i> .	
Oahu 34— <i>Trematolobelia singularis</i> —c .....	.....	<i>Trematolobelia singularis</i> .
Oahu 35— <i>Trematolobelia singularis</i> —d	<i>Trematolobelia singularis</i> .	
Oahu 35— <i>Trematolobelia singularis</i> —e	<i>Trematolobelia singularis</i> .	
Oahu 4— <i>Urera kaalae</i> —a .....	.....	<i>Urera kaalae</i> .
Oahu 4— <i>Urera kaalae</i> —b	<i>Urera kaalae</i> .	
Oahu 15— <i>Urera kaalae</i> —c	<i>Urera kaalae</i> .	
Oahu 15— <i>Urera kaalae</i> —d	<i>Urera kaalae</i> .	
Oahu 15— <i>Urera kaalae</i> —e	<i>Urera kaalae</i> .	
Oahu 15— <i>Urera kaalae</i> —f	<i>Urera kaalae</i> .	
Oahu 1— <i>Vigna o-wahuensis</i> —a .....	.....	<i>Vigna o-wahuensis</i> .
Oahu 24— <i>Vigna o-wahuensis</i> —b .....	.....	<i>Vigna o-wahuensis</i> .
Oahu 25— <i>Vigna o-wahuensis</i> —c .....	.....	<i>Vigna o-wahuensis</i> .

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

Unit name	Species occupied	Species unoccupied
Oahu 26— <i>Vigna o-wahuensis</i> —d .....	.....	<i>Vigna o-wahuensis</i>
Oahu 4— <i>Viola chamissoniana</i> ssp. <i>chamissoniana</i> —a ...	.....	<i>Viola chamissoniana</i> ssp. <i>chamissoniana</i> .
Oahu 4— <i>Viola chamissoniana</i> ssp. <i>chamissoniana</i> —b ...	.....	<i>Viola chamissoniana</i> ssp. <i>chamissoniana</i> .
Oahu 4— <i>Viola chamissoniana</i> ssp. <i>chamissoniana</i> —c ...	<i>Viola chamissoniana</i> ssp. <i>chamissoniana</i> .	
Oahu 10— <i>Viola chamissoniana</i> ssp. <i>chamissoniana</i> —d .....	.....	<i>Viola chamissoniana</i> ssp. <i>chamissoniana</i> .
Oahu 15— <i>Viola chamissoniana</i> ssp. <i>chamissoniana</i> —e ..	.....	<i>Viola chamissoniana</i> ssp. <i>chamissoniana</i> .
Oahu 15— <i>Viola chamissoniana</i> ssp. <i>chamissoniana</i> —f ..	<i>Viola chamissoniana</i> ssp. <i>chamissoniana</i> .	
Oahu 20— <i>Viola Oahuensis</i> —a	<i>Viola Oahuensis</i> .	
Oahu 35— <i>Viola Oahuensis</i> —b .....	.....	<i>Viola Oahuensis</i> .

(306) Critical habitat unit descriptions and maps, and a description of primary constituent elements, for Family Poaceae: *Panicum faurei* var. *carteri* on the island of Oahu is provided in 50 CFR 17.96(a).

(j) *Plants on Oahu; Constituent elements.*

(1) *Flowering plants.*

Family Amaranthaceae: *Nototrichium humile* (kului)

Oahu 3—*Nototrichium humile*—a, Oahu 4—*Nototrichium humile*—b, Oahu 4—*Nototrichium humile*—c, and Oahu 4—*Nototrichium humile*—d, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Nototrichium humile* on Oahu.

Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Cliff faces, gulches, stream banks, or steep slopes in dry or mesic forests often dominated by *Diospyros sandwicensis* or *Sapindus oahuensis* and containing one or more of the following associated native plant species: *Abutilon sandwicense*, *Alyxia oliviformis*, *Antidesma pulvinatum*, *Artemisia australis*, *Bidens cervicata*, *Canavalia* sp., *Carex wahuensis*, *Charpentiera* sp., *Dodonaea viscosa*, *Elaeocarpus bifidus*, *Erythrina sandwicensis*, *Eugenia reinwardtiana*, *Hibiscus* sp., *Melanthra tenuis*, *Metrosideros polymorpha*, *Myoporum sandwicense*, *Myrsine lanaiensis*, *Nestegis sandwicensis*, *Peperomia* sp., *Pisonia umbellifera*, *Pleomele* sp., *Pouteria sandwicensis*, *Psychodora odorata*, *Rauvolfia sandwicensis*, *Reynoldsia sandwicensis*, *Sicyos* sp., *Stenogyne* sp., *Streblus pendulinus*, or *Syzygium sandwicensis*; and

(ii) Elevations between 185 and 806 m (607 and 2,644 ft).

Family Apiaceae: *Peucedanum sandwicense* (makou)

Oahu 4—*Peucedanum sandwicense*—a, identified in the legal description in paragraph (i) of this section, constitutes critical habitat for *Peucedanum sandwicense* on Oahu. Within this unit,

currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Cliffs, slopes, or ridges in *Metrosideros polymorpha* lowland mesic forest containing one or more of the following associated native plant species: *Artemisia australis*, *Carex meyenii*, *Dianella sandwicensis*, *Dodonaea viscosa*, *Eragrostis* sp., *Lepidium bidentatum* var. *o-waihiense*, *Melanthra integrifolia*, *Osteomeles anthyllidifolia*, *Peperomia remyi*, *Pittosporum halophilum*, *Plechranthus parviflorus*, *Plumbago zeylanica*, *Portulaca lutea*, *Reynoldsia sandwicensis*, *Santalum ellipticum*, *Scaevola sericea*, *Schiedea globosa*, *Senna gaudichaudii*, or *Sida fallax*; and

(ii) Elevations between 469 and 977 m (1,538 and 3,205 ft).

Family Apiaceae: *Sanicula mariversa* (NCN)

Oahu 4—*Sanicula mariversa*—a, Oahu 4—*Sanicula mariversa*—b, Oahu 4—*Sanicula mariversa*—c, Oahu 6—*Sanicula mariversa*—d, Oahu 15—*Sanicula mariversa*—e, and Oahu 15—*Sanicula mariversa*—f, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Sanicula mariversa* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Well-drained, dry slopes or rock faces in mesic shrublands or open grassy areas and containing one or more of the following associated native plant species: *Bidens torta*, *Carex meyenii*, *Doryopteris* sp., *Eragrostis* sp., *Metrosideros polymorpha*, or *Metrosideros tremuloides*; and

(ii) Elevations between 475 and 1,025 m (1,558 and 3,362 ft).

Family Apiaceae: *Sanicula purpurea* (NCN)

Oahu 20—*Sanicula purpurea*—a, identified in the legal description in paragraph (i) of this section, constitutes critical habitat for *Sanicula purpurea* on

Oahu. Within this unit, currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Open *Metrosideros polymorpha* mixed montane bogs or windswept shrublands within the cloud zone containing one or more of the following associated native plant species: *Bidens* sp., *Cheirodendron* sp., *Dicanthelium koolauense*, *Gahnia beechyi*, *Leptecophylla tameiameia*, *Lycopodium* sp., *Machaerina angustifolia*, *Plantago pachyphylla*, *Sadleria pallida*, or *Vaccinium* sp.; and

(ii) Elevations between 415 and 871 m (1,361 and 2,857 ft).

Family Apiaceae: *Spermolepis hawaiiensis* (NCN)

Oahu 5—*Spermolepis hawaiiensis*—a and Oahu 31—*Spermolepis hawaiiensis*—b, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Spermolepis hawaiiensis* on Oahu.

Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep or vertical cliffs or the base of cliffs or ridges in coastal dry cliff vegetation containing one or more of the following associated native plant species: *Artemisia australis*, *Bidens* sp., *Dodonaea viscosa*, *Doryopteris* sp., *Heteropogon contortus*, *Santalum ellipticum*, or *Waltheria indica*; and

(ii) Elevations between 25 to 306 m (82 to 1,004 ft).

Family Araliaceae: *Tetraplasandra gymnocarpa* (oheohe)

Oahu 20—*Tetraplasandra gymnocarpa*—a, Oahu 20—*Tetraplasandra gymnocarpa*—b, Oahu 20—*Tetraplasandra gymnocarpa*—c, Oahu 20—*Tetraplasandra gymnocarpa*—d, Oahu 35—*Tetraplasandra gymnocarpa*—e and Oahu 35—*Tetraplasandra gymnocarpa*—f, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Tetraplasandra gymnocarpa* on Oahu.

Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Windswept summit ridges, slopes, or gullies in wet or sometimes mesic lowland forests or shrublands and containing one or more of the following associated native plant species: *Acacia koa*, *Antidesma platyphyllum*, *Bidens* sp., *Bobea elatior*, *Broussaisia arguta*, *Cheirodendron* sp., *Cibotium chamissoi*, *Cibotium* sp., *Cyanea humboltiana*, *Dicranopteris linearis*, *Diplopterygium pinnatum*, *Dubautia laxa*, *Freycinetia arborea*, *Hedyotis fosbergii*, *Hedyotis terminalis*, *Labordia* sp., *Lobelia hypoleuca*, *Machaerina angustifolia*, *Melicope* spp., *Metrosideros polymorpha*, *Myrsine fosbergii*, *Pouteria sandwicensis*, *Psychotria* spp., *Sadleria* sp., *Syzygium sandwicensis*, *Tetraplasandra oahuensis*, or *Wikstroemia* sp.; and

(ii) Elevations between 93 and 959 m (305 and 3,146 ft).

Family Asteraceae: *Dubautia herbstobatae* (naenae)

Oahu 4—*Dubautia herbstobatae*—a, Oahu 4—*Dubautia herbstobatae*—b, and Oahu 7—*Dubautia herbstobatae*—c, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Dubautia herbstobatae* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Rock outcrops, ridges, moderate slopes, or vertical cliffs in dry or mesic shrubland containing one or more of the following associated native plant species: *Artemisia australis*, *Bidens torta*, *Carex meyenii*, *Chamaesyce celastroides*, *Dodonaea viscosa*, *Eragrostis variabilis*, *Metrosideros polymorpha*, or *Schiedea mannii*; and

(ii) Elevations between 473 and 975 m (1,551 and 3,198 ft).

Family Asteraceae: *Hesperomannia arborescens* (NCN)

Oahu 4—*Hesperomannia arborescens*—a and Oahu 20—*Hesperomannia arborescens*—b, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Hesperomannia arborescens* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep slopes, ridge tops, or gulches in lowland wet forests or shrublands and containing one or more of the following associated native plant

species: *Acacia koa*, *Antidesma platyphyllum*, *Bobea elatior*, *Broussaisia arguta*, *Cheirodendron* sp., *Cibotium* sp., *Coprosma* sp., *Dicranopteris linearis*, *Dubautia* sp., *Hedyotis terminalis*, *Hibiscus arnottianus*, *Labordia sessilis*, *Machaerina angustifolia*, *Melicope* sp., *Metrosideros polymorpha*, *Myrsine* sp., *Nestegis sandwicensis*, *Perrottetia sandwicensis*, *Pipturus* sp., *Psychotria mariniana*, *Scaevola glabra*, *Scaevola gaudichaudiana*, *Syzygium sandwicensis*, *Tetraplasandra oahuensis*, or *Wikstroemia* sp.; and

(ii) Elevations between 110 and 1,025 m (361 and 3,362 ft).

Family Asteraceae: *Hesperomannia arbuscula* (NCN)

Oahu 4—*Hesperomannia arbuscula*—a, Oahu 4—*Hesperomannia arbuscula*—b, Oahu 15—*Hesperomannia arbuscula*—c, Oahu 15—*Hesperomannia arbuscula*—d, and Oahu 15—*Hesperomannia arbuscula*—e, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Hesperomannia arbuscula* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Slopes or ridges in dry to wet forest dominated by *Acacia koa* or *Metrosideros polymorpha* containing one or more of the following associated native plant species: *Alyxia oliviformis*, *Antidesma* sp., *Bidens* sp., *Bobea elatior*, *Cyanea longiflora*, *Diospyros hillebrandii*, *Freycinetia arborea*, *Hedyotis terminalis*, *Hibiscus* sp., *Psychotria* sp., or *Syzygium sandwicensis*; and

(ii) Elevations between 370 and 1,053 m (1,214 and 3,454 ft).

Family Asteraceae: *Lipochaeta lobata* var. *leptophylla* (nehe)

Oahu 4—*Lipochaeta lobata* var. *leptophylla*—a and Oahu 15—*Lipochaeta lobata* var. *leptophylla*—b, 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 currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Cliffs, ridges, or slopes in dry or mesic shrubland containing one or more of the following associated native plant species: *Artemisia australis*, *Bidens* sp., *Carex meyenii*, *Diospyros* sp., *Dodonaea viscosa*, *Eragrostis* sp., *Melanthra tenuis*, *Peperomia* sp., *Psydrax odorata*, or *Stenogyne* sp.; and

(ii) Elevations between 256 and 978 m (840 and 3,208 ft).

Family Asteraceae: *Lipochaeta tenuifolia* (nehe)

Oahu 4—*Lipochaeta tenuifolia*—a, Oahu 4—*Lipochaeta tenuifolia*—b, and Oahu 4—*Lipochaeta tenuifolia*—c, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Lipochaeta tenuifolia* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Ridgetops or bluffs in open areas or protected pockets of dry to mesic forests or shrublands or forests dominated by *Diospyros sandwicensis* and containing one or more of the following associated native plant species: *Artemisia australis*, *Bidens* sp., *Carex meyenii*, *Diospyros* sp., *Dodonaea viscosa*, *Doryopteris* sp., *Dubautia* sp., *Eragrostis* sp., *Myoporum sandwicense*, *Osteomeles anthyllidifolia*, *Psydrax odorata*, *Reynoldsia sandwicensis*, *Rumex* sp., *Sapindus oahuensis*, *Santalum* sp., or *Schiedea* sp.; and

(ii) Elevations between 110 and 978 m (361 and 3,208 ft).

Family Asteraceae: *Tetramolopium filiforme* (NCN)

Oahu 4—*Tetramolopium filiforme*—a and Oahu 4—*Tetramolopium filiforme*—b, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Tetramolopium filiforme* on Oahu. 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 cliff faces or ridges in dry or mesic forests containing one or more of the following associated native plant species: *Artemisia australis*, *Bidens torta*, *Carex meyenii*, *Dodonaea viscosa*, *Peperomia tetraphylla*, *Schiedea mannii*, *Schiedea* sp., or *Sida fallax*; and

(ii) Elevations between 352 and 978 m (1,155 and 3,208 ft).

Family Asteraceae: *Tetramolopium lepidotum* ssp. *lepidotum* (NCN)

Oahu 4—*Tetramolopium lepidotum* ssp. *lepidotum*—a, Oahu 4—*Tetramolopium lepidotum* ssp. *lepidotum*—b, Oahu 15—*Tetramolopium lepidotum* ssp. *lepidotum*—c, Oahu 15—*Tetramolopium lepidotum* ssp. *lepidotum*—d, Oahu 15—*Tetramolopium lepidotum* ssp. *lepidotum*—e, and Oahu 15—*Tetramolopium lepidotum* ssp.

lepidotum—f, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Tetramolopium lepidotum* ssp. *lepidotum* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Grassy ridgetops, slopes, or cliffs in windblown dry forests and containing one or more of the following associated native plant species: *Bidens* sp., *Carex wahuensis*, *Eragrostis* sp., or *Metrosideros polymorpha*; and

(ii) Elevations between 330 to 1,157 m (1,082 to 3,795 ft).

Family Brassicaceae: *Lepidium arbuscula* (anaunau)

Oahu 4—*Lepidium arbuscula*—a, Oahu 15—*Lepidium arbuscula*—b, and Oahu 15—*Lepidium arbuscula*—c, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Lepidium arbuscula* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Exposed ridge tops and cliff faces in mesic and dry vegetation communities containing one or more of the following associated native plant species: *Artemisia australis*, *Bidens* sp., *Carex meyenii*, *Carex wahuensis*, *Chamaesyce multiformis*, *Dodonaea viscosa*, *Dryopteris unidentata*, *Dubautia* sp., *Eragrostis* sp., *Leptecophylla tameiameia*, *Lysimachia hillebrandii*, *Metrosideros polymorpha*, *Peperomia* sp., *Psydrax odorata*, *Rumex albescens*, *Schiedea ligustrina*, *Sida fallax*, or *Sophora chrysophylla*; and

(ii) Elevations between 246 and 978 m (430 and 3,208 ft).

Family Campanulaceae: *Cyanea acuminata* (haha)

Oahu 4—*Cyanea acuminata*—a and Oahu 20—*Cyanea acuminata*—b, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyanea acuminata* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Slopes, ridges, or stream banks in *Metrosideros polymorpha*-*Dicranopteris linearis* or *Acacia koa*-*Metrosideros polymorpha* wet or mesic forest or shrubland, or *Diospyros sandwicensis*-*Metrosideros polymorpha* lowland mesic forest, and containing one or more of the following associated native plant species: *Antidesma* sp.,

Broussaisia arguta, *Chamaesyce* sp., *Charpentiera* sp., *Cyrtandra* spp., *Diplazium sandwichianum*, *Dryopteris sandwicensis*, *Dubautia laxa*, *Freycinetia arborea*, *Hedyotis centranthoides*, *Hedyotis* sp., *Hibiscus* sp., *Ilex anomala*, *Labordia* sp., *Machaerina* sp., *Melicope* spp., *Perrottetia sandwicensis*, *Phyllostegia* sp., *Pipturus albidus*, *Pisonia* sp., *Psychotria* sp., *Sadleria* sp., *Syzygium sandwicensis*, *Touchardia latifolia*, or *Wikstroemia* sp.; and

(ii) Elevations between 216 and 1,208 m (708 and 3,962 ft).

Family Campanulaceae: *Cyanea crispa* (NCN)

Oahu 20—*Cyanea crispa*—a, Oahu 20—*Cyanea crispa*—b, Oahu 21—*Cyanea crispa*—c, and Oahu 35—*Cyanea crispa*—d, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyanea crispa* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Slopes, moist gullies, or stream banks in open mesic forests or closed wet forests containing one or more of the following associated native plant species: *Antidesma platyphyllum*, *Boehmeria grandis*, *Broussaisia arguta*, *Christella cyatheoides*, *Cibotium chamissoi*, *Cyrtandra* spp., *Diospyros* sp., *Dubautia* sp., *Metrosideros polymorpha*, *Microsorium spectrum*, *Perrottetia sandwicensis*, *Pipturus albidus*, *Pisonia umbellifera*, *Psychotria* sp. or *Touchardia latifolia*; and

(ii) Elevations between 56 and 959 m (184 and 3,146 ft).

Family Campanulaceae: *Cyanea grimesiana* ssp. *grimesiana* (haha)

Oahu 20—*Cyanea grimesiana* ssp. *grimesiana*—a and Oahu 35—*Cyanea grimesiana* ssp. *grimesiana*—b, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyanea grimesiana* ssp. *grimesiana* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Rocky or steep slopes of stream banks in mesic forest often dominated by *Metrosideros polymorpha* or *Metrosideros polymorpha* and *Acacia koa*, and containing one or more of the following associated native plant species: *Alyxia oliviformis*, *Antidesma* sp., *Bobea* sp., *Clermontia persicifolia*, *Coprosma* sp., *Cyanea angustifolia*, *Dicranopteris linearis*, *Diplazium sandwichianum*, *Joinvillea* sp., *Melicope*

sp., *Myrsine* sp., *Nestegis sandwicensis*, *Psychotria* sp., *Syzygium sandwicensis*, or *Xylosma* sp.; and

(ii) Elevations between 114 and 746 m (374 and 2,447 ft).

Family Campanulaceae: *Cyanea grimesiana* ssp. *obatae* (haha)

Oahu 4—*Cyanea grimesiana* ssp. *obatae*—a, Oahu 15—*Cyanea grimesiana* ssp. *obatae*—b, Oahu 15—*Cyanea grimesiana* ssp. *obatae*—c, and Oahu 15—*Cyanea grimesiana* ssp. *obatae*—d, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyanea grimesiana* ssp. *obatae* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep, moist, shaded slopes in diverse mesic to wet lowland forests containing one or more of the following associated native plant species: *Acacia koa*, *Antidesma platyphyllum*, *Chamaesyce* sp., *Charpentiera obovata*, *Cibotium chamissoi*, *Claoxylon sandwicense*, *Coprosma* sp., *Cyanea membranacea*, *Cyrtandra waianaeensis*, *Diplazium sandwichianum*, *Dryopteris unidentata*, *Dubautia* sp., *Freycinetia arborea*, *Hedyotis acuminata*, *Hedyotis terminalis*, *Metrosideros polymorpha*, *Myrsine lessertiana*, *Nothocestrum* sp., *Perrottetia sandwicensis*, *Pipturus albidus*, *Pisonia umbellifera*, *Pouteria sandwicensis*, *Psychotria hathewayi*, *Rumex* sp., *Selaginella arbuscula*, or *Streblus pendulinus*; and

(ii) Elevations between 404 and 1,092 m (1,325 and 3,528 ft).

Family Campanulaceae: *Cyanea humboldtiana* (haha)

Oahu 20—*Cyanea humboldtiana*—a, Oahu 20—*Cyanea humboldtiana*—b, Oahu 20—*Cyanea humboldtiana*—c, Oahu 20—*Cyanea humboldtiana*—d, and Oahu 35—*Cyanea humboldtiana*—e, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyanea humboldtiana* on Oahu. 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 *Metrosideros polymorpha*-*Dicranopteris linearis* lowland shrubland containing one or more of the following associated native plant species: *Acacia koa*, *Bobea elatior*, *Broussaisia arguta*, *Cibotium chamissoi*, *Dubautia laxa*, *Hedyotis terminalis*, *Ilex anomala*, *Machaerina angustifolia*, *Melicope* sp., *Phyllostegia* sp., *Psychotria mariniana*, *Sadleria* sp., *Scaevola mollis*, *Syzygium*

sandwicensis, *Wikstroemia* sp., or native ferns; and

(ii) Elevations between 319 and 959 m (856 and 3,146 ft).

Family Campanulaceae: *Cyanea koolauensis* (haha)

Oahu 20—*Cyanea koolauensis*—a, Oahu 20—*Cyanea koolauensis*—b, Oahu 35—*Cyanea koolauensis*—c, and Oahu 35—*Cyanea koolauensis*—d, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyanea koolauensis* on Oahu.

Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Slopes, stream banks, and ridge crests in wet *Metrosideros polymorpha-Dicranopteris linearis* forest or shrubland containing one or more of the following associated native plant species: *Acacia koa*, *Antidesma platyphyllum*, *Bidens* sp., *Bobea elatior*, *Broussaisia arguta*, *Cibotium* sp., *Diplopterygium pinnatum*, *Dubautia* sp., *Hedyotis* sp., *Machaerina* sp., *Melicope* sp., *Pittosporum* sp., *Pritchardia martii*, *Psychotria mariniana*, *Sadleria* sp., *Scaevola* sp., *Syzygium sandwicensis*, or *Wikstroemia* sp.; and

(ii) Elevations between 280 and 959 m (535 and 3,146 ft).

Family Campanulaceae: *Cyanea longiflora* (haha)

Oahu 4—*Cyanea longiflora*—a, Oahu 4—*Cyanea longiflora*—b, and Oahu 19—*Cyanea longiflora*—c, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyanea longiflora* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep slopes, bases of cliffs, or ridge crests in mesic *Acacia koa-Metrosideros polymorpha* lowland forest containing one or more of the following associated native plant species: *Antidesma* sp., *Cibotium* sp., *Coprosma* sp., *Dicranopteris linearis*, *Psychotria* sp., *Schiedea* sp., or *Syzygium sandwicensis*; and

(ii) Elevations between 146 and 1,191 m (479 and 3,906 ft).

Family Campanulaceae: *Cyanea pinnatifida* (haha)

Oahu 15—*Cyanea pinnatifida*—a, Oahu 15—*Cyanea pinnatifida*—b, and Oahu 15—*Cyanea pinnatifida*—c, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyanea pinnatifida* on Oahu. Within these units, the

currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep, wet, rocky slopes in diverse mesic forest containing one or more of the following associated native plant species: *Canavalia* sp., *Diplazium sandwichianum*, *Pipturus albidus*, *Pisonia sandwicensis*, *Pisonia umbellifera*, *Psychotria* sp., *Strongylodon ruber*, or native ferns; and

(ii) Elevations between 450 and 881 m (1,476 and 2,890 ft).

Family Campanulaceae: *Cyanea st.-johnii* (haha)

Oahu 20—*Cyanea st.-johnii*—a and Oahu 35—*Cyanea st.-johnii*—b, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyanea st.-johnii* on Oahu. 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, windswept slopes and ridges in *Metrosideros polymorpha* mixed lowland shrubland or *Metrosideros polymorpha-Dicranopteris linearis* lowland shrubland and containing one or more of the following associated native plant species: *Alyxia oliviformis*, *Antidesma* sp., *Bidens macrocarpa*, *Broussaisia arguta*, *Chamaesyce clusiifolia*, *Cibotium* sp., *Dubautia laxa*, *Freycinetia arborea*, *Hedyotis* sp., *Labordia* sp., *Machaerina angustifolia*, *Melicope* sp., *Psychotria* sp., *Sadleria pallida*, *Scaevola mollis*, or *Syzygium sandwicensis*; and

(ii) Elevations between 461 and 959 m (1,512 and 3,146 ft).

Family Campanulaceae: *Cyanea superba* (NCN)

Oahu 4—*Cyanea superba*—a, Oahu 4—*Cyanea superba*—b, Oahu 4—*Cyanea superba*—c, and Oahu 35—*Cyanea superba*—d, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyanea superba* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Sloping terrain on a well drained rocky substrate within mesic forest containing one or more of the following associated native plant species: *Diospyros* sp., *Hedyotis terminalis*, *Metrosideros polymorpha*, *Nestegis sandwicensis*, *Pisonia brunoniana*, *Psychotria* sp., or *Xylosma* sp.; and

(ii) Elevations between 232 and 872 m (761 and 2,991 ft).

Family Campanulaceae: *Cyanea truncata* (haha)

Oahu 20—*Cyanea truncata*—a and Oahu 21—*Cyanea truncata*—b, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyanea truncata* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Windward slopes and stream banks in mesic to wet forests containing one or more of the following associated native plant species: *Cibotium chamissoi*, *Cyrtandra calpidicarpa*, *Cyrtandra laxiflora*, *Cyrtandra propinqua*, *Diospyros sandwicensis*, *Hibiscus arnottianus*, *Metrosideros polymorpha*, *Neraudia melastomifolia*, *Pipturus albidus*, or *Pisonia umbellifera*; and

(ii) Elevations between 54 and 705 m (177 and 2,312 ft).

Family Campanulaceae: *Delissea subcordata* (oha)

Oahu 4—*Delissea subcordata*—a, Oahu 15—*Delissea subcordata*—b, Oahu 15—*Delissea subcordata*—c, Oahu 15—*Delissea subcordata*—d, Oahu 35—*Delissea subcordata*—e, and Oahu 35—*Delissea subcordata*—f, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Delissea subcordata* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Moderate to steep gulch slopes in mixed mesic forests containing one or more of the following associated native plant species: *Acacia koa*, *Alyxia oliviformis*, *Antidesma* sp., *Bobea* sp., *Claoxylon sandwicense*, *Chamaesyce multiformis*, *Charpentiera obovata*, *Diospyros hillebrandii*, *Diospyros sandwicensis*, *Hedyotis acuminata*, *Metrosideros polymorpha*, *Myrsine lanaiensis*, *Nestegis sandwicensis*, *Pisonia* sp., *Pouteria sandwicensis*, *Psychotria hathewayi*, *Psydrax odorata*, or *Streblus pendulinus*; and

(ii) Elevations between 179 and 928 m (587 and 3,044 ft).

Family Campanulaceae: *Lobelia gaudichaudii* ssp. *koolauensis* (NCN)

Oahu 20—*Lobelia gaudichaudii* ssp. *koolauensis*—a, identified in the legal description in paragraph (i) of this section, constitutes critical habitat for *Lobelia gaudichaudii* ssp. *koolauensis* on Oahu. Within this unit, the currently known primary constituent elements of critical habitat include, but are not

limited to, the habitat components provided by:

(i) Moderate to steep slopes in *Metrosideros polymorpha* lowland wet shrublands or bogs and containing one or more of the following associated native plant species: *Bidens* sp., *Broussaisia arguta*, *Cibotium* sp., *Dicanthelium koolauense*, *Isachne distichophylla*, *Machaerina angustifolia*, *Melicope* sp., *Sadleria pallida*, *Scaevola* sp., or *Vaccinium dentatum*; and

(ii) Elevations between 383 and 867 m (1,256 and 2,844 ft).

Family Campanulaceae: *Lobelia monostachya* (NCN)

Oahu 30—*Lobelia monostachya*—a, Oahu 22—*Lobelia monostachya*—b, Oahu 33—*Lobelia monostachya*—c, and Oahu 35—*Lobelia monostachya*—d, identified in the legal descriptions in paragraph (i) of this section, constitutes critical habitat for *Lobelia monostachya* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep, sparsely vegetated cliffs in mesic shrubland containing one or more of the following associated native plant species: *Artemisia australis*, *Carex meyenii*, *Eragrostis* sp., or *Psilotum nudum*; and

(ii) Elevation between 79 and 592 m (259 to 1,942 ft).

Family Campanulaceae: *Lobelia niihauensis* (NCN)

Oahu 4—*Lobelia niihauensis*—a and Oahu 17—*Lobelia niihauensis*—b, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Lobelia niihauensis* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Exposed mesic or dry cliffs or ledges and containing one or more of the following associated native plant species: *Artemisia* sp., *Bidens* sp., *Carex meyenii*, *Dodonaea viscosa*, *Doryopteris* sp., *Eragrostis* sp., *Leptecophylla tameiameia*, *Melanthera tenuis*, *Osteomeles anthyllidifolia*, *Plectranthus parviflorus*, *Schiedea mannii*, or *Sida fallax*; and

(ii) Elevations between 407 to 926 m (1,335 to 3,037 ft).

Family Campanulaceae: *Lobelia oahuensis* (NCN)

Oahu 20—*Lobelia oahuensis*—a and Oahu 35—*Lobelia oahuensis*—b, identified in the legal descriptions in paragraph (i) of this section, constitute

critical habitat for *Lobelia oahuensis* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep slopes on summit cliffs in cloudswet wet forests or in lowland wet shrubland that are frequently exposed to heavy wind and rain and containing one or more of the following associated native plant species: *Bidens* sp., *Broussaisia arguta*, *Cheirodendron trigynum*, *Cibotium* sp., *Dicranopteris linearis*, *Dubautia laxa*, *Freycinetia arborea*, *Hedyotis* sp., *Labordia hosakana*, *Lycopodium* sp., *Machaerina angustifolia*, *Melicope* sp., *Metrosideros polymorpha*, *Peperomia* sp., *Phyllostegia* sp., *Sadleria squarrosa*, *Scaevola* sp., *Syzygium sandwicensis*, *Vaccinium* sp., or *Wikstroemia* sp.; and

(ii) Elevations between 415 and 959 m (1,361 and 3,146 ft).

Family Campanulaceae: *Trematolobelia singularis* (NCN)

Oahu 20—*Trematolobelia singularis*—a, Oahu 20—*Trematolobelia singularis*—b, Oahu 34—*Trematolobelia singularis*—c, Oahu 35—*Trematolobelia singularis*—d, and Oahu 35—*Trematolobelia singularis*—e, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Trematolobelia singularis* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep, windswept cliff faces or slopes in *Metrosideros polymorpha*-*Dicranopteris linearis* lowland wet shrubland and containing one or more of the following associated native plant species: *Broussaisia arguta*, *Cibotium* sp., *Dubautia laxa*, *Eugenia* sp., *Melicope* sp., *Sadleria* sp., or *Wikstroemia* sp.; and

(ii) Elevations between 545 and 953 m (1,788 and 3,126 ft).

Family Caryophyllaceae: *Alsinidendron obovatum* (NCN)

Oahu 4—*Alsinidendron obovatum*—a, Oahu 4—*Alsinidendron obovatum*—b, and Oahu 15—*Alsinidendron obovatum*—c, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Alsinidendron obovatum* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Ridges and slopes in lowland diverse mesic forest dominated by *Acacia koa* and *Metrosideros polymorpha* and containing one or more

of the following associated native plant species: *Alyxia oliviformis*, *Antidesma platyphyllum*, *Bidens torta*, *Cibotium chamissoi*, *Coprosma* sp., *Cyanea longiflora*, *Hedyotis terminalis*, *Ilex anomala*, *Machaerina* sp., *Peperomia* sp., *Perrottetia sandwicensis*, *Pipturus* sp., or *Psydrax odorata*; and

(ii) Elevations between 477 and 943 m (1,565 and 3,093 ft).

Family Caryophyllaceae: *Alsinidendron trinerve* (NCN)

Oahu 4—*Alsinidendron trinerve*—a, identified in the legal description in paragraph (i) of this section, constitutes critical habitat for *Alsinidendron trinerve* on Oahu. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Slopes in wet forest or the wetter portions of diverse mesic forest dominated by *Metrosideros polymorpha* or *Ilex anomala* and *Metrosideros polymorpha* montane wet forest and containing one or more of the following associated native plant species:

Broussaisia arguta, *Coprosma ochracea*, *Diplazium sandwichianum*, *Gunnera* sp., *Hedyotis* sp., *Machaerina* sp., *Nothoperanema rubiginosa*, *Peperomia* sp., *Perrottetia sandwicensis*, *Phyllostegia* sp., *Pipturus albidus*, or *Vaccinium* sp.; and

(ii) Elevations between 833 and 1,233 m (2,732 and 4,044 ft).

Family Caryophyllaceae: *Schiedea hookeri* (NCN)

Oahu 3—*Schiedea hookeri*—a, Oahu 4—*Schiedea hookeri*—b, Oahu 4—*Schiedea hookeri*—c, Oahu 4—*Schiedea hookeri*—d, Oahu 15—*Schiedea hookeri*—e, Oahu 15—*Schiedea hookeri*—f, and Oahu 15—*Schiedea hookeri*—g, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Schiedea hookeri* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Slopes, cliffs or cliff bases, rock walls, or ledges in diverse mesic or dry lowland forest often dominated by *Metrosideros polymorpha*, *Diospyros sandwicensis*, or *Diospyros hillebrandii*, and containing one or more of the following associated native plant species: *Acacia koa*, *Alyxia oliviformis*, *Antidesma pulvinatum*, *Artemisia australis*, *Bidens torta*, *Carex meyenii*, *Carex wahuensis*, *Charpentiera tomentosa*, *Dodonaea viscosa*, *Elaeocarpus bifidus*, *Eragrostis grandis*, *Hibiscus* sp., *Leptecophylla*

tameiameiae, *Melanthera tenuis*, *Pisonia sandwicensis*, *Pouteria sandwicensis*, *Psydrax odorata*, *Sida fallax*, or *Stenogyne* sp.; and

(ii) Elevations between 238 and 978 m (781 and 3,208 ft).

Family Caryophyllaceae: *Schiedea kaalae* (maolioli)

Oahu 4—*Schiedea kaalae*—a, Oahu 15—*Schiedea kaalae*—b, Oahu 15—*Schiedea kaalae*—c, Oahu 15—*Schiedea kaalae*—d, Oahu 20—*Schiedea kaalae*—e, and Oahu 21—*Schiedea kaalae*—f, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Schiedea kaalae* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep slopes, cliffs, stream banks, or deep shade in diverse mesic or wet forests and containing one or more of the following associated native plant species: *Alyxia oliviformis*, *Boehmeria grandis*, *Charpentiera* sp., *Claoxylon sandwicense*, *Cyrtandra calpidicarpa*, *Cyrtandra laxiflora*, *Diospyros hillebrandii*, *Diplazium arnottii*, *Diplazium sandwichianum*, *Dryopteris unidentata*, *Freycinetia arborea*, *Hedyotis acuminata*, *Nothocestrum longifolium*, *Pipturus albidus*, *Pisonia sandwicensis*, *Pisonia umbellifera*, *Pouteria sandwicensis*, *Psychotria hathewayi*, *Selaginella arbuscula*, or *Xylosma hawaiiense*; and

(ii) Elevations between 64 and 904 m (210 and 2,965 ft).

Family Caryophyllaceae: *Schiedea kealiae* (maolioli)

Oahu 1—*Schiedea kealiae*—a, identified in the legal description in paragraph (i) of this section, constitutes critical habitat for *Schiedea kealiae* on Oahu. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep slopes or cliff faces or bases in dry remnant *Erythrina sandwicensis* forest and containing one or more of the following associated native plant species: *Bidens* sp., *Hibiscus arnottianus*, *Lepidium bidentatum*, *Melanthera remyi*, *Myoporum sandwicense*, *Plumbago zeylanica*, *Psydrax odorata*, *Sicyos* sp., or *Sida fallax*; and

(ii) Elevations between 47 and 341 m (154 and 1,118 ft)

Family Caryophyllaceae: *Schiedea nuttallii* (NCN)

Oahu 4—*Schiedea nuttallii*—a, Oahu 15—*Schiedea nuttallii*—b, and Oahu 15—*Schiedea nuttallii*—c, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Schiedea nuttallii* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Rock walls, forested slopes, or steep walls in *Acacia koa*-*Metrosideros polymorpha* lowland mesic forest or *Metrosideros polymorpha*-*Dodonaea viscosa* forest and containing one or more of the following associated native plant species: *Alyxia oliviformis*, *Antidesma platyphyllum*, *Bidens torta*, *Cibotium chamissoi*, *Coprosma* sp., *Cyanea longiflora*, *Hedyotis terminalis*, *Ilex anomala*, *Machaerina* sp., *Peperomia* sp., *Perrottetia sandwicensis*, *Pipturus* sp., or *Psydrax odorata*; and

(ii) Elevations between 408 and 1072 m (1,338 and 3,516 ft).

Family Caryophyllaceae: *Silene lanceolata* (NCN)

Oahu 4—*Silene lanceolata*—a, identified in the legal description in paragraph (i) of this section, constitutes critical habitat for *Silene lanceolata* on Oahu. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Cliff faces or ledges of gullies in dry to mesic shrubland or cliff communities and containing one or more of the following associated native plant species: *Artemisia australis*, *Bidens* sp., *Carex* sp., *Chamaesyce* sp., *Dodonaea viscosa*, *Lysimachia* sp., *Osteomeles anthyllidifolia*, *Schiedea mannii*, or *Tetramolopium filiforme*; and

(ii) Elevations between 328 to 978 m (1,076 to 3,208 ft).

Family Caryophyllaceae: *Silene perlmannii* (NCN)

Oahu 15—*Silene perlmannii*—a, Oahu 15—*Silene perlmannii*—b, Oahu 15—*Silene perlmannii*—c, and Oahu 15—*Silene perlmannii*—d, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Silene perlmannii* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep rocky slopes in *Acacia koa*-*Metrosideros polymorpha* lowland mesic forest; and

(ii) Elevations between 382 and 926 m (1,253 and 3,037 ft).

Family Convolvulaceae: *Bonamia menziesii* (NCN)

Oahu 2—*Bonamia menziesii*—a, Oahu 3—*Bonamia menziesii*—b, Oahu 4—*Bonamia menziesii*—c, Oahu 17—*Bonamia menziesii*—d, and Oahu 35—*Bonamia menziesii*—e, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Bonamia menziesii* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep slopes or level ground in dry or mesic forest in open or closed canopy and containing one or more of the following associated native plant species: *Acacia koa*, *Alyxia oliviformis*, *Dianella sandwicensis*, *Diospyros sandwicensis*, *Dodonaea viscosa*, *Erythrina sandwicensis*, *Hedyotis terminalis*, *Leptecophylla tameiameiae*, *Melicope* sp., *Metrosideros polymorpha*, *Myoporum sandwicensis*, *Nestegis sandwicensis*, *Pisonia* sp., *Pittosporum* sp., *Pleomele* sp., *Pouteria sandwicensis*, *Psydrax odorata*, *Rauvolfia sandwicensis*, *Sapindus oahuensis*, *Sicyos* sp., *Sida fallax*, or *Waltheria indica*; and

(ii) Elevations between 81 and 658 m (266 and 2,158 ft).

Family Cyperaceae: *Cyperus trachysanthos* (puukaa)

Oahu 1—*Cyperus trachysanthos*—a, Oahu 28—*Cyperus trachysanthos*—b, Oahu 29—*Cyperus trachysanthos*—c, and Oahu 36—*Cyperus trachysanthos*—d, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyperus trachysanthos* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Mud flats, wet clay soil, seasonal ponds, wet cliff seeps on seepy flats, coastal cliffs, or talus slopes containing *Hibiscus tiliaceus*; and

(ii) Elevations between 6 and 194 m (20 and 636 ft).

Family Cyperaceae: *Mariscus pennatiformis* (NCN)

Oahu 4—*Mariscus pennatiformis*—a and Oahu 4—*Mariscus pennatiformis*—b, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Mariscus pennatiformis* on Oahu. 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 and wet *Metrosideros polymorpha* forest and *Metrosideros polymorpha*-*Acacia koa* forest; and
- (ii) Elevations between 424 and 1,032 m (1,391 and 3,385 ft).

Family Euphorbiaceae: *Chamaesyce celastroides* var. *kaenana* (akoko)

Oahu 1—*Chamaesyce celastroides* var. *kaenana*—a, Oahu 3—*Chamaesyce celastroides* var. *kaenana*—b, Oahu 4—*Chamaesyce celastroides* var. *kaenana*—c, Oahu 5—*Chamaesyce celastroides* var. *kaenana*—d, and Oahu 35—*Chamaesyce celastroides* var. *kaenana*—e, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Chamaesyce celastroides* var. *kaenana* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

- (i) Windward talus slopes, leeward rocky cliffs, open grassy slopes, or vegetated cliff faces in coastal dry shrubland and containing one or more of the following associated native plant species: *Artemisia australis*, *Boerhavia* sp., *Chamaesyce celastroides* var. *amplectans*, *Dodonaea viscosa*, *Gossypium tomentosum*, *Heteropogon contortus*, *Jacquemontia ovalifolia* ssp. *sandwicensis*, *Lipochaeta lobata*, *Myoporum sandwicense*, *Plumbago zeylanica*, *Psilotum nudum*, *Psydrax odorata*, *Santalum freycinetianum*, *Sida fallax* or *Waltheria indica*; and
- (ii) Elevations between 1 and 862 m (3 and 2,827 ft).

Family Euphorbiaceae: *Chamaesyce deppeana* (akoko)

Oahu 20—*Chamaesyce deppeana*—a and Oahu 35—*Chamaesyce deppeana*—b, identified in the legal description in paragraph (i) of this section, constitute critical habitat for *Chamaesyce deppeana* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

- (i) Windward-facing ridge crests, cliff faces, and mixed native cliffs and containing one or more of the following associated native plant species: *Bidens sandwicensis* or *Metrosideros polymorpha*; and
- (ii) Elevations from 274 to 661 m (899 to 2,168 ft).

Family Euphorbiaceae: *Chamaesyce herbstii* (akoko)

Oahu 4—*Chamaesyce herbstii*—a, Oahu 15—*Chamaesyce herbstii*—b, and

Oahu 15—*Chamaesyce herbstii*—c, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Chamaesyce herbstii* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

- (i) Shaded gulch bottoms and slopes in mesic *Acacia koa*-*Metrosideros polymorpha* lowland forests or diverse mesic forests and containing one or more of the following associated native plant species: *Antidesma platyphyllum*, *Coprosma* sp., *Diplazium sandwichianum*, *Hedyotis* sp., *Hibiscus arnottianus* var. *arnottianus*, *Melicope* sp., *Morinda trimera*, *Pipturus albidus*, *Pouteria sandwicensis*, *Pteralyxia* sp., *Urera glabra*, or *Xylosma* sp.; and
- (ii) Elevations between 433 and 928 m (1,420 and 3,044 ft).

Family Euphorbiaceae: *Chamaesyce kuwaleana* (akoko)

Oahu 9—*Chamaesyce kuwaleana*—a, Oahu 11—*Chamaesyce kuwaleana*—b, Oahu 12—*Chamaesyce kuwaleana*—c, Oahu 15—*Chamaesyce kuwaleana*—d, Oahu 22—*Chamaesyce kuwaleana*—e, Oahu 23—*Chamaesyce kuwaleana*—f, and Oahu 26—*Chamaesyce kuwaleana*—g, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Chamaesyce kuwaleana* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

- (i) Thin guano soil on basaltic rock; arid, exposed volcanic cliffs; dry or mesic rocky ridges; or sparsely vegetated slopes and containing one or more of the following associated native plant species: *Artemisia* sp., *Bidens* sp., *Carex* sp., *Chamaesyce* sp., *Dodonaea viscosa*, *Heteropogon contortus*, *Plectranthus parviflorus*, *Schiedea* sp., or *Sida fallax*; and
- (ii) Elevations between 0 and 596 m (0 and 1,955 ft).

Family Euphorbiaceae: *Chamaesyce rockii* (akoko)

Oahu 20—*Chamaesyce rockii*—a, Oahu 20—*Chamaesyce rockii*—b, and Oahu 20—*Chamaesyce rockii*—c, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Chamaesyce rockii* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

- (i) Gulch slopes, gulch bottoms, and ridge crests in wet *Metrosideros*

polymorpha-*Dicranopteris linearis* forest and shrubland and containing one or more of the following associated native plant species: *Antidesma platyphyllum*, *Bidens* sp., *Broussaisia arguta*, *Cibotium* sp., *Coprosma longifolia*, *Diplopterygium pinnatum*, *Dubautia laxa*, *Hedyotis terminalis*, *Machaerina* sp., *Melicope* spp., *Myrsine juddii*, *Psychotria fauriei*, *Psychotria* spp., or *Wikstroemia* sp.; and

- (ii) Elevations between 208 and 867 m (682 and 2,844 ft).

Family Euphorbiaceae: *Euphorbia haeleeleana* (akoko)

Oahu 3—*Euphorbia haeleeleana*—a and Oahu 4—*Euphorbia haeleeleana*—b, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Euphorbia haeleeleana* on Oahu. 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 forest dominated by *Diospyros* sp. and containing one or more of the following associated native plant species: *Dodonaea viscosa*, *Erythrina sandwicensis*, *Pleomele* sp., *Psydrax odorata*, *Reynoldsia sandwicensis*, or *Sapindus oahuensis*; and
- (ii) Elevations between 156 and 526 m (512 and 1,725 ft).

Family Euphorbiaceae: *Flueggea neowawraea* (mehamehame)

Oahu 4—*Flueggea neowawraea*—a, identified in the legal description in paragraph (i) of this section, constitutes critical habitat for *Flueggea neowawraea* on Oahu. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

- (i) Gulch slopes, ridge crests, or near streams in dry or mesic forest and containing one or more of the following associated native plant species: *Alyxia oliviformis*, *Antidesma platyphyllum*, *Antidesma pulvinatum*, *Bobea* sp., *Chamaesyce herbstii*, *Chamaesyce multiformis*, *Charpentiera* sp., *Claoxylon sandwicense*, *Diospyros hillebrandii*, *Diospyros sandwicensis*, *Erythrina sandwicensis*, *Hedyotis terminalis*, *Hibiscus arnottianus*, *Metrosideros polymorpha*, *Morinda trimera*, *Myoporum sandwicense*, *Myrsine* sp., *Nestegis sandwicensis*, *Pipturus albidus*, *Pisonia sandwicensis*, *Pisonia umbellifera*, *Pittosporum* sp., *Pleomele* sp., *Psydrax odorata*, *Pteralyxia* sp., *Rauvolfia sandwicensis*, *Sapindus oahuensis*, or *Streblus pendulina*; and

(ii) Elevations between 335 to 1,006 m (1,099 to 3,300 ft).

Family Fabaceae: *Sesbania tomentosa* (ohai)

Oahu 1—*Sesbania tomentosa*—a and Oahu 18—*Sesbania tomentosa*—b, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Sesbania tomentosa* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Cliff faces, broken basalt, or sand dunes with rock outcrops in *Scaevola sericea* coastal dry shrubland or *Sporobolus virginicus* mixed grasslands and containing one or more of the following associated native plant species: *Heliotropium* sp., *Jacquemontia ovalifolia* ssp. *sandwicensis*, *Melanthera* sp., *Myoporum sandwicense*, or *Sida fallax*; and

(ii) Elevations between sea level and 152 m (0 and 499 ft).

Family Fabaceae: *Vigna o-wahuensis* (NCN)

Oahu 1—*Vigna o-wahuensis*—a, Oahu 24—*Vigna o-wahuensis*—b, Oahu 25—*Vigna o-wahuensis*—c, and Oahu 26—*Vigna o-wahuensis*—d, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Vigna o-wahuensis* on Oahu. 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 fossil reef, with shrubs or grasses on fairly steep slopes; and

(ii) Elevations between 0 and 301 m (0 and 987 ft).

Family Gentianaceae: *Centaurium sebaeoides* (awiwi)

Oahu 1—*Centaurium sebaeoides*—a and Oahu 27—*Centaurium sebaeoides*—b, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Centaurium sebaeoides* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Volcanic or clay soils or cliffs in arid coastal areas or on coral plains and containing one or more of the following associated native plant species: *Artemisia* sp., *Bidens* sp., *Jacquemontia ovalifolia* ssp. *sandwicensis*, *Lipochaeta succulenta*, or *Lysimachia* sp.; and

(ii) Elevations between 1 and 161 m (3 and 528 ft).

Family Gesneriaceae: *Cyrtandra dentata* (haiwale)

Oahu 4—*Cyrtandra dentata*—a, identified in the legal description in paragraph (i) of this section, constitutes critical habitat for *Cyrtandra dentata* on Oahu. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Gulches, slopes, stream banks, or ravines in mesic or wet forest and containing one or more of the following associated native plant species: *Acacia koa*, *Metrosideros polymorpha*, *Pipturus albidus*, *Pisonia sandwicensis*, *Pisonia umbellifera*, *Pouteria sandwicensis*, *Syzygium sandwicensis*, or *Urera glabra*; and

(ii) Elevations between 319 and 880 m (1,046 and 2,886 ft).

Family Gesneriaceae: *Cyrtandra polyantha* (haiwale)

Oahu 35—*Cyrtandra polyantha*—a, identified in the legal description in paragraph (i) of this section, constitutes critical habitat for *Cyrtandra polyantha* on Oahu. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Ridges of valleys in *Metrosideros polymorpha* mesic or wet forests and containing one or more of the following associated native plant species: *Broussaisia arguta*, *Coprosma foliosa*, *Dicranopteris linearis*, *Machaerina angustifolia*, or *Psychotria* sp.; and

(ii) Elevations between 312 and 783 m (1,023 and 2,568 ft).

Family Gesneriaceae: *Cyrtandra subumbellata* (haiwale)

Oahu 20—*Cyrtandra subumbellata*—a and Oahu 20—*Cyrtandra subumbellata*—b, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cyrtandra subumbellata* on Oahu. 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 slopes or gulch bottoms in wet forest dominated by *Metrosideros polymorpha* or a mixture of *Metrosideros polymorpha*-*Dicranopteris linearis*-*Acacia koa* and containing one or more of the following associated native plant species: *Boehmeria grandis*, *Broussaisia arguta*, *Machaerina* sp., or *Thelypteris* sp.; and

(ii) Elevations between 167 and 841 m (548 and 2,758 ft).

Family Gesneriaceae: *Cyrtandra viridiflora* (haiwale)

Oahu 20—*Cyrtandra viridiflora*—a, identified in the legal description in paragraph (i) of this section, constitutes critical habitat for *Cyrtandra viridiflora* on Oahu. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Wind blown ridge tops in cloud-covered wet forest or shrubland and containing one or more of the following associated native plant species: *Broussaisia arguta*, *Cheirodendron platyphyllum*, *Dicranopteris linearis*, *Diplopterygium pinnatum*, *Dubautia* sp., *Freycinetia arborea*, *Hedyotis* sp., *Ilex anomala*, *Machaerina* sp., *Melicope* sp., *Metrosideros polymorpha*, *Metrosideros rugosa*, *Psychotria* sp., or *Syzygium sandwicensis*; and

(ii) Elevations between 443 and 867 m (1,453 and 2,844 ft).

Family Lamiaceae: *Phyllostegia hirsuta* (NCN)

Oahu 4—*Phyllostegia hirsuta*—a, Oahu 15—*Phyllostegia hirsuta*—b, Oahu 15—*Phyllostegia hirsuta*—c, and Oahu 20—*Phyllostegia hirsuta*—d, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Phyllostegia hirsuta* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep, shaded slopes, cliffs, ridges, gullies, or stream banks in mesic or wet forests dominated by *Metrosideros polymorpha* or a mixture of *Metrosideros polymorpha* and *Dicranopteris linearis* and containing one or more of the following associated native plant species: *Antidesma platyphyllum*, *Astelia* sp., *Broussaisia arguta*, *Chamaesyce multifloris*, *Cibotium* sp., *Claoxylon sandwicense*, *Clermontia kakeana*, *Coprosma longifolia*, *Cyanea membranacea*, *Cyrtandra waianaeensis*, *Diplazium sandwichianum*, *Dryopteris unidentata*, *Dubautia laxa*, *Dubautia sherffiana*, *Elaeocarpus bifidus*, *Freycinetia arborea*, *Hedyotis schlechterdahlana*, *Hedyotis terminalis*, *Hibiscus* sp., *Ilex anomala*, *Labordia kaalae*, *Liparis hawaiiensis*, *Lysimachia hillebrandii*, *Machaerina angustifolia*, *Melicope* sp., *Myrsine lessertiana*, *Myrsine sandwicensis*, *Neraudia* sp., *Nothocestrum* sp., *Perrottetia sandwicensis*, *Phyllostegia grandiflora*, *Pipturus* sp., *Pisonia* sp., *Pleomele* sp., *Pouteria sandwicensis*, *Psychotria* sp., *Rumex albescens*, *Scaevola*

gaudichaudiana, *Streblus pendulinus*, *Zanthoxylum kauaense*, or native ferns; and

(ii) Elevations between 195 and 1,202 m (640 and 3,943 ft).

Family Lamiaceae: *Phyllostegia kaalaensis* (NCN)

Oahu 4—*Phyllostegia kaalaensis*—a, Oahu 4—*Phyllostegia kaalaensis*—b, Oahu 4—*Phyllostegia kaalaensis*—c, Oahu 4—*Phyllostegia kaalaensis*—d, Oahu 4—*Phyllostegia kaalaensis*—e, and Oahu 15—*Phyllostegia kaalaensis*—f, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Phyllostegia kaalaensis* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Gulch slopes or bottoms or almost vertical rock faces in mesic forest or *Sapindus oahuensis* forest and containing one or more of the following associated native plant species:

Antidesma platyphyllum, *Claoxylon sandwicense*, *Diplazium sandwichianum*, *Freycinetia arborea*, *Hibiscus* sp., *Myrsine lanaiensis*, *Myrsine lessertiana*, *Neraudia melastomifolia*, *Pipturus albidus*, *Pouteria sandwicensis*, *Psychotria hathewayi*, *Streblus pendulinus*, or *Urera glabra*; and

(ii) Elevations between 248 and 878 m (813 and 2,880 ft).

Family Lamiaceae: *Phyllostegia mollis* (NCN)

Oahu 15—*Phyllostegia mollis*—a and Oahu 15—*Phyllostegia mollis*—b, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Phyllostegia mollis* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep slopes or gulches in diverse mesic to wet forests and containing one or more of the following associated native plant species: *Acacia koa*, *Alyxia oliviformis*, *Antidesma platyphyllum*, *Carex meyenii*, *Chamaesyce multiformis*, *Claoxylon sandwicense*, *Diospyros hillebrandii*, *Dryopteris unidentata*, *Metrosideros polymorpha*, *Myrsine* sp., *Pipturus albidus*, *Pisonia umbellifera*, *Pouteria sandwicensis*, *Psychotria hathewayi*, or *Urera glabra*; and

(ii) Elevations between 519 to 928 m (1,702 to 3,044 ft).

Family Lamiaceae: *Phyllostegia parviflora* (NCN)

Oahu 20—*Phyllostegia parviflora*—d, identified in the legal description in paragraph (i) of this section, constitutes critical habitat for *Phyllostegia parviflora* var. *lydgatei* on Oahu. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Moderate to steep slopes in mesic forest and containing one or more of the following associated native plant species: *Antidesma platyphyllum*, *Chamaesyce multiformis*, *Claoxylon sandwicense*, *Coprosma foliosa*, *Dryopteris unidentata*, *Myrsine lessertiana*, *Pipturus albidus*, *Pouteria sandwicensis*, *Selaginella arbuscula*, or *Xylosma hawaiiense*; and

(ii) Elevations between 529 to 881 m (1,800 to 2,890 ft).

Oahu 15—*Phyllostegia parviflora*—a, Oahu 15—*Phyllostegia parviflora*—b, and Oahu 15—*Phyllostegia parviflora*—c, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Phyllostegia parviflora* var. *parviflora* on Oahu. 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* mixed lowland wet forest and containing one or more of the following associated native plant species: *Antidesma* sp., *Broussaisia arguta*, *Cheirodendron* sp., *Cibotium* sp., *Cyrtandra* sp., *Dicranopteris linearis*, *Melicope* sp., *Phyllostegia glabra*, *Pipturus* sp., *Pritchardia* sp., *Tetraplasandra* sp., *Touchardia latifolia*, or *Syzygium sandwicensis*; and

(ii) Elevations between 232 to 881 m (761 to 2,890 ft).

Family Lamiaceae: *Stenogyne kanehoana* (NCN)

Oahu 15—*Stenogyne kanehoana*—a and Oahu 15—*Stenogyne kanehoana*—b, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Stenogyne kanehoana* on Oahu. 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 mesic forest and containing one or more of the following associated native plant species: *Acacia koa*, *Alyxia oliviformis*, *Bidens* sp., *Chamaesyce* sp., *Cibotium* sp., *Freycinetia arborea*, *Metrosideros polymorpha*, *Psychotria* sp., or *Scaevola* sp.; and

(ii) Elevations between 559 and 1,168 m (1,834 and 3,831 ft).

Family Loganiaceae: *Labordia cyrtandrae* (kamakahala)

Oahu 4—*Labordia cyrtandrae*—a, Oahu 20—*Labordia cyrtandrae*—b, and Oahu 20—*Labordia cyrtandrae*—c, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Labordia cyrtandrae* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Shady gulches, slopes, or glens in mesic to wet forests and shrublands dominated by *Metrosideros polymorpha*, *Diplopterygium pinnatum*, and/or *Acacia koa* and containing one or more of the following associated native plant species: *Antidesma* sp., *Artemisia australis*, *Bidens torta*, *Boehmeria grandis*, *Broussaisia arguta*, *Chamaesyce* sp., *Coprosma* sp., *Cyrtandra* sp., *Dicranopteris linearis*, *Diplazium sandwichianum*, *Dubautia plantaginea*, *Lysimachia hillebrandii*, *Peperomia membranacea*, *Perrottetia sandwicensis*, *Phyllostegia* sp., *Pipturus albidus*, *Pouteria sandwicensis*, *Psychotria* sp., or *Rumex* sp.; and

(ii) Elevations between 232 and 1,233 m (761 and 4,044 ft).

Family Malvaceae: *Abutilon sandwicense* (NCN)

Oahu 4—*Abutilon sandwicense*—a, Oahu 4—*Abutilon sandwicense*—b, Oahu 4—*Abutilon sandwicense*—c, Oahu 15—*Abutilon sandwicense*—d, Oahu 15—*Abutilon sandwicense*—e, and Oahu 17—*Abutilon sandwicense*—f, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Abutilon sandwicense* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep slopes or gulches in dry to mesic lowland forest and containing one or more of the following associated native plant species: *Antidesma pulvinatum*, *Diospyros sandwicensis*, *Elaeocarpus bifidus*, *Eugenia reinwardtiana*, *Hibiscus arnottianus*, *Metrosideros polymorpha*, *Myrsine lanaiensis*, *Nestegis sandwicensis*, *Pipturus albidus*, *Pisonia* sp., *Pittosporum* sp., *Pleomele* sp., *Psydrax odorata*, *Rauvolfia sandwicensis*, *Reynoldsia sandwicensis*, or *Sapindus oahuensis*; and

(ii) Elevations between 215 and 725 m (705 and 2,378 ft).

Family Malvaceae: *Hibiscus brackenridgei* (mao hau hele)

(i) Oahu 1—*Hibiscus brackenridgei*—a and Oahu 4—*Hibiscus brackenridgei*—b, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Hibiscus brackenridgei* ssp. *mokuleianus* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(A) Slopes, cliffs, or arid ledges in lowland dry forest or shrubland and containing one or more of the following associated native plant species: *Bidens amplexans*, *Chamaesyce* sp., *Diospyros hillebrandii*, *Dodonaea viscosa*, *Doryopteris* sp., *Erythrina sandwicensis*, *Heteropogon contortus*, *Lepidium bidetatum*, *Melanthera remyi*, *Pleomele halapepe*, *Psydrax odorata*, *Reynoldsia sandwicensis*, *Sida fallax*, or *Waltheria indica*; and

(B) Elevations between 32 to 490 m (105 to 1,607 ft).

(ii) Oahu 5—*Hibiscus brackenridgei*—c, identified in the legal description in paragraph (i) of this section, constitutes critical habitat for *Hibiscus brackenridgei* ssp. *molokaiana* on Oahu. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(A) Dry shrublands containing one or more of the following associated native plant species: *Doryopteris* sp., *Dodonaea viscosa*, *Heteropogon contortus*, *Sida fallax*, or *Waltheria indica*; and

(B) Elevations between 32 to 490 m (105 to 1,607 ft).

Family Myrsinaceae: *Myrsine juddii* (kolea)

Oahu 20—*Myrsine juddii*—a, identified in the legal description in paragraph (i) of this section, constitutes critical habitat for *Myrsine juddii* on Oahu. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Ridge crests or gulch slopes in wet forests or shrublands dominated by *Metrosideros polymorpha* or a mixture of *Metrosideros polymorpha* and *Dicranopteris linearis* and containing one or more of the following associated native plant species: *Cheirodendron platyphyllum*, *Cheirodendron trigynum*, *Machaerina* sp., *Melicope clusiifolia*, *Psychotria mariniana*, or *Syzygium sandwicensis*; and

(ii) Elevations between 384 and 867 m (1,260 and 2,844 ft).

Family Myrtaceae: *Eugenia koolauensis* (nioi)

Oahu 4—*Eugenia koolauensis*—a, Oahu 19—*Eugenia koolauensis*—b, and Oahu 20—*Eugenia koolauensis*—c, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Eugenia koolauensis* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Gentle to steep slopes or ridges in mesic or dry forests dominated by *Metrosideros polymorpha* or *Diospyros* sp. and containing one or more of the following associated native plant species: *Alyxia oliviformis*, *Bobea elatior*, *Carex meyenii*, *Dicranopteris linearis*, *Leptecophylla tameiameia*, *Myrsine lessertiana*, *Nestegis sandwicensis*, *Pleomele halapepe*, *Pouteria sandwicensis*, *Psydrax odorata*, or *Rauvolfia sandwicensis*; and

(ii) Elevations between 57 to 437 m (187 to 1,433 ft).

Family Orchidaceae: *Platanthera holochila* (NCN)

Oahu 20—*Platanthera holochila*—a and Oahu 20—*Platanthera holochila*—b, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Platanthera holochila* on Oahu. 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*—*Dicranopteris linearis* wet forest or *Metrosideros polymorpha* mixed shrubland and containing one or more of the following associated native plant species: *Broussaia arguta*, *Cibotium* sp., *Clermontia* sp., *Coprosma* sp., *Dubautia* sp., *Gahnia* sp., *Leptecophylla tameiameia*, *Luzula hawaiiensis*, *Lycopodiella cernua*, *Lythrum maritimum*, *Polypodium pellucidum*, *Sadleria* sp., *Scaevola* sp., *Vaccinium reticulatum*, or *Wikstroemia* sp.; and

(ii) Elevations between 448 and 848 m (1,469 and 2,781 ft).

Family Plantaginaceae: *Plantago princeps* (laukahi kuahiwi)

(i) Oahu 20—*Plantago princeps*—d and Oahu 20—*Plantago princeps*—e, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Plantago princeps* var. *longibracteata* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(A) Sides of waterfalls or wet rock faces and containing one or more of the following associated native plant species: *Bidens* sp., *Coprosma granadensis*, *Eugenia* sp., *Lobelia gaudichaudii*, *Metrosideros rugosa*, or *Scaevola glabra*; and

(B) Elevations between 211 and 885 m (692 and 2,903 ft).

(ii) Oahu 4—*Plantago princeps*—a, Oahu 4—*Plantago princeps*—b, and Oahu 15—*Plantago princeps*—c, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Plantago princeps* var. *princeps* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(A) Slopes or ledges in *Metrosideros polymorpha* lowland mesic forests or shrublands and containing one or more of the following associated native plant species: *Artemisia australis*, *Bidens* sp., *Chamaesyce* sp., *Dubautia plantaginea*, *Eragrostis* sp., *Lysimachia* sp., *Pilea peploides*, or *Viola* sp.; and

(B) Elevations between 110 and 1,064 m (361 and 3,490 ft).

Family Poaceae: *Cenchrus agrimonoides* (kamanomano)

Oahu 4—*Cenchrus agrimonoides*—a, Oahu 4—*Cenchrus agrimonoides*—b, Oahu 15—*Cenchrus agrimonoides*—c, and Oahu 15—*Cenchrus agrimonoides*—d, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Cenchrus agrimonoides* var. *agrimonioides* on Oahu. 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 ridges, upper slopes, or ridges in lowland mixed mesic forest and containing one or more of the following associated native plant species: *Acacia koa*, *Alyxia oliviformis*, *Bobea* sp., *Carex wahuensis*, *Chamaesyce multifloris*, *Coprosma foliosa*, *Diospyros sandwicensis*, *Eragrostis variabilis*, *Gahnia beecheyi*, *Leptecophylla tameiameia*, *Metrosideros polymorpha*, *Nestegis sandwicensis*, *Psychotria* sp., or *Psydrax odorata*; and

(ii) Elevations between 357 and 874 m (1,171 and 2,867 ft).

Family Poaceae: *Eragrostis fosbergii* (Fosberg's love grass)

Oahu 4—*Eragrostis fosbergii*—a, identified in the legal description in paragraph (i) of this section, constitutes critical habitat for *Eragrostis fosbergii* on Oahu. Within this unit, the currently known primary constituent elements of

critical habitat include, but are not limited to, the habitat components provided by:

(i) Ridge crests or moderate slopes in dry or mesic forests and containing one or more of the following associated native plant species: *Acacia koa*, *Alyxia oliviformis*, *Bidens* sp., *Chamaesyce* sp., *Dodonaea viscosa*, *Doodia* sp., *Eragrostis grandis*, *Melicope* sp., *Metrosideros polymorpha*, *Nephrolepis exaltata*, *Psydrax odorata*, or *Sphenomeris* sp.; and

(ii) Elevations between 578 and 941 m (1,896 and 3,086 ft).

Family Primulaceae: *Lysimachia filifolia* (NCN)

Oahu 20—*Lysimachia filifolia*—a, identified in the legal description in paragraph (i) of this section, constitutes critical habitat for *Lysimachia filifolia* on Oahu. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Mossy banks at the base of cliff faces within the spray zone of waterfalls or along streams in lowland wet forests and containing one or more of the following associated native plant species: Mosses, ferns, liverworts, or *Pilea peplodes*; and

(ii) Elevations between 65 and 798 m (213 and 2,617 ft).

Family Rhamnaceae: *Colubrina oppositifolia* (kauila)

Oahu 4—*Colubrina oppositifolia*—a, identified in the legal description in paragraph (i) of this section, constitutes critical habitat for *Colubrina oppositifolia* on Oahu. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Lowland dry or mesic forests dominated by *Diospyros sandwicensis* and containing one or more of the following associated native plant species: *Alyxia oliviformis*, *Nestegis sandwicensis*, *Psydrax odorata*, *Reynoldsia sandwicensis*, or *Sapindus oahuensis*; and

(ii) Elevations between 255 and 761 m (909 and 2,496 ft).

Family Rhamnaceae: *Gouania meyenii* (NCN)

Oahu 4—*Gouania meyenii*—a, Oahu 4—*Gouania meyenii*—b, Oahu 15—*Gouania meyenii*—c, and Oahu 31—*Gouania meyenii*—d, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Gouania meyenii* on Oahu. Within these units, the currently known primary

constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Moderate to steep slopes in dry shrubland or mesic lowland forest and containing one or more of the following associated native plant species: *Alyxia oliviformis*, *Bidens* sp., *Canavalia* sp., *Carex meyenii*, *Chamaesyce* sp., *Charpentiera* sp., *Diospyros sandwicensis*, *Diospyros* sp., *Dodonaea viscosa*, *Dryopteris unidentata*, *Dubautia sherffiana*, *Eragrostis* sp., *Hedyotis* sp., *Hibiscus* sp., *Lysimachia* sp., *Melicope* sp., *Myrsine* sp., *Nestegis sandwicensis*, *Pisonia* sp., *Psychotria* sp., *Psydrax odorata*, *Sapindus oahuensis*, *Schiedea* sp., *Senna gaudichaudii*, *Sida fallax*, or *Sophora chrysophylla*; and

(ii) Elevations between 468 to 916 m (1,535 to 3,004 ft).

Family Rhamnaceae: *Gouania vitifolia* (NCN)

Oahu 2—*Gouania vitifolia*—a, Oahu 3—*Gouania vitifolia*—b, Oahu 5—*Gouania vitifolia*—c, Oahu 4—*Gouania vitifolia*—d, Oahu 4—*Gouania vitifolia*—e, Oahu 4—*Gouania vitifolia*—f, Oahu 4—*Gouania vitifolia*—g, and Oahu 8—*Gouania vitifolia*—h, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Gouania vitifolia* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Sides of ridges or gulches in dry to mesic forests and containing one or more of the following associated native plant species: *Bidens* sp., *Carex meyenii*, *Chamaesyce* sp., *Diospyros sandwicensis*, *Dodonaea viscosa*, *Erythrina sandwicensis*, *Hedyotis* sp., *Hibiscus arnottianus*, *Melicope* sp., *Nestegis sandwicensis*, *Pipturus albidus*, *Psychotria* sp., or *Urera glabra*; and

(ii) Elevations between 50 to 944 m (164 to 3,096 ft).

Family Rubiaceae: *Gardenia manni* (nanu)

Oahu 15—*Gardenia manni*—a, Oahu 20—*Gardenia manni*—b, and Oahu 20—*Gardenia manni*—c, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Gardenia manni* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Moderate to moderately steep gulch slopes, ridge crests, gulch bottoms, and stream banks in mesic or wet forests and containing one or more

of the following associated native plant species: *Acacia koa*, *Alyxia oliviformis*, *Antidesma platyphyllum*, *Bobea* sp., *Boehmeria grandis*, *Broussaisia arguta*, *Cheirodendron* sp., *Cibotium* sp., *Coprosma foliosa*, *Dicranopteris linearis*, *Elaeocarpus* sp., *Freycinetia arborea*, *Hedyotis acuminata*, *Ilex anomala*, *Melicope* sp., *Metrosideros polymorpha*, *Perrottetia* sp., *Pipturus* sp., *Pisonia* sp., *Pouteria sandwicensis*, *Psychotria mariniana*, *Syzygium sandwicensis*, or *Thelypteris* sp.; and

(ii) Elevations between 239 and 1,050 m (784 and 3,444 ft).

Family Rubiaceae: *Hedyotis coriacea* (kioele)

Oahu 15—*Hedyotis coriacea*—a and Oahu 35—*Hedyotis coriacea*—b, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Hedyotis coriacea* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep, rocky slopes in dry to mesic *Dodonaea viscosa* dominated shrublands or forests and containing one or more of the following associated native plant species: *Alyxia oliviformis*, *Leptecophylla tameiameia*, or *Metrosideros polymorpha*; and

(ii) Elevations between 78 and 836 m (256 and 2,742 ft).

Family Rubiaceae: *Hedyotis degeneri* (NCN)

Oahu 4—*Hedyotis degeneri*—a and Oahu 4—*Hedyotis degeneri*—b, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Hedyotis degeneri* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Ridge crests in diverse mesic forest and containing one or more of the following associated native plant species: *Alyxia oliviformis*, *Carex meyenii*, *Chamaesyce multifloris*, *Cocculus* sp., *Dicranopteris linearis*, *Diospyros sandwicensis*, *Dodonaea viscosa*, *Gahnia* sp., *Hedyotis terminalis*, *Leptecophylla tameiameia*, *Lysimachia hillebrandii*, *Lobelia yuccoides*, *Metrosideros polymorpha*, *Pleomele* sp., *Psydrax odorata*, *Psychotria hathewayi*, or *Wikstroemia oahuensis*; and

(ii) Elevations between 360 and 1,083 m (1,181 and 3,552 ft).

Family Rubiaceae: *Hedyotis parvula* (NCN)

Oahu 4—*Hedyotis parvula*—a, Oahu 15—*Hedyotis parvula*—b, Oahu 15—*Hedyotis parvula*—c, and Oahu 15—*Hedyotis parvula*—d, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Hedyotis parvula* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Cliff faces or their bases, rock outcrops, or ledges in mesic habitat and containing one or more of the following associated native plant species: *Bidens* sp., *Carex* sp., *Chamaesyce* sp., *Dodonaea viscosa*, *Eragrostis* sp., *Metrosideros polymorpha*, *Metrosideros tremuloides*, *Plectranthus parviflorus*, *Psydrax odorata*, or *Rumex* sp.; and

(ii) Elevations between 427 and 1,165 m (1,401 and 3,821 ft).

Family Rutaceae: *Melicope lydgatei* (alani)

Oahu 20—*Melicope lydgatei*—a, identified in the legal description in paragraph (i) of this section, constitutes critical habitat for *Melicope lydgatei* on Oahu. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Ridges in mesic or wet forests containing one or more of the following associated native plant species: *Acacia koa*, *Bobea elatior*, *Dicranopteris linearis*, *Metrosideros polymorpha*, *Psychotria* sp., or *Syzygium sandwicensis*; and

(ii) Elevations between 101 and 671 m (331 and 2,201 ft).

Family Rutaceae: *Melicope pallida* (alani)

Oahu 4—*Melicope pallida*—a, Oahu 15—*Melicope pallida*—b, Oahu 15—*Melicope pallida*—c, Oahu 15—*Melicope pallida*—d, and Oahu 15—*Melicope pallida*—e, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Melicope pallida* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep rock faces in lowland dry or mesic forests containing one or more of the following associated native plant species: *Abutilon sandwicense*, *Acacia koa*, *Alyxia oliviformis*, *Bobea elatior*, *Cibotium* sp., *Dryopteris* sp., *Metrosideros polymorpha*, *Pipturus albidus*, *Psychotria maritima*,

Sapindus oahuensis, *Syzygium sandwicensis*, *Tetraplasandra* sp., *Wikstroemia oahuensis*, or *Xylosma hawaiiense*; and

(ii) Elevations between 234 to 841 m (768 to 2,758 ft).

Family Rutaceae: *Melicope saint-johnii* (alani)

Oahu 15—*Melicope saint-johnii*—a and Oahu 15—*Melicope saint-johnii*—b, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Melicope saint-johnii* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Ridges or gulch bottoms in mesic forest containing one or more of the following associated native plant species: *Alyxia oliviformis*, *Artemisia australis*, *Bidens torta*, *Carex wahuensis*, *Coprosma longifolia*, *Eragrostis* sp., *Hedyotis schlechtendahlana*, *Labordia kaalae*, *Lysimachia hillebrandii*, *Metrosideros polymorpha*, *Panicum beechyi*, *Pittosporum* sp., *Pipturus albidus*, *Pleomele halapepe*, *Psychotria hathewayi*, or *Rumex albescens*; and

(ii) Elevations between 494 and 943 m (1,620 and 3,093 ft).

Family Sapindaceae: *Alectryon macrococcus* (mahoe)

Oahu 4—*Alectryon macrococcus*—a and Oahu 15—*Alectryon macrococcus*—b, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Alectryon macrococcus* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Slopes, ridges, or gulches within mesic lowland forests containing one or more of the following associated native plant species: *Alyxia oliviformis*, *Antidesma platyphyllum*, *Canavalia* sp., *Charpentiera* sp., *Claoxylon sandwicense*, *Diospyros hillebrandii*, *Diospyros sandwicensis*, *Diplazium sandwichianum*, *Elaeocarpus bifidus*, *Hibiscus arnottianus*, *Metrosideros polymorpha*, *Myrsine lanaiensis*, *Neraudia* sp., *Nestegis sandwicensis*, *Pipturus albidus*, *Pisonia sandwicensis*, *Pisonia umbellifera*, *Pouteria sandwicensis*, *Psychotria hathewayi*, *Psydrax odorata*, *Streblus pendulinus*, or *Xylosma* sp.; and

(ii) Elevations between 476 and 820 m (1,561 and 2,690 ft).

Family Solanaceae: *Solanum sandwicense* (aiakeakua, popolo)

Oahu 4—*Solanum sandwicense*—a, Oahu 15—*Solanum sandwicense*—b, and Oahu 15—*Solanum sandwicense*—c, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Solanum sandwicense* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Talus slopes or streambeds in open, sunny areas containing one or more of the following associated native plant species: *Pisonia* sp. or *Psychotria* sp.; and

(ii) Elevations between 471 and 1,006 m (1,545 and 3,300 ft).

Family Urticaceae: *Neraudia angulata* (NCN)

(i) Oahu 3—*Neraudia angulata*—a, Oahu 4—*Neraudia angulata*—b, Oahu 4—*Neraudia angulata*—c, Oahu 4—*Neraudia angulata*—d, Oahu 4—*Neraudia angulata*—e, and Oahu 15—*Neraudia angulata*—f, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Neraudia angulata* var. *angulata* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(A) Slopes, ledges, or gulches in lowland mesic or dry forest containing one or more of the following associated native plant species: *Artemisia australis*, *Bidens* sp., *Carex meyenii*, *Diospyros* sp., *Dodonaea viscosa*, *Hibiscus* sp., *Nestegis sandwicensis*, *Pisonia sandwicensis*, *Psydrax odorata*, or *Sida fallax*; and

(B) Elevations between 134 and 881 m (440 and 2,890 ft).

(ii) Oahu 3—*Neraudia angulata*—a, Oahu 4—*Neraudia angulata*—b, Oahu 4—*Neraudia angulata*—c, Oahu 4—*Neraudia angulata*—d, Oahu 4—*Neraudia angulata*—e, and Oahu 15—*Neraudia angulata*—f, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Neraudia angulata* var. *dentata* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(A) Cliffs, rock embankments, gulches, or slopes in mesic or dry forests containing one or more of the following associated native plant species: *Alyxia oliviformis*, *Antidesma pulvinatum*, *Artemisia australis*, *Bidens torta*,

Canavalia sp., *Carex* sp., *Charpentiera* sp., *Diospyros hillebrandii*, *Diospyros sandwicensis*, *Dodonaea viscosa*, *Eragrostis* sp., *Hibiscus* sp., *Metrosideros polymorpha*, *Myrsine lanaiensis*, *Nestegis sandwicensis*, *Pisonia* sp., *Psydrax odorata*, *Rauvolfia sandwicensis*, *Sapindus oahuensis*, *Sida fallax*, or *Streblus pendulinus*; and

(B) Elevations between 134 and 881 m (440 and 2,890 ft).

Family Urticaceae: *Urera kaalae* (opuhe)

Oahu 4—*Urera kaalae*—a, Oahu 4—*Urera kaalae*—b, Oahu 15—*Urera kaalae*—c, Oahu 15—*Urera kaalae*—d, Oahu 15—*Urera kaalae*—e, and Oahu 15—*Urera kaalae*—f, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Urera kaalae* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Slopes or gulches in diverse mesic forest containing one or more of the following associated native plant species: *Alyxia oliviformis*, *Antidesma platyphyllum*, *Asplenium kaufusii*, *Athyrium* sp., *Canavalia* sp., *Chamaesyce* sp., *Charpentiera* sp., *Claoxylon sandwicense*, *Diospyros hillebrandii*, *Doryopteris* sp., *Freycinetia arborea*, *Hedyotis acuminata*, *Hibiscus* sp., *Nestegis sandwicensis*, *Pipturus albidus*, *Pleomele* sp., *Pouteria sandwicensis*, *Psychotria* sp., *Senna gaudichaudii*, *Streblus pendulinus*, *Urera glabra*, or *Xylosma hawaiiense*; and

(ii) Elevations between 439 and 995 m (1,440 and 3,264 ft).

Family Violaceae: *Isodendron laurifolium* (aupaka)

Oahu 4—*Isodendron laurifolium*—a, Oahu 4—*Isodendron laurifolium*—b, and Oahu 35—*Isodendron laurifolium*—c, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Isodendron laurifolium* on Oahu.

Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Gulch slopes, ravines, or ridges in diverse mesic or dry forest dominated by *Metrosideros polymorpha*, *Acacia koa*, *Eugenia reinwardtiana*, or *Diospyros sandwicensis* and containing one or more of the following associated native plant species: *Alyxia oliviformis*, *Antidesma platyphyllum*, *Antidesma pulvinatum*, *Carex wahuensis*, *Charpentiera tomentosa*, *Doodia* sp., *Dryopteris unidentata*, *Hedyotis*

terminalis, *Hibiscus arnottianus*, *Nestegis sandwicensis*, *Pisonia* sp., *Pouteria sandwicensis*, *Psydrax odorata*, *Rauvolfia sandwicensis*, *Sapindus* sp., *Smilax melastomifolia*, or *Xylosma hawaiiense*; and

(ii) Elevations between 180 and 959 m (590 and 3,146 ft).

Family Violaceae: *Isodendron longifolium* (aupaka)

Oahu 4—*Isodendron longifolium*—a and Oahu 20—*Isodendron longifolium*—b, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Isodendron longifolium* on Oahu.

Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep slopes or stream banks in mixed mesic or lowland wet *Metrosideros polymorpha*-*Dicranopteris linearis* forest containing one or more of the following associated native plant species: *Acacia koa*, *Alyxia oliviformis*, *Antidesma* sp., *Bobea brevipes*, *Carex* sp., *Cyanea* sp., *Cyrtandra* sp., *Hedyotis terminalis*, *Isachne pallens*, *Melicope* sp., *Peperomia* sp., *Perrottetia sandwicensis*, *Pittosporum* sp., *Pouteria sandwicensis*, *Psydrax odorata*, *Psychotria* sp., *Selaginella arbuscula*, or *Syzygium sandwicensis*; and

(ii) Elevations between 316 and 880 m (1,036 and 2,886 ft).

Family Violaceae: *Isodendron pyriformis* (wahine noho kula)

Oahu 5—*Isodendron pyriformis*—a, Oahu 16—*Isodendron pyriformis*—b, and Oahu 17—*Isodendron pyriformis*—c, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Isodendron pyriformis* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by bare rocky hills or wooded ravines in dry shrublands from 37 to 692 m (121 to 2,270 ft).

Family Violaceae: *Viola chamissoniana* ssp. *chamissoniana* (pamakani)

Oahu 4—*Viola chamissoniana* ssp. *chamissoniana*—a, Oahu 4—*Viola chamissoniana* ssp. *chamissoniana*—b, Oahu 4—*Viola chamissoniana* ssp. *chamissoniana*—c, Oahu 10—*Viola chamissoniana* ssp. *chamissoniana*—d, Oahu 15—*Viola chamissoniana* ssp. *chamissoniana*—e, and Oahu 15—*Viola chamissoniana* ssp. *chamissoniana*—f, identified in the legal descriptions in paragraph (i) of this section, constitute

critical habitat for *Viola chamissoniana* ssp. *chamissoniana* on Oahu. 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 cliffs, rocky ledges, or steep slopes in mesic shrubland or cliff vegetation and containing one or more of the following associated native plant species: *Artemisia australis*, *Bidens torta*, *Carex meyenii*, *Chamaesyce* sp., *Dodonaea viscosa*, *Dubautia* sp., *Eragrostis* sp., *Leptecophylla tameiameiae*, *Melanthera tenuis*, *Metrosideros polymorpha*, *Peperomia* sp., *Rumex* sp., *Schiedea* sp., or *Sida fallax*; and

(ii) Elevations between 468 and 1,149 m (1,535 and 3,769 ft).

Family Violaceae: *Viola oahuensis* (NCN)

Oahu 20—*Viola oahuensis*—a and Oahu 35—*Viola oahuensis*—b, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Viola oahuensis* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Exposed, windswept ridges of moderate to steep slope in wet *Metrosideros polymorpha*-*Dicranopteris linearis* shrublands or *Metrosideros polymorpha* mixed montane bogs in the cloud zone and containing one or more of the following associated native plant species: *Antidesma* sp., *Bidens macrocarpa*, *Broussaisia arguta*, *Cibotium* sp., *Dubautia laxa*, *Hedyotis terminalis*, *Labordia* sp., *Machaerina* sp., *Melicope* sp., *Sadleria* sp., *Syzygium sandwicensis*, *Vaccinium* sp., or *Wikstroemia* sp.; and

(ii) Elevations between 415 and 959 m (1,361 and 3,146 ft).

(2) *Ferns and allies*.

Family Adiantaceae: *Pteris lidgatei* (NCN)

Oahu 20—*Pteris lidgatei*—a, Oahu 20—*Pteris lidgatei*—b, and Oahu 20—*Pteris lidgatei*—c, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Pteris lidgatei* on Oahu. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep stream banks or cliffs in wet *Metrosideros polymorpha*-*Dicranopteris linearis* forest containing one or more of the following associated native plant species: *Asplenium* sp., *Broussaisia arguta*, *Cibotium chamissoi*, *Cyrtandra*

sp., *Dicranopteris linearis*, *Diplopterygium pinnatum*, *Doodia lyonii*, *Dryopteris sandwicensis*, *Elaphoglossum crassifolium*, *Isachne pallens*, *Machaerina angustifolia*, *Sadleria* sp., *Sadleria squarrosa*, *Selaginella arbuscula*, or *Sphenomeris chinensis*; and

(ii) Elevations between 75 and 867 m (246 and 2,844 ft).

Family Aspleniaceae: *Ctenitis squamigera* (pauoa)

Oahu 4—*Ctenitis squamigera*—a, identified in the legal description in paragraph (i) of this section, constitutes critical habitat for *Ctenitis squamigera* on Oahu. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Gentle to steep slopes in *Metrosideros polymorpha*-*Diospyros sandwicensis* mesic forest or diverse mesic forest and containing one or more of the following associated native plant species: *Alyxia oliviformis*, *Carex meyenii*, *Diospyros hillebrandii*, *Dodonaea viscosa*, *Doodia kunthiana*, *Dryopteris unidentata*, *Freycinetia arborea*, *Hibiscus* sp., *Myrsine* sp., *Nestegis sandwicensis*, *Pisonia* sp., *Pouteria sandwicensis*, *Psychotria* sp., *Psydrax odorata*, or *Xylosma* sp.; and

(ii) Elevations between 413 to 923 m (1,355 to 3,027 ft).

Family Aspleniaceae: *Diellia erecta* (asplenium-leaved diellia)

Oahu 35—*Diellia erecta*—a, identified in the legal description in paragraph (i) of this section, constitutes critical habitat for *Diellia erecta* on Oahu. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Moderate to steep gulch slopes or sparsely vegetated rock faces in mesic forest containing one or more of the following associated native plant species: *Coprosma* sp., *Dodonaea viscosa*, *Dryopteris unidentata*, *Myrsine* sp., *Psychotria* sp., *Psydrax odorata*, *Sapindus oahuensis*, *Syzygium sandwicensis*, or *Wikstroemia* sp.; and

(ii) Elevations between 150 and 550 m (492 and 1,804 ft).

Family Aspleniaceae: *Diellia falcata* (NCN)

Oahu 4—*Diellia falcata*—a, Oahu 4—*Diellia falcata*—b, Oahu 15—*Diellia falcata*—c, and Oahu 15—*Diellia falcata*—d, identified in the legal descriptions in paragraph (i) of this section, constitute critical habitat for *Diellia falcata* on Oahu. Within these

units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Deep shade or open understory on moderate to moderately steep slopes and gulch bottoms in diverse mesic forest containing one or more of the following associated native plant species: *Acacia* koa, *Alyxia oliviformis*, *Antidesma* sp., *Asplenium kaulfussii*, *Carex meyenii*, *Charpentiera* sp., *Claoxylon sandwicense*, *Coprosma foliosa*, *Diospyros hillebrandii*, *Diospyros sandwicensis*, *Diplazium sandwichianum*, *Doodia kunthiana*, *Dryopteris unidentata*, *Elaeocarpus bifidus*, *Freycinetia arborea*, *Hedyotis terminalis*, *Hibiscus* sp., *Melicope* sp., *Metrosideros polymorpha*, *Myrsine lanaiensis*, *Nephrolepis exaltata*, *Nestegis sandwicensis*, *Nothocestrum* sp., *Pipturus* sp., *Pisonia sandwicensis*, *Pouteria sandwicensis*, *Psychotria* sp., *Psydrax odorata*, *Sapindus oahuensis*, *Selaginella arbuscula*, *Sophora chrysophylla*, or *Xylosma* sp.; and

(ii) Elevations between 394 and 932 m (1,292 and 3,057 ft).

Family Aspleniaceae: *Diellia unisora* (NCN)

Oahu 15—*Diellia unisora*—a, identified in the legal description in paragraph (i) of this section, constitutes critical habitat for *Diellia unisora* on Oahu. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Moderate to steep slopes or gulch bottoms in deep shade or open understory in mesic forest and containing one or more of the following associated native plant species: *Acacia* koa, *Alyxia oliviformis*, *Antidesma* sp., *Bidens torta*, *Carex meyenii*, *Chamaesyce multifloris*, *Coprosma* sp., *Dodonaea viscosa*, *Dryopteris unidentata*, *Eragrostis grandis*, *Hedyotis schlechtendahlana*, *Hedyotis terminalis*, *Metrosideros polymorpha*, *Myrsine lessertiana*, *Psychotria* sp., *Rumex* sp., or *Selaginella arbuscula*; and

(ii) Elevations between 489 and 943 m (1,604 and 3,093 ft).

Family Aspleniaceae: *Diplazium molokaiense* (NCN)

Oahu 4—*Diplazium molokaiense*—a, identified in the legal description in paragraph (i) of this section, constitutes critical habitat for *Diplazium molokaiense* on Oahu. Within this unit, the currently known primary constituent elements of critical habitat

include, but are not limited to, the habitat components provided by:

(i) Steep rocky wooded gulch walls in wet forests; and

(ii) Elevations between 618 and 1,202 m (2,027 and 3,943 ft).

Family Grammitidaceae: *Adenophorus periens* (pendent kihi fern)

Oahu 20—*Adenophorus periens*—a, identified in the legal description in paragraph (i) of this section, constitutes critical habitat for *Adenophorus periens* on Oahu. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Trees in *Metrosideros polymorpha* or *Metrosideros rugosa* wet forests containing one or more of the following associated native plant species: *Cheirodendron* spp., *Cibotium* sp., *Dicranopteris linearis*, *Hedyotis terminalis*, *Machaerina angustifolia*, or *Syzygium sandwicensis*; and

(ii) Elevations between 309 to 867 m (1,014 to 2,844 ft).

Family Lycopodiaceae: *Phlegmariurus nutans* (wawaeiole)

Oahu 20—*Phlegmariurus nutans*—a, identified in the legal description in paragraph (i) of this section, constitutes critical habitat for *Phlegmariurus nutans* on Oahu. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Tree trunks, open ridges, forested slopes, or cliffs in *Metrosideros polymorpha* dominated wet forests, cliffs, or shrublands or mesic forests and containing one or more of the following associated native plant species: *Antidesma platyphyllum*, *Broussaisia arguta*, *Cyrtandra laxiflora*, *Dicranopteris linearis*, *Elaphoglossum* sp., *Hedyotis terminalis*, *Hibiscus* sp., *Machaerina angustifolia*, *Psychotria mariniana*, *Syzygium sandwicensis*, or *Wikstroemia oahuensis*; and

(ii) Elevations between 227 and 846 m (745 and 2,775).

Family Marsileaceae: *Marsilea villosa* (ihi ihi)

Oahu 13—*Marsilea villosa*—a, Oahu 14—*Marsilea villosa*—b, Oahu 28—*Marsilea villosa*—c, Oahu 29—*Marsilea villosa*—d, and Oahu 36—*Marsilea villosa*—e, identified in the legal description in paragraph (i) of this section, constitute critical habitat for *Marsilea villosa* on Oahu. 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 craters, vernal pools surrounded by lowland dry forest

vegetation, mud flats, or lowland grasslands containing *Sida fallax*; and

(ii) Elevations between 1 and 89 m (3 and 292 ft).

Dated: April 30, 2003.

Craig Manson,

Assistant Secretary for Fish and Wildlife and Parks.

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Federal Register

**Tuesday,
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Part III

Department of Labor

Mine Safety and Health Administration

30 CFR Parts 6, 7, 18, et al.

**Testing and Evaluation by Independent
Laboratories and Non-MSHA Product
Safety Standards; Final Rule**

DEPARTMENT OF LABOR**Mine Safety and Health Administration****30 CFR Parts 6, 7, 18, 19, 20, 22, 23, 27, 33, 35, and 36****RIN 1219-AA87****Testing and Evaluation by Independent Laboratories and Non-MSHA Product Safety Standards****AGENCY:** Mine Safety and Health Administration (MSHA), Department of Labor.**ACTION:** Final rule.

SUMMARY: This final rule establishes alternate requirements for testing and evaluation of products that MSHA approves for use in gassy underground mines. It is being published in response to comments received as the result of a 1994 proposed rule and an October 17, 2002, revised proposed rule on the same subject. It allows manufacturers of certain products, who seek MSHA approval under Title 30 of the Code of Federal Regulations (30 CFR), the option of using an independent laboratory to perform, in whole or part, the necessary testing and evaluation for approval which MSHA would normally perform so that such products can be used in gassy mines in the United States. Testing and evaluation as used in this final rule means testing, evaluation, or both. This final rule also permits manufacturers to have their products approved based on non-MSHA product safety standards. This will occur only after MSHA has determined that such standards are equivalent to its applicable product approval requirements or can be modified to provide at least the same degree of protection as those MSHA requirements. The final rule should increase the availability of a wider variety of mining products having enhanced safety features by reducing costs and broadening the market for mining equipment.

EFFECTIVE DATE: This regulation is effective August 18, 2003.

FOR FURTHER INFORMATION CONTACT: Marvin W. Nichols, Jr., Director, Office of Standards, Regulations, and Variances, MSHA, 1100 Wilson Boulevard, Room 2352, Arlington, Virginia 22209-3939. Mr. Nichols can be reached at *nichols-marvin@msha.gov* (Internet e-mail), 202-693-9440 (voice), or 202-693-9441 (fax). You may obtain copies of the final rule in alternative formats by calling this number. The alternative formats available are either a large print version of the final rule or

the final rule in an electronic file on computer disk. The final rule also is available on the Internet at *http://www.msha.gov/REGSINFO.HTM*.

SUPPLEMENTARY INFORMATION:**I. Background**

From its creation by Congress in 1910, MSHA's predecessor, the Bureau of Mines, U.S. Department of the Interior, was responsible for the testing and evaluation of mining products. Under the Federal Mine Safety and Health Act of 1977 (Mine Act), MSHA is responsible for prescribing the technical design, construction, and the test requirements for certain products used in underground mines, and for testing and evaluating them for approval based on those requirements. These technical requirements are set forth in the Agency's approval regulations in 30 CFR parts 7 through 36.

MSHA's approval regulations govern the process through which manufacturers may obtain MSHA approval, certification, acceptance or evaluation of certain products for use in underground mines. Each of these separate approval actions has specific application procedures and technical requirements for testing and evaluation. MSHA currently conducts the testing and evaluation of products for a fee paid by the applicant. Following MSHA approval, manufacturers must ensure that the product continues to conform to the technical requirements tested, evaluated, and approved by MSHA.

When MSHA receives an application for approval of a product for use in underground mines, every aspect of the documentation package is reviewed to determine whether the product meets the technical requirements of the applicable provisions of 30 CFR parts 15 through 36. Each drawing and specification in the package is cross-checked against these requirements and, for some products, samples of the product or parts of the product are disassembled and examined by MSHA for conformity with the drawings and specifications. After MSHA verifies that an applicant's product complies with the design and construction requirements, MSHA then tests the product to determine whether it performs according to the approval requirements, unless the design obviates the need for testing. If the product passes the tests and meets all MSHA requirements, MSHA issues an approval for the product.

Once MSHA has approved a product, the manufacturer is authorized to place an MSHA approval marking on the product that identifies it as approved for use in underground mines. Use of the

MSHA marking obligates the manufacturer to maintain the quality of the product as approved. The MSHA marking indicates to the mining community that the product has been manufactured according to the drawings and specifications upon which the approval was based. Any proposed change to an approved product that causes it to differ from the design or construction described in the original documentation approved by MSHA must be submitted to the Agency for approval prior to implementation of the change. If MSHA approves the change, the Agency issues an extension of approval or a notice of acceptance of the modified product to the manufacturer.

In the mid-1980s, the Agency reviewed its product approval program to determine whether it could be restructured to provide improved safety to miners without increasing cost to the applicant. That review resulted in the promulgation in 1988 of 30 CFR part 7, Testing by Applicant or Third-Party, which represented MSHA's first departure from its role of front-end prototype testing of products for approval, by substituting manufacturer or third-party testing of a limited number of products for the testing that previously had been conducted by MSHA.

The objectives of the program were to permit MSHA to redirect its resources to its post-approval product audit functions, as well as to the review of technological improvements in mining products. The Agency's shift in emphasis was intended to enhance the safety of products in mines by providing the mining community a greater assurance that approved products in mines continue to be manufactured as approved, by detecting any problems in manufactured products more effectively, and by enabling a more expeditious introduction of new technology.

Products selected as suitable for applicant or third-party testing under part 7 were those with characteristics which could be objectively tested in a routine and readily reproducible manner, with no elements of subjective analysis. Products whose testing results depend on the experience, judgement, and knowledge of the personnel executing the tests, such as testing a complex intrinsically safe circuit, were not included in the part 7 program.

Under part 7, all product testing is conducted according to MSHA-specified tests and procedures, using calibrated and accurate instruments. Moreover, the product testing is subject to Agency observation. Part 7 is not a self-certification program. The part 7 concept shifts only the testing of certain

products to the applicant or a third party. The evaluation of the test results and the issuance of the approval remain the responsibility of the Agency. This final rule will not affect the testing aspects of part 7. Part 7, unlike the other approval parts, will continue to permit testing by the applicant or by third party laboratories that are not necessarily independent from the manufacturer.

In 1993, MSHA initiated a further review of its approval and certification activities, including its part 7 applicant or third-party testing program. Based on this review, the Agency reaffirmed the objectives of the part 7 concept to increase post-approval product audits and direct more resources to evaluation of safety and technological improvements in products for use underground. However, MSHA determined that while the part 7 program was a step in the right direction, the limited scope of that program did not free up sufficient resources to allow MSHA to fully redirect its efforts to meet those objectives. After considering how best to accomplish those goals, the Agency decided to initiate rulemaking to modify MSHA's approval program in two ways, which it did in 1994. Under a 1994 proposed rule titled "Testing and Evaluation by Nationally Recognized Testing Laboratories and Use of Equivalent Testing and Evaluation Requirements," applicants seeking MSHA product approval would have been required to use independent laboratories recognized by the Occupational Safety and Health Administration (OSHA) under its Nationally-Recognized Testing Laboratories (NRTL) program for the required testing and evaluation. This would have been in place of MSHA testing and evaluation of products. As with the part 7 program, however, MSHA would have continued to verify that approval requirements were met and would have retained full responsibility for issuing the product approval. Thus, the 1994 proposed rule would not have constituted a self-certification program. Second, MSHA or appropriately recognized independent laboratories would have been permitted, upon an applicant's request, to test and evaluate a product for approval based on approval requirements other than the Agency's, as long as those requirements provided an equal or a greater degree of protection. This would have allowed MSHA to approve a product meeting the International Electrotechnical Commission's (IEC) approval standards, or some other approval requirements different from those specified in

MSHA's regulations, provided that MSHA first had determined that those requirements were equivalent or could be modified to provide protection equivalent to that afforded by products tested and evaluated according to MSHA approval requirements. In this way, the Agency could have taken advantage of revisions to product safety standards developed by other countries or standards development organizations to address technological advances or improvements in product safety. Such an approach would have permitted the introduction of a wider variety of improved products into U.S. mines more quickly than if the Agency had to undertake rulemaking to address each technological advancement or improvement in product safety, capability, and performance.

A notice of proposed rulemaking (NPRM) for a new part 6 was published on November 30, 1994 (59 FR 61376). The NPRM comment period was extended to February 21, 1995 (60 FR 8209). A Public Hearing Notice was published on October 10, 1995 (60 FR 52640), scheduling a public hearing for November 15, 1995. That hearing was rescheduled to April 30, 1996. (61 FR 15743). The post-hearing comment period ended on May 31, 1996. (61 FR 15743). The 1996 proposed rule was not published as a final rule.

MSHA introduced a revised proposed rule in the **Federal Register** on October 17, 2002. This revised proposed rule offered applicants for MSHA product approval alternate requirements for testing and evaluation of products that MSHA approves for use in gassy underground mines. Based on comments from the public to the 1994 proposed rule, the revised proposed rule provided a number of revisions to the original proposed rule. The major changes in the revised proposed rule are outlined below.

First, the revised proposal would be voluntary. Manufacturers could choose to use independent laboratories to perform all or part of the testing and evaluation necessary for approval, or could elect to have MSHA perform the necessary testing and evaluation. Second, applicants would not have to use only independent laboratories that were National Recognized Testing Laboratories under OSHA's program, but could choose an independent laboratory recognized by other laboratory accreditation programs, such as that of the American National Standards Institute (ANSI) or the International Electrotechnical Commission (IEC). Third, only MSHA would conduct required post-approval product audits. Audits conducted by

independent laboratories would not be required under the revised proposal. Fourth, only the MSHA mark would be required on MSHA-approved products, not both the MSHA and independent laboratory mark. Finally, the revised proposal would allow public input into the process of making equivalency determinations of non-MSHA product safety standards. MSHA would notify the public through publication in the **Federal Register** of MSHA's intent to review a particular non-MSHA standard for equivalency and provide an opportunity for public input on that issue.

However, like part 7, under both the 1994 proposed rule and the revised proposed rule, the review of any testing and evaluation performed by an independent laboratory and the issuance of the MSHA product approval would still remain the full responsibility of MSHA's Approval and Certification Center.

MSHA requested comments from the public (67 FR 64196). MSHA received two general comments regarding this revised proposed rule. The public comment period closed on December 31, 2002. MSHA held two public hearings. One was on January 7, 2003, in Denver, Colorado. The other hearing was held on January 9, 2003, in Washington, Pennsylvania. No comments or statements regarding the revised proposal were provided by any party at either of the public hearings. The post-hearing comment period closed on February 10, 2003.

II. Discussion of Final Rule

A. Introduction

Under this final rule, manufacturers seeking MSHA approval could choose to have their products tested and evaluated either by an independent laboratory or by MSHA. MSHA will be able to accept the independent laboratory's test and evaluation results in lieu of performing its own.

This final rule recognizes the industry's need to expedite the transfer of technology into the mining environment. This transfer should improve the health and safety of miners. The alternate program in this final rule will permit a manufacturer who has had a product tested and evaluated by an independent laboratory to submit the test reports and technical information to MSHA to obtain MSHA approval for the product.

MSHA is aware of certain instruments that are currently listed (approved) by independent laboratories for use in hazardous gas and dust atmospheres that may also be suitable for use in the

mine environment. These instruments include: Portable methane detectors, air sampling pumps, oxygen deficiency meters, air velocity meters, carbon monoxide detectors, hydrogen sulfide detectors, powered respirators and accessories, toxic gas detectors, portable two-way radios, laser surveying instruments, mine rescue communications systems, photometers, temperature sensing devices, personal audible and visual alarms, heat detection systems, voice amplifiers, position sensing devices, tape recorders, pressure sensing devices, data recording instruments, electrical diagnostic test instruments, sound level meters, sound level calibrators, audio dosimeters, and cable fault detectors.

MSHA has issued approvals for a number of instruments that were already listed (approved) by an independent laboratory at the time of application for MSHA approval. Examples of some of these instruments are: Motorola MT2000 and HT1000 Hand-held Radios; MSA Microgard Portable Alarm for warning of low levels of oxygen and high levels of methane; MSA Escort Elf Portable Pump for sampling of the mine atmosphere for dust; MSA Passport and Mini Series Personal Alarms for warning of high levels of toxic and combustible gases; Industrial Scientific Corporation Model SP402 Sampling Pump for remote monitoring of oxygen, toxic and combustible gases; and Industrial Scientific Corporation Model TMX410 Four-Gas Monitor for monitoring and warning of high levels of toxic and combustible gases and low levels of oxygen.

MSHA recognizes that there are many more products, including instruments, motors, explosion-proof enclosures, conveyor belts and hydraulic fluids, that are listed by independent laboratories that have not been submitted for MSHA approval. These products, used in other industries, can offer safety-related benefits to the mining industry and are considered potential candidates for the program that is created by this rule. By permitting acceptance of independent laboratory test and evaluation results, MSHA believes that some of these product manufacturers will be encouraged to submit their products for MSHA approval.

MSHA is also aware that many instruments and products have been listed (approved) by independent laboratories to Underwriter's Laboratories (UL) and Factory Mutual (FM) intrinsic safety standards for use in Class I (explosive gas-air mixtures) and Class II (explosive dust-air mixtures) atmospheres. Many of the same tests

and design requirements that MSHA uses under its intrinsic safety regulations are also used in the UL and FM standards. Under this final rule, applicants seeking MSHA approval of instruments or other products for intrinsic safety purposes could submit the results of any independent laboratory's testing and evaluation for intrinsic safety to MSHA as part of their applications. If, after review, MSHA determined that the testing already conducted was performed properly, MSHA could accept the test results and will not have to repeat testing in cases where the tests were the same. This will reduce costs and the time spent by manufacturers to obtain MSHA approval. If the review raised questions or concerns about the validity of test and evaluations submitted, MSHA will need to perform repeat testing. MSHA, of course, will conduct additional testing and evaluation where the UL and FM intrinsic safety requirements were not the same as MSHA's.

Under this final rule, MSHA will retain its testing and evaluation capabilities, but will offer applicants the alternative of submitting independent laboratory test and evaluation results for MSHA approval. MSHA will have the authority to accept the test and evaluation results in lieu of conducting its own tests and evaluations. MSHA also will have the authority to conduct or to observe any additional or repeat test and evaluation to ensure compliance with the MSHA requirements.

This final rule will also permit manufacturers to request MSHA approval based on non-MSHA product safety standards. This will occur only after MSHA has determined that such standards are equivalent to its applicable product approval requirements or can be modified to provide at least the same degree of protection as those MSHA requirements.

No approvals will be issued under part 6. Instead, any approval issued based on part 6 provisions will continue to be approved under the applicable product approval parts. The necessary conforming language to those other approval parts is published in this **Federal Register** notice of final rulemaking.

In developing this final rule, MSHA has made every effort to address the comments received on the October 17, 2002, revised proposal. Two commenters submitted comments regarding the revised proposed rule.

One commenter expressed its support for the revised proposed rule indicating that " * * * the Revised Proposed Rule contained language which addressed all

of our concerns." The commenter was in agreement with allowing manufacturers to utilize independent laboratory testing facilities while maintaining the test facility at MSHA. It agreed that requiring the use of OSHA's Nationally Recognized Testing Laboratories (NRTLs) which must conduct semi-annual audits was unnecessary since MSHA conducts its own audits. The commenter was also supportive of MSHA's proposal to approve equipment designed to non-MSHA product safety standards, particularly international standards, once MSHA has determined that they provide at least the same degree of protection, in their original or modified form, as MSHA's product approval requirements. The commenter indicated that the proposed provision on equivalency would assist in maintaining a single product line for use in multiple countries. This commenter also urged MSHA to "pursue working toward harmonizing with the world in regard to globalized standards," specifically suggesting that MSHA join the IECEx scheme that permits one global standard and allows member countries to accept the certification issued by other member countries.

The second commenter expressed its concern regarding the competency of independent laboratories when compared with that of MSHA's own testing and evaluation capabilities. It indicated that MSHA and its predecessors have almost a century of experience and developed knowledge regarding the evaluation of mining products. The commenter recognized that independent laboratories may have the appropriate expertise to test to MSHA requirements, but asserted that the lack of mining-specific knowledge would reduce the industry's confidence in the test and evaluation results. This commenter was further concerned about the potential for "institutional atrophy" that could occur within MSHA with the reduction in testing and evaluation experience. The commenter expressed concern with a potential conflict of interest that could result from an independent laboratory being hired by a manufacturer. The commenter expressed similar concerns that a laboratory could be influenced to "gloss over negative aspects of a mining product" in an effort to keep the manufacturer as a customer.

MSHA has carefully evaluated the concern expressed about accepting third party testing results. Under this final rule, before an independent laboratory's test and evaluation results will be considered, the manufacturer must provide evidence to MSHA that the

laboratory is independent from outside influences and has been accredited by a laboratory accrediting organization to test to the particular standard. Test and evaluation results from an outside laboratory will be scrutinized by MSHA. The results, required by the final rule to be submitted to MSHA, will include the complete report which outlines the conduct of each test. The test and evaluation results will be used by MSHA to determine compliance with the applicable product approval requirements on which the MSHA approval is based. MSHA will have the option to require the independent laboratory to repeat or conduct additional tests if there is any reason to question the supplied test data. MSHA will also have the option of performing the repeat or additional tests. In addition, MSHA's post-approval product audit program will ensure that approved products are produced in compliance with all approval requirements.

The use of third party laboratories in the MSHA approval process has proven to be successful under 30 CFR, part 7, Testing by Applicant or Third Party. This regulation, which permits an applicant to submit their own test results or those from a third party, has been in place since 1988. There have been notably few instances of questionable laboratory test results of part 7 approved products in more than 14 years of experience with the regulation. The few cases dealt with the laboratory's lack of understanding of a particular test standard. In these cases, MSHA's oversight resulted in corrections to the laboratory's test process and the issues were resolved prior to any part 7 product approval.

For the reasons stated above, MSHA has no reason to anticipate problems with competency or conflict of interest associated with independent laboratory testing and evaluation.

B. Section-by-Section Discussion

The following portion of the preamble discusses each provision of the final part 6 rule. The text of the final rule is included at the end of the document.

§ 6.1 Purpose and Effective Date

This section explains that the purpose of this final rule is to establish an alternate program for testing and evaluation of products MSHA approves for use in gassy underground mines. It permits manufacturers of certain products who seek MSHA approval to use an independent laboratory to perform, in whole or in part, the necessary testing and evaluation for approval. It also permits manufacturers

to request to have their products approved based on non-MSHA product safety standards once MSHA has determined that the non-MSHA product safety standards are equivalent to MSHA's applicable product approval requirements or can be modified to provide at least the same degree of protection as MSHA's requirements. No comments on the specific language in § 6.1 were received. Therefore, the final language remains unchanged from the revised proposed rule.

The provisions of this part apply to any application for approval or extension of approval filed under 30 CFR part 18, 19, 20, 22, 23, 27, 33, 35, or 36, and received by MSHA after the effective date of this rule. It will become effective 60 days after publication of the final rule in the **Federal Register**.

§ 6.2 Definitions

This section of the final rule defines and clarifies the key terms used in part 6.

Applicant. This term is used to describe an individual or organization that manufactures or controls the assembly of a product and that applies to MSHA for approval of that product.

Approval. This term is used to describe a written document issued by MSHA which states that a product has met the applicable requirements of part 18, 19, 20, 22, 23, 27, 33, 35, or 36. The definition is based on the existing definitions of "approval" in the parts specified above. It is expanded to include "certification" and "acceptance" because these terms are also used to denote MSHA approval.

Approval holder. This term is used to describe an applicant whose application for approval of a product under part 18, 19, 20, 22, 23, 27, 33, 35, or 36 of this chapter has been approved by MSHA.

Equivalent non-MSHA product safety standard. This term is used to describe a non-MSHA product safety standard, or group of standards, that is determined by MSHA to provide at least the same degree of protection as the applicable MSHA product approval requirements in parts 18, 19, 20, 22, 23, 27, 33, 35, and 36, or which in modified form, provide at least the same degree of protection.

Independent Laboratory. This term is used to describe a laboratory that: (1) has been recognized by a laboratory accrediting organization (e.g., OSHA NRTL, American National Standards Institute (ANSI), International Electrotechnical Commission (IEC), etc.) to test and evaluate products to a product safety standard, and (2) is free from commercial, financial, and other

pressures that may influence the results of the testing and evaluation process.

Post-approval product audit. This term applies to the examination, testing, or both, by MSHA of approved products selected by MSHA to determine whether those products meet the applicable product approval requirements and have been manufactured as approved.

Product safety standard. This term is used to describe a document, or group of documents, that specify the requirements for the testing and evaluation of a product for use in explosive gas and dust atmospheres, and, when appropriate, include documents addressing the flammability properties of products.

No comments on the specific language of the proposed definitions in § 6.2 were received. Therefore, the language in each of the definitions in the final rule remains unchanged from the revised proposed rule.

§ 6.10 Use of Independent Laboratories

Under paragraph (a) of this section, manufacturers who seek approval of certain products will be permitted to use an independent laboratory to perform, in whole or in part, the necessary testing and evaluation for MSHA product approval. This final rule does not require manufacturers to use independent laboratories. Instead, it gives manufacturers the option of having either MSHA or an independent laboratory do the testing and evaluation.

Also, under this final rule, if independent laboratories are used, applicants need to submit, as part of the approval application, four items set out in paragraphs (a)(1), (2), (3), and (4) of § 6.10. They include written evidence of the laboratory's independence and current recognition by a laboratory accrediting organization; a complete technical explanation of how the product complies with each requirement in the applicable MSHA product approval requirements; identification of components or features of the product that are critical to the safety of the product; and all documentation, including drawings and specifications, which are required by the applicable approval part under this chapter.

The Agency determined that it is essential for the laboratories performing testing and evaluation to be recognized by a laboratory accrediting organization. These organizations determine the qualifications of laboratories. Several competent laboratory accrediting programs exist including, but not limited to, those operated by OSHA; the American National Standards Institute

(ANSI); and the International Electrotechnical Commission (IEC).

The Agency believes that there are two essential qualifications that laboratories must meet in order for MSHA and the mining community to have assurance that any product, tested and evaluated by third party laboratories, is safe for use in the mining environment. First, MSHA believes that the laboratory must be independent of commercial, financial, or other pressures that could influence the results of the testing and evaluation process. Independence of the testing laboratory from the manufacturer is essential, under this part 6, for MSHA and the mining public to have confidence in the results of testing and evaluation conducted outside the Agency's Approval and Certification Center. Unlike part 7, independence of the laboratories is required under part 6 due to the subjective nature of the tests and evaluations performed, and often require the use of engineering judgement. Second, MSHA needs some evidence that the laboratory is competent to test and evaluate to a particular product safety standard. This final rule permits MSHA to accept testing and evaluation performed by an independent laboratory provided that MSHA receives written evidence of the laboratory's independence and current recognition by a laboratory accrediting organization.

MSHA recognizes that some foreign laboratories meet the criteria for independent laboratories. Therefore, a manufacturer could choose to use a foreign laboratory as long as it is free from commercial, financial and other pressures that could influence the testing and evaluation process and has been accredited by a recognized accrediting organization such as the IEC to perform testing and evaluation to MSHA's requirements. Guide 17025 of the International Organization for Standardization (ISO)/IEC "General requirements for the competence of testing and calibration laboratories" and ISO/IEC Guide 65 "General requirements for bodies operating product certification systems" are the main documents used both nationally and internationally by organizations which accredit laboratories. Moreover, the United States is a member of the World Trade Organization (WTO). The Technical Barriers to Trade Agreement applies to members of the WTO and requires members to ensure that technical regulations are not prepared, adopted, or applied with a view to or with the effect of creating unnecessary obstacles to international trade. This means that, under the agreement,

standards could not be promulgated that discriminate between foreign and domestic manufacturers and laboratories.

MSHA emphasizes that it will continue to test and evaluate products at the manufacturers' request. It also needs to retain testing and evaluation capability for the purposes of post-approval product audits, accident investigations, and for purposes of technical assistance. In addition, as discussed later in § 6.20 of this final rule, MSHA will be evaluating other non-MSHA product safety standards to determine equivalency, increasing its testing and evaluation expertise.

The final rule allows the optional use of a wide network of independent laboratories, eliminating the concern about monopolies. It also provides manufacturers the option to have MSHA perform some or all of the testing and evaluation necessary for approval. MSHA believes that assessing other non-MSHA product safety standards' equivalency to MSHA's approval requirements and continuing its responsibility for product audits will maintain MSHA's expertise in mine equipment safety. Under this final rule, the Agency will continue to be involved in direct product testing and evaluation if manufacturers choose to submit their products to MSHA for testing and evaluation. No comments on the specific language in § 6.10(a) were received. Therefore, the final language remains unchanged from the revised proposed rule.

Paragraph (b) of this section requires that product testing and evaluation performed by independent laboratories for purposes of MSHA approval comply with MSHA product approval requirements. The final rule does not permit an independent laboratory to change a testing standard or any elements incorporated into the standard. This is due to the critical nature of the testing and evaluation of products to be used in a potentially hazardous underground mining environment. No comments on the specific language in § 6.10(b) were received. Therefore, the final language remains unchanged from the revised proposed rule.

Paragraph (c) of this section requires product testing to be conducted or witnessed by the independent laboratory's personnel. No comments on the specific language in § 6.10(c) were received. Therefore, the final language remains unchanged from the revised proposed rule.

Under paragraph (d) of this section, MSHA will notify applicants, after the review of information required under paragraph (a), if additional information

and testing will be required. The applicant will be required to provide the information. The applicant will have to supply any additional components necessary for testing and evaluation. Without a complete application, MSHA will be unable to initiate the technical review of the product.

After determining that an application package is complete, MSHA will initiate a technical review to ensure that the independent laboratory's testing and evaluation results were both reasonable and appropriate for the particular product. If the technical review of the package indicates deficiencies resulting from inadequate data, illogical or unreasonable testing or evaluation results, or the omission of required information, the applicant will be notified of the discrepancy and given a reasonable period of time to provide the needed information and correct the apparent deficiency. If MSHA determines that additional or repeat testing is required, the applicant will have to arrange for any additional or repeat tests and notify MSHA of the location, date and time of the test(s). MSHA could elect to observe additional testing conducted by an independent laboratory or MSHA could conduct the additional or repeat tests at the applicant's expense. The applicant will need to supply any additional components necessary for testing and evaluation. No comments on the specific language in § 6.10(d) were received. Therefore, the final language remains unchanged from the revised proposed rule.

Following the administrative and technical reviews of the product approval package, MSHA will issue an approval, or a notice denying approval, to the applicant. A notice denying approval will state the reasons on which the denial is based. If an approval is issued, the approval holder will be authorized and required to place an MSHA mark on the product which signifies to the user of the product that it is approved for use in gassy underground mines. The product drawings and specifications, the independent laboratory's testing and evaluation results, and its statement of product compliance with the applicable approval requirements, as well as written evidence of the laboratory's independence and current recognition by an accrediting organization, will be retained in the approval file at MSHA's Approval and Certification Center.

The final rule does not require that manufacturers use the mark of the independent laboratory that tested and evaluated the product or its components. However, nothing in this

final rule prohibits a manufacturer from using the mark of an independent laboratory if it chooses to do so, as long as it carries the MSHA mark as well.

Paragraph (e) requires that approval holders of products approved based on independent laboratory testing and evaluation make such products available for audit upon request by MSHA. This will not occur more than once a year, except for cause. Such an audit will be conducted at a mutually agreeable site at no cost to MSHA. This is to ensure that products bearing the MSHA marking meet the approval requirements and are manufactured in accordance with the approved drawings and specifications. Although MSHA will not specifically require manufacturers to adhere to audits required by independent laboratories, MSHA recognizes that most manufacturers who elect to have their products listed (approved) by independent laboratories generally accept those laboratories' audit requirements to maintain their listing.

MSHA will continue to conduct audits as part of its post-approval product audit program. MSHA conducts audits to ensure conformity with the technical requirements upon which the approval was based. Approved products to be audited by MSHA will be selected by the Agency as representative of those distributed for use in underground mines. When an approved product is requested by MSHA for audit from the approval holder, the Agency will arrange to examine and evaluate it at a mutually agreed upon time and location and will permit the approval holder to observe audit-related tests. This examination and evaluation could take place at an MSHA facility, at the manufacturer's plant or distribution center, or at any other place agreed upon by MSHA and the approval holder. The approval holder will be able to obtain the report resulting from such audits.

Product testing and evaluation performed by both foreign and domestic laboratories for purposes of MSHA approval will have to comply with MSHA product approval requirements. In this regard, under this final rule, MSHA will carefully review all product testing and evaluation reports submitted in support of product approval applications prior to an approval decision being made. This will ensure that such testing and evaluation has been performed in accordance with MSHA procedures and requirements. Finally, the manufacturer will be ultimately responsible for any product, under any of the approval parts covered, regardless of who performs the testing

(i.e., foreign or domestic independent laboratory or MSHA). Once the product is in the mines, the mine operator is required to maintain the product in approved condition.

This final rule provision for post-approval product audits will allow MSHA to more effectively determine whether products are, in fact, being manufactured as approved. MSHA, not the manufacturer, will select the product. MSHA also will continue to obtain approved products from sources other than the manufacturer. This approach is particularly useful for products that are "one of a kind" or of limited distribution. Because these products are not readily found at mine suppliers or distributors, they are difficult to locate without the assistance of the approval holder.

In determining which approved products will be subject to audit at any particular time, MSHA will consider a variety of factors such as, but not limited to, whether the manufacturer has previously produced the approved product or similar products, whether the approved product is new or part of a new product line, or whether the approved product is intended for a unique application or limited distribution. Other considerations could include product complexity, the manufacturer's previous product audit results, product population in the mining community, and the time since the last audit or since the product was first approved.

Based on MSHA's experience, the Agency anticipates few instances in which more than one approved product will be required to be audited "for cause" from any one manufacturer in any one year. There are circumstances or causes, however, under which additional products for audit may be necessary to ascertain compliance with the technical requirements upon which an approval is based. Examples of such circumstances include verified complaints about the safety of an approved product, evidence of product changes that have not been approved, audit test results that warrant further testing to determine compliance, and evaluation of corrective action taken by an approval holder. Under these circumstances, the approval holder will have to provide, at no cost to MSHA, additional approved products so the Agency could ensure that the approval holder is meeting its obligation to manufacture the product as approved.

When discrepancies are found during MSHA audits of approved products, MSHA will require that the manufacturer take all necessary corrective actions. These actions could

include, but are not limited to, the approval holder recalling or retrofitting the approved product involved, and issuing notices of such action to users. Revocation of the approval by MSHA may result when discrepancies in approved products are not corrected. No comments on the specific language in § 6.10(e) were received. Therefore, the final language remains unchanged from the revised proposed rule.

Paragraph (f) requires approval holders to notify MSHA of all product defects they discover, once products are approved. A defect is a nonconformance with the MSHA approved design, including any drawings and specifications. There are varying degrees of significance of defects. It is MSHA's intent that all defects be reported to the Agency.

Because the use of products with defects could create hazards underground, immediate notification should be made by expedient means, such as by telephone, e-mail, or fax. The telephone notification should be followed-up in writing. The oral and written notification should include a description of the nature and extent of the problem. No comments on the specific language in § 6.10(f) were received. Therefore, the final language remains unchanged from the revised proposed rule.

§ 6.20 MSHA Acceptance of Equivalent Non-MSHA Product Safety Standards

Section 6.20(a) of this section states that MSHA will accept non-MSHA product safety standards, or groups of standards, as equivalent after determining that they: (1) Provide at least the same degree of protection as MSHA's product approval requirements set forth for the product in other parts of this chapter; or (2) can be modified to provide at least the same degree of protection as those MSHA requirements.

Non-MSHA product safety standards will be considered equivalent when MSHA determines that, in their original or modified form, they provide at least the same degree of protection as MSHA's product approval requirements in part 18, 19, 20, 22, 23, 27, 33, 35 or 36 of this chapter. No comments on the specific language in § 6.20(a) were received. Therefore, the final language remains unchanged from the revised proposed rule.

Paragraph (b) provides that MSHA will publish its intent to review any non-MSHA product safety standard for equivalency in the **Federal Register** for the purpose of soliciting public input. MSHA encourages public input in the equivalency process. It will solicit such

input through a **Federal Register** notice once it decides to evaluate a particular standard or group of standards for equivalency. Because MSHA is solely responsible for the approval of mining products under the Mine Act, MSHA will retain the ultimate decision on equivalency. No comments on the specific language in § 6.20(b) were received. Therefore, the final language remains unchanged from the revised proposed rule.

Paragraph (c) requires that MSHA publish a listing of all final equivalency determinations in this part 6 and the applicable approval parts. The listing will state whether MSHA accepts the non-MSHA product safety standards in their original form, or will require modifications to demonstrate equivalency. If modifications are required, they will also be provided in the listing. MSHA will notify the public of each equivalency determination and will publish a summary of the basis for its determination in the **Federal Register**. MSHA's Approval and Certification Center will provide complete equivalency determination reports upon request. No comments on the specific language in § 6.20(c) were received. Therefore, the final language remains unchanged from the revised proposed rule.

Paragraph (d) requires that after MSHA has determined that non-MSHA product safety standards are equivalent and has notified the public of such determinations in the **Federal Register**, applicants can seek MSHA product approval based on such non-MSHA product safety standards. No comments on the specific language in § 6.20(d) were received. Therefore, the final language remains unchanged from the revised proposed rule.

The Agency believes that this final rule will encourage a more rapid introduction of mining products embodying new technology with enhanced safety features. In addition, testing and evaluation to "equivalent" standards, that provide at least the same degree of protection to miners as those in the various MSHA product approval regulations could achieve multiple objectives. These include metric conversion, greater compatibility with international standards, and a more competitive posture for U.S. products in the international market.

Section 6.20 provides that MSHA will determine which non-MSHA product safety standards, or groups of standards, are equivalent or can be modified to be equivalent. The decision to perform an equivalency evaluation will be based on MSHA's determination of the overall value of conducting the evaluation. It is

MSHA's intention to base its decision on factors such as the number of potential applications for approval using a particular non-MSHA product safety standard, the number of potential products affected, and its knowledge of the standard and the potential for it being equivalent. MSHA began this process some time ago in order to compare its approval requirements to those of other organizations because of the increasing use of those non-MSHA product safety standards in international trade and because of requests from the public. The equivalency analysis will be conducted by the Agency's Approval and Certification Center using personnel with expertise in the approval requirements involved.

MSHA's equivalency determinations will be based on the objectives of its product approval requirements and the hazards they were designed to address. Section 101(a)(9) of the Mine Act provides that no new standard can reduce the protection afforded miners by an existing standard. For this reason, MSHA must assure that any non-MSHA product safety standard provides at least the same degree of protection for the miners who may use the product approved under that standard. MSHA cannot accept product safety standards, domestic or international, without determining whether they are equivalent or whether some modifications to those product safety standards are needed to achieve the objectives of the existing MSHA product approval requirements. While certain standards, including those accepted by other mining agencies, may be equivalent, MSHA must make that determination on a standard-by-standard basis. It is MSHA's belief that certain product safety standards may well be equivalent without modifications; others may require modification. The Agency will do a systematic analysis first to make this determination.

MSHA's equivalency analysis will compare the subject product safety standards, whether domestic or international, and MSHA's applicable product approval requirements. Where they differ, each difference will be examined to assess its effect on overall safety, and the differences as a whole will be assessed. Where the differences do not impact the objectives of the MSHA requirements, MSHA will issue a determination that the standard is equivalent to MSHA's approval requirements. However, if certain design criteria or performance requirements fail to meet MSHA's objectives or could diminish the safety of the product in

underground mines, MSHA will specify the modifications necessary to reconcile the differences between the two so that at least the same degree of protection is provided.

Under this final rule, when MSHA evaluates a product safety standard to determine equivalency, the Agency will be looking at the standard as a whole and whether it meets the objectives of MSHA's applicable product approval requirements. The Agency recognizes that some non-MSHA product safety standards may have more stringent provisions than MSHA's comparable approval requirements. However, it is not the Agency's intention to require more stringent protections where a non-MSHA product safety standard may afford them. MSHA intends to require modifications only where the non-MSHA standard does not provide equivalent protection. For manufacturers who choose to design products to more stringent standards, for purposes other than MSHA approval, this final rule provides the vehicle for them to obtain MSHA approval even if their products were not designed specifically to MSHA's approval requirements. It is not the Agency's intention to develop a "hybrid" regulation, choosing the most stringent requirements from both the MSHA requirements and non-MSHA standards. This final rule requires modifications to provide at least the same degree of protection as MSHA's product approval requirements.

After MSHA has determined that equivalent requirements exist or that certain requirements, other than those in MSHA approval regulations, can be modified to provide at least the same degree of protection, the applicant will be given the option of requesting that MSHA base its approval on the equivalent, non-MSHA product safety standard, instead of on MSHA's applicable product approval requirements. This option will benefit manufacturers by permitting them to design products to a single set of requirements for sale in multiple markets (domestic and international as well as mining and non-mining applications). This option will also benefit miners by encouraging a more rapid introduction of mining products embodying new technology with enhanced safety features.

Because this final rule permits approval of mining equipment intended to compete in multiple market areas with differing approval requirements, the approved product design will incorporate the highest level of safety required by any of the intended market areas. For example, if the target areas

include mining and non-mining markets, and the non-mining market has a product safety standard with more stringent approval requirements than MSHA for a specific product, MSHA could, at the request of the applicant, issue an approval based on the more stringent requirements. The approval documentation will state that the product fulfills both the applicable approval requirements in the non-mining standard and MSHA's approval requirements. In this case, the approved product sold in mining markets will provide a greater degree of protection than that specified by MSHA under existing requirements. Should the non-mining market have product safety standards which are, in some aspects, less stringent than those of MSHA, the applicant will be required to fulfill the non-mining standards' requirements and, in addition, all other requirements deemed necessary to ensure that the product provides at least the same degree of protection demanded by the MSHA approval requirements. In this situation, the approved product will exceed the safety requirements of the non-mining standard and meet those of MSHA. The same analysis will apply if the targeted areas were foreign and domestic markets.

In these situations, MSHA's approval documentation will show that the product had fulfilled the requirements of any non-MSHA product safety standard and those of MSHA. In the first instance, the product marketed in the non-mining application will embody a higher level of safety, while in the second instance it will embody equivalent safety. In no case will the product provide less protection than mandated by MSHA approval requirements.

The following example illustrates how MSHA will evaluate non-MSHA product safety standards to determine if they provide at least the same degree of protection as MSHA's product approval requirements. MSHA's approval regulation under 30 CFR part 18 requires explosion testing of explosion-proof enclosures using a methane-in-air mixture. The IEC explosion-proof enclosure standard (IEC 60079-1) requires the use of more sensitive test gases. That standard specifies the use of methane to determine "reference pressures" and uses a hydrogen/methane fuel mixture to test for flame propagation. The tests used in both MSHA requirements and the IEC standard produce higher pressures/temperatures than occur during normal operation.

One obvious difference in the two test protocols is MSHA's criterion to observe

for the "discharge of flame" (hot glowing gases) during any of the tests. The IEC standard does not have this requirement. The reason for this difference is that MSHA tests enclosures "as manufactured" without any intentional gaps and, unlike the IEC, does not require flamepath gaps to be enlarged to the maximum specified by design. Therefore, during MSHA testing, flamepaths are not forced open to any appreciable amount, unless there are defects or weaknesses in the enclosure. This is important because MSHA's requirements do not contain provisions for regular prototype pressure testing to supplement the explosion tests, as do the IEC requirements. Such pressure testing is specifically designed to identify faulty products over a broader range of pressures than can be achieved by the MSHA explosion testing protocol.

Considering the above discussion, MSHA's explosion testing protocol, with combustible mixtures of methane as the test gas and using the discharge of flame as an additional criterion to flame propagation for test failure, sets a high evaluation standard for explosion-proof enclosures used on mining equipment in the U.S. However, testing is accomplished without introducing intentional flamepath flange gaps. In contrast, the IEC standard requires that tests be conducted with flamepath gaps intentionally enlarged to within 80% to 100% of the maximum specified design. Thus, the IEC test standard allows for luminous flame to pass, but with insufficient energy to ignite the surrounding atmosphere and uses a more easily ignitable test gas than methane. This concession is significant when flamepath gaps are purposely enlarged for testing. Such a practice could produce non-incendive luminous gas discharges during testing, which would be considered unacceptable under MSHA test protocols. MSHA has no evidence that such a non-incendive luminous gas discharge is unsafe. The MSHA requirement and the IEC standard could be considered equivalent because the MSHA requirement to observe no discharge of flame is offset by the IEC's use of a more easily ignitable test gas and intentional gap enlargement.

With all other factors equal, MSHA could consider the explosion test specified by IEC to be equivalent to the explosion test procedure followed by MSHA in fulfillment of 30 CFR 18.62. In this manner a single test could verify conformity to the test requirements of both product standards with no reduction of safety in either case.

This example highlights the methods that will be employed by MSHA when determining if a non-MSHA product safety standard provides at least the same degree of protection as MSHA's product approval requirements. In like fashion, other differences between MSHA requirements and the IEC standards will be analyzed to determine if they are equivalent or if modifications to the IEC standards will be required.

This same process will be applied to all non-MSHA product safety standards that will be evaluated for equivalency. For example, MSHA requires that a component in an intrinsically safe circuit be tested to determine that it will not overheat under fault conditions and ignite a layer of coal dust. UL requires the product to be marked with a maximum temperature rating (also called a "T-Code") or tested using a different ignitable dust or gas. MSHA will determine if the temperature rating is below the minimum ignition temperature of a coal dust layer or if the specified dust layer (*e.g.*, grain dust) used in the test has a lower ignition temperature than a coal dust layer currently used in MSHA tests. If equivalency could not be determined, MSHA will require an additional test using a layer of a specified type and size of coal dust to ensure at least the same degree of protection is provided.

MSHA anticipates that cost savings from use of equivalent non-MSHA product safety standards could reduce the manufacturer's unit cost by permitting more standardized construction (*i.e.*, single product line) and, thus, improve the manufacturer's competitive position. This, together with the need to provide products meeting the highest level of safety demanded by the market areas of interest, could encourage a more rapid introduction of mining products embodying new technology with enhanced safety features. In general, this final rule should provide increased opportunity for direct competition leading to improved safety and performance quality in mining products.

Under this final rule, manufacturers who apply for MSHA approval of their products can have MSHA base the approval on either MSHA approval requirements or the equivalent non-MSHA product safety standards. MSHA will retain the responsibility of approving or denying an application based on all information submitted in the application.

As is the case with existing MSHA approval regulations, this final rule will not discriminate between U.S. and foreign manufacturers. Any manufacturer, either domestic or

foreign, wishing to acquire an MSHA product approval will be able to take advantage of this "equivalency" program.

Further, this final rule will be consistent with the North American Free Trade Agreement (NAFTA) and the Agreement on Technical Barriers to Trade (TBT).

Equivalency Under Part 7

Under the final rule, an equivalency provision is provided in part 7 which will operate like the provision for equivalency in § 6.20.

Under this provision, § 7.2 will be amended by adding a definition of "equivalent non-MSHA product safety standards." This term is used to describe a non-MSHA product safety standard, or group of standards, that is determined by MSHA to provide at least the same degree of protection as the applicable MSHA technical requirements in the subparts of part 7. This definition is essentially the same as that in § 6.2 of part 6. No comments on the specific language in § 7.2 were received. Therefore, the final language remains unchanged from the revised proposed rule.

Section 7.10 MSHA Acceptance of Equivalent Non-MSHA Product Safety Standards

Section 7.10(a) is similar to § 6.20(a) and provides that MSHA will accept non-MSHA product safety standards, or group of standards, as equivalent after determining that they: (1) Provide at least the same degree of protection as MSHA's technical requirements for the products in other subparts of this part; or (2) can be modified to provide at least the same degree of protection as those MSHA requirements. No comments on the specific language of § 7.10(a) were received. Therefore, the final language remains unchanged from the revised proposed rule.

Paragraph (b) of § 7.10 provides that MSHA publish its intent to review any non-MSHA product safety standard for equivalency in the **Federal Register** for the purpose of soliciting public input. No comments on the specific language in § 7.10(b) were received. Therefore, the final language remains unchanged from the revised proposed rule.

Paragraph (c) of § 7.10 provides that MSHA publish a listing of all equivalency determinations for this part 7. The listing will state whether MSHA accepts the non-MSHA product safety standards in their original form, or will require modifications to demonstrate equivalency. If modifications are required, they will also be included in this listing for part 7. MSHA will notify

the public of each equivalency determination and will publish a summary of the basis for its determination in the **Federal Register**. MSHA's Approval and Certification Center will provide complete equivalency determination reports upon request. No comments on the specific language in § 7.10(c) were received. Therefore, the final language remains unchanged from the revised proposed rule.

Paragraph (d) of § 7.10 provides that after MSHA has determined that non-MSHA product safety standards are equivalent and has notified the public of such determinations, applicants can seek MSHA product approval based on such non-MSHA product safety standards. No comments on the specific language in § 7.10(d) were received. Therefore, the final language remains unchanged from the revised proposed rule.

MSHA is aware of some foreign and domestic non-MSHA product safety standards that could be used to test and evaluate products approved under the various subparts of part 7. These standards are used in other countries and other industries. Some of these non-MSHA product safety standards can provide at least the same degree of protection as MSHA requirements and can provide consistent, repeatable test results.

MSHA intends to operate its equivalency program under part 7, the same as previously described in the discussion of § 6.20 on equivalency.

III. Paperwork Reduction Act

This final rule will result in a total of approximately 29 burden hours and \$654 dollars of related costs. A breakdown of the burden hours and related costs by provision and by applicant size can be found in Chapter VII of the Regulatory Economic Analysis (REA) supporting this final rule. The REA is located on our Web site at <http://www.msha.gov/regsinfo.htm>.

This rule contains no substantive changes to the paperwork requirements contained in parts 18, 19, 20, 22, 23, 27, 33, 35, and 36 which are currently approved under OMB Control Number 1219-0066. The paperwork requirements contained in § 6.10 have been submitted to the Office of Management and Budget (OMB) for review under 44 U.S.C. 3504(h) of the Paperwork Reduction Act of 1995, as amended. Persons are not obligated to comply with them until approved by OMB.

Under § 6.10 applicants will have to provide information stated in paragraphs (a)(1) through (a)(4) for

MSHA to accept testing and evaluation performed by an independent laboratory. Currently, applicants must submit only information requested in paragraph (a)(4). If applicants choose to use independent laboratories, information requested in paragraphs (a)(1) through (a)(3) will be needed because MSHA will no longer be performing all the testing and evaluation associated with the approval application. Providing the information under § 6.10(a)(1) through (a)(3) will result in a total of approximately 24 burden hours and \$458 of associated costs.

Section 6.10(d) states that after review of the information required under paragraph (a)(1) through (a)(4), MSHA will notify the applicant if additional information and testing are required. If an independent laboratory conducts any additional or repeat testing, then the applicant will have to send the test results to MSHA. Sending any additional or repeat testing results to MSHA under § 6.10(d) will result in a total of 2 burden hours and \$39 of associated costs.

Section 6.10(f) states that, once the product is approved, the approval holder will have to notify MSHA of all product defects of which the approval holder is aware. Notification is assumed to be in the form of a letter to MSHA. Notifying MSHA of product defects under § 6.10(f) will result in a total of 3 burden hours and \$157 of associated costs.

IV. Executive Order 12866

A. Compliance Costs

Executive Order 12866 requires that regulatory agencies assess both the costs and benefits of regulations. MSHA has determined that this final rule does not meet the criteria of an economically significant regulatory action pursuant to Executive Order 12866 section 3(f)(1) in that it will not have an effect on the economy of \$100 million or otherwise have any material adverse effect. Although this final rule is not an economically significant action, MSHA has completed a REA in which the economic impact of the final rule is estimated. For a complete breakdown of the compliance costs for this final rule see chapter IV of the REA. The REA is summarized as follows.

The final rule will result in an annual net cost savings of about \$1.5 million. Applicants seeking MSHA product approval employing 500 or fewer workers will realize a net cost savings of \$0.66 million. Applicants employing more than 500 workers will realize a net cost savings of \$0.86 million.

The net cost savings of \$0.66 million, for applicants employing 500 or fewer workers, consists of cost savings of \$0.68 million and compliance costs of \$0.02 million. The net cost savings of \$0.86 million, for applicants employing more than 500 workers, consists of cost savings of \$0.88 million and compliance costs of \$0.02 million.

B. Benefits

This final rule should encourage non-mining manufacturers with products that could be applicable to mining to apply for approvals. The modification of the approval process will expedite the introduction of technologically-advanced products into the mine, thus improving miner safety. Finally, the rule will reduce applicants' costs by eliminating repeat testing and evaluation and the need for multiple product lines. For a more complete discussion of the Benefits of this final rule, see chapter III of the REA.

V. Regulatory Flexibility Act (RFA) and Small Business Regulatory Enforcement Fairness Act (SBREFA)

The Regulatory Flexibility Act (RFA) requires regulatory agencies to consider a rule's economic impact on small entities. Under the RFA, MSHA must use the Small Business Administration's (SBA's) criterion for a small entity in determining a rule's economic impact unless, after consultation with the SBA Office of Advocacy, MSHA establishes an alternative definition for a small entity and publishes that definition in the **Federal Register** for notice and comment.

For the mining industry, SBA defines "small" as a mine with 500 or fewer workers. In addition, most applicants (manufacturers) that file for an MSHA approval for their products operate in industries such as those involved in measurement, analysis, controlling instruments, photographic instruments, commercial and industrial lighting fixtures, and conveyors. SBA considers the small business size standard for such industries to be 500 or fewer employees. To ensure that this final rule conforms to the RFA, MSHA analyzed the economic impact of the final rule on small entities that are defined as those employing 500 or fewer workers.

A. Factual Basis for Certification

Based on its analysis, MSHA has determined that this final rule will not have a significant economic impact on a substantial number of small entities. MSHA has so certified this finding to the SBA. The factual basis for this certification is discussed in chapter V of the REA.

B. Unfunded Mandates Reform Act of 1995

For purposes of the Unfunded Mandates Reform Act of 1995, the final rule does not include any Federal mandate that will result in increased expenditures by State, local, or tribal governments, or increased expenditures by the private sector of more than \$100 million. MSHA is not aware of any State, local, or tribal governments which manufacture products applicable to mining.

C. Executive Order 13132 (Federalism)

MSHA has reviewed this final rule in accordance with Executive Order 13132 regarding federalism, and has determined that it will not have "federalism implications." The final rule will not "have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government." MSHA is not aware of any State or local governments which manufacture products applicable to mining.

D. Executive Order 13045 (Health and Safety Effect on Children)

In accordance with Executive Order 13045, MSHA has evaluated the environmental health and safety effect of this final rule on children. The Agency has determined that the final rule will not have an adverse impact on children.

E. Executive Order 13175 (Indian Tribal Governments)

MSHA certifies that this final rule will not impose substantial direct compliance costs on Indian tribal governments. MSHA is not aware of any tribal governments which manufacture products applicable to mining.

F. Executive Order 12630 (Governmental Actions and Interference With Constitutionally Protected Property Rights)

This final rule is not subject to Executive Order 12630, Governmental Actions and Interference with Constitutionally Protected Property Rights, because it will not involve implementation of a policy with takings implications.

G. Executive Order 12988 (Civil Justice Reform)

The Agency has reviewed Executive Order 12988, Civil Justice Reform, and determined that this final rule will not unduly burden the Federal court system. The final rule has been written so as to provide a clear legal standard

for affected conduct, and has been reviewed carefully to eliminate drafting errors and ambiguities.

H. Executive Order 13211 (Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use)

In accordance with Executive Order 13211, MSHA has reviewed this final rule for its energy impacts. MSHA has determined that this final rule will not have any adverse effects on energy supply, distribution, or use.

List of Subjects in 30 CFR Parts 6, 7, 18, 19, 20, 22, 23, 27, 33, 35, and 36

Mine Safety and Health, Reporting and Recordkeeping Requirements, Research

Signed in Arlington, Virginia, this 9th day of June, 2003.

Dave D. Lauriski,

Assistant Secretary of Labor for Mine Safety and Health.

■ For the reasons set out in the preamble, chapter I of title 30 of the Code of Federal Regulations is amended as follows:

■ 1. Part 6 is added to read as follows:

PART 6—TESTING AND EVALUATION BY INDEPENDENT LABORATORIES AND NON-MSHA PRODUCT SAFETY STANDARDS

Sec.

6.1 Purpose and effective date.

6.2 Definitions.

6.10 Use of independent laboratories.

6.20 MSHA acceptance of equivalent non-MSHA product safety standards.

Authority: 30 U.S.C. 957.

§ 6.1 Purpose and effective date.

This part sets out alternate requirements for testing and evaluation of products MSHA approves for use in gassy underground mines. It permits manufacturers of certain products who seek MSHA approval to use an independent laboratory to perform, in whole or part, the necessary testing and evaluation for approval. It also permits manufacturers to have their products approved based on non-MSHA product safety standards once MSHA has determined that the non-MSHA standards are equivalent to MSHA's applicable product approval requirements or can be modified to provide at least the same degree of protection as those MSHA requirements. The provisions of this part may be used by applicants for product approval under parts 18, 19, 20, 22, 23, 27, 33, 35, and 36. This rule is effective August 18, 2003.

§ 6.2 Definitions.

The following definitions apply in this part.

Applicant. An individual or organization that manufactures or controls the assembly of a product and applies to MSHA for approval of that product.

Approval. A written document issued by MSHA which states that a product has met the applicable requirements of part 18, 19, 20, 22, 23, 27, 33, 35, or 36. The definition is based on the existing definitions of "approval" in the parts specified above. It is expanded to include "certification" and "acceptance" because these terms also are used to denote MSHA approval.

Approval holder. An applicant whose application for approval of a product under part 18, 19, 20, 22, 23, 27, 33, 35 or 36 of this chapter has been approved by MSHA.

Equivalent non-MSHA product safety standards. A non-MSHA product safety standard, or group of standards, that is determined by MSHA to provide at least the same degree of protection as the applicable MSHA product approval requirements in parts 18, 19, 20, 22, 23, 27, 33, 35, and 36, or which in modified form provide at least the same degree of protection.

Independent laboratory. A laboratory that:

(1) has been recognized by a laboratory accrediting organization to test and evaluate products to a product safety standard, and

(2) is free from commercial, financial, and other pressures that may influence the results of the testing and evaluation process.

Post-approval product audit. The examination, testing, or both, by MSHA of approved products selected by MSHA to determine whether those products meet the applicable product approval requirements and have been manufactured as approved.

Product safety standard. A document, or group of documents, that specifies the requirements for the testing and evaluation of a product for use in explosive gas and dust atmospheres, and, when appropriate, includes documents addressing the flammability properties of products.

§ 6.10 Use of independent laboratories.

(a) MSHA will accept testing and evaluation performed by an independent laboratory for purposes of MSHA product approval provided that MSHA receives as part of the application:

(1) Written evidence of the laboratory's independence and current

recognition by a laboratory accrediting organization;

(2) Complete technical explanation of how the product complies with each requirement in the applicable MSHA product approval requirements;

(3) Identification of components or features of the product that are critical to the safety of the product; and

(4) All documentation, including drawings and specifications, as submitted to the independent laboratory by the applicant and as required by the applicable part under this chapter.

(b) Product testing and evaluation performed by independent laboratories for purposes of MSHA approval must comply with the applicable MSHA product approval requirements.

(c) Product testing and evaluation must be conducted or witnessed by the laboratory's personnel.

(d) After review of the information required under paragraphs (a)(1) through (a)(4) of this section, MSHA will notify the applicant if additional information or testing is required. The applicant must provide this information, arrange any additional or repeat tests and notify MSHA of the location, date, and time of the test(s). MSHA may observe any additional testing conducted by an independent laboratory. Further, MSHA may decide to conduct the additional or repeated tests at the applicant's expense. The applicant must supply any additional components necessary for testing and evaluation.

(e) Upon request by MSHA, but not more than once a year, except for cause, approval holders of products approved based on independent laboratory testing and evaluation must make such products available for post-approval audit at a mutually agreeable site at no cost to MSHA.

(f) Once the product is approved, the approval holder must notify MSHA of all product defects of which they become aware.

§ 6.20 MSHA acceptance of equivalent non-MSHA product safety standards.

(a) MSHA will accept non-MSHA product safety standards, or groups of standards, as equivalent after determining that they:

(1) Provide at least the same degree of protection as MSHA's product approval requirements in parts 18, 19, 20, 22, 23, 27, 33, 35 and 36 of this chapter; or

(2) Can be modified to provide at least the same degree of protection as those MSHA requirements.

(b) MSHA will publish its intent to review any non-MSHA product safety standard for equivalency in the **Federal Register** for the purpose of soliciting public input.

(c) A listing of all equivalency determinations will be published in this part 6 and the applicable approval parts. The listing will state whether MSHA accepts the non-MSHA product safety standards in their original form, or whether MSHA will require modifications to demonstrate equivalency. If modifications are required, they will be provided in the listing. MSHA will notify the public of each equivalency determination and will publish a summary of the basis for its determination. MSHA will provide equivalency determination reports to the public upon request to the Approval and Certification Center.

(d) After MSHA has determined that non-MSHA product safety standards are equivalent and has notified the public of such determinations, applicants may seek MSHA product approval based on such non-MSHA product safety standards.

PART 7—TESTING BY APPLICANT OR THIRD PARTY

■ 2–3. The authority for part 7 continues to read as follows:

Authority: 30 U.S.C. 957.

■ 4. Amend § 7.2 by adding a new definition to read as follows:

§ 7.2 Definitions.

* * * * *

Equivalent non-MSHA product safety standards. A non-MSHA product safety standard, or group of standards, that is determined by MSHA to provide at least the same degree of protection as the applicable MSHA product technical requirements in the subparts of this part, or can be modified to provide at least the same degree of protection as those MSHA requirements.

* * * * *

■ 5. Amend subpart A by adding a new § 7.10 to read as follows:

§ 7.10 MSHA acceptance of equivalent non-MSHA product safety standards.

(a) MSHA will accept non-MSHA product safety standards, or groups of standards, as equivalent after determining that they:

(1) Provide at least the same degree of protection as MSHA's applicable technical requirements for a product in the subparts of this part; or

(2) Can be modified to provide at least the same degree of protection as those MSHA requirements.

(b) MSHA will publish its intent to review any non-MSHA product safety standard for equivalency in the **Federal Register** for the purpose of soliciting public input.

(c) A listing of all equivalency determinations will be published in this part 7. The listing will state whether MSHA accepts the non-MSHA product safety standards in their original form, or whether MSHA will require modifications to demonstrate equivalency. If modifications are required, they will be provided in the listing. MSHA will notify the public of each equivalency determination and will publish a summary of the basis for its determination. MSHA will provide equivalency determination reports to the public upon request to the Approval and Certification Center.

(d) After MSHA has determined that non-MSHA product safety standards are equivalent and has notified the public of such determinations, applicants may seek MSHA product approval based on such non-MSHA product safety standards.

PART 18—ELECTRIC MOTOR-DRIVEN MINE EQUIPMENT AND ACCESSORIES

■ 6. The authority for part 18 continues to read as follows:

Authority: 30 U.S.C. 957, 961.

■ 7. Amend § 18.6 by revising paragraph (a) to read as follows:

§ 18.6 Applications.

(a)(1) Investigation leading to approval, certification, extension thereof, or acceptance of hose or conveyor belt, will be undertaken by MSHA only pursuant to a written application accompanied by a check, bank draft, or money order, payable to the U.S. Mine Safety and Health Administration to cover the fees. The application shall be accompanied by all necessary drawings, specifications, descriptions, and related materials, as set out in this part.

(2) Where the applicant for approval has used an independent testing laboratory under part 6 of this chapter to perform, in whole or in part, the necessary testing and evaluation for approval under this part, the applicant must provide to MSHA as part of the approval application:

(i) Written evidence of the laboratory's independence and current recognition by a laboratory accrediting organization;

(ii) Complete technical explanation of how the product complies with each requirement in the applicable MSHA product approval requirements;

(iii) Identification of components or features of the product that are critical to the safety of the product; and

(iv) All documentation, including drawings and specifications, as

submitted to the independent laboratory by the applicant and as required by this part.

(3) An applicant may request testing and evaluation to non-MSHA product safety standards which have been determined by MSHA to be equivalent, under § 6.20 of this chapter, to MSHA's product approval requirements under this part.

(4) The application, all related documents, and all correspondence concerning it shall be addressed to the Approval and Certification Center, Rural Route #1, Box 251, Industrial Park Road, Triadelphia, WV 26059.

* * * * *

■ 8. Amend § 18.15 by revising paragraph (a) to read as follows:

§ 18.15 Changes after approval or certification.

* * * * *

(a)(1) Application shall be made as for an original approval or letter of certification requesting that the existing approval or certification be extended to cover the proposed changes and shall be accompanied by drawings, specifications, and related information, showing the changes in detail.

(2) Where the applicant for approval has used an independent laboratory under part 6 of this chapter to perform, in whole or in part, the necessary testing and evaluation for approval of changes to an approved or certified product under this part, the applicant must provide to MSHA as part of the approval application:

(i) Written evidence of the laboratory's independence and current recognition by a laboratory accrediting organization;

(ii) Complete technical explanation of how the product complies with each requirement in the applicable MSHA product approval requirements;

(iii) Identification of components or features of the product that are critical to the safety of the product; and

(iv) All documentation, including drawings and specifications, as submitted to the independent laboratory by the applicant and as required by this part.

* * * * *

PART 19—ELECTRIC CAP LAMPS

■ 9. The authority for part 19 continues to read as follows:

Authority: 30 U.S.C. 957, 961.

■ 10. Revise § 19.3 to read as follows:

§ 19.3 Applications.

(a) Before MSHA will undertake the active investigation leading to approval

of any lamp, the manufacturer shall make application by letter for an investigation leading to approval of its lamp. This application, accompanied by a check, bank draft, or money order, payable to U.S. Mine Safety and Health Administration, to cover all the necessary fees, shall be sent to Approval and Certification Center, Rural Route #1, Box 251, Industrial Park Road, Triadelphia, WV 26059, together with the required drawings, one complete lamp, and instructions for its operation.

(b) Where the applicant for approval has used an independent laboratory under part 6 of this chapter to perform, in whole or in part, the necessary testing and evaluation for approval under this part, the applicant must provide to MSHA as part of the approval application:

(1) Written evidence of the laboratory's independence and current recognition by a laboratory accrediting organization;

(2) Complete technical explanation of how the product complies with each requirement in the applicable MSHA product approval requirements;

(3) Identification of components or features of the product that are critical to the safety of the product; and

(4) All documentation, including drawings and specifications, as submitted to the independent laboratory by the applicant and as required by this part.

(c) An applicant may request testing and evaluation to non-MSHA product safety standards which have been determined by MSHA to be equivalent, under § 6.20 of this chapter, to MSHA's product approval requirements under this part.

■ 11. Amend § 19.13 by revising paragraph (a) to read as follows:

§ 19.13 Instructions for handling future changes in lamp design.

* * * * *

(a)(1) The manufacturer shall write to the Approval and Certification Center, Rural Route #1, Box 251, Industrial Park Road, Triadelphia, WV 26059, requesting an extension of the original approval and stating the change or changes desired. With this letter the manufacturer should submit a revised drawing or drawings showing the changes in detail, and one of each of the changed lamp parts.

(2) Where the applicant for approval has used an independent laboratory under part 6 of this chapter to perform, in whole or in part, the necessary testing and evaluation for approval of changes to an approved product under this part, the applicant must provide to MSHA as part of the approval application:

(i) Written evidence of the laboratory's independence and current recognition by a laboratory accrediting organization;

(ii) Complete technical explanation of how the product complies with each requirement in the applicable MSHA product approval requirements;

(iii) Identification of components or features of the product that are critical to the safety of the product; and

(iv) All documentation, including drawings and specifications, as submitted to the independent laboratory by the applicant and as required by this part.

* * * * *

PART 20—ELECTRIC MINE LAMPS OTHER THAN STANDARD CAP LAMPS

■ 12. The authority for part 20 continues to read as follows:

Authority: 30 U.S.C. 957, 961.

■ 13. Revise § 20.3 to read as follows:

§ 20.3 Applications.

(a) Before MSHA will undertake the active investigation leading to approval of any lamp, the manufacturer shall make application by letter for an investigation of the lamp. This application, accompanied by a check, bank draft, or money order, payable to the U.S. Mine Safety and Health Administration, to cover all the necessary fees, shall be sent to the Approval and Certification Center, Rural Route #1, Box 251, Industrial Park Road, Triadelphia, WV 26059, together with the required drawings, one complete lamp, and instructions for its operation.

(b) Where the applicant for approval has used an independent laboratory under part 6 of this chapter to perform, in whole or in part, the necessary testing and evaluation for approval under this part, the applicant must provide to MSHA as part of the approval application:

(1) Written evidence of the laboratory's independence and current recognition by a laboratory accrediting organization;

(2) Complete technical explanation of how the product complies with each requirement in the applicable MSHA product approval requirements;

(3) Identification of components or features of the product that are critical to the safety of the product; and

(4) All documentation, including drawings and specifications, as submitted to the independent laboratory by the applicant and as required under this part.

(c) An applicant may request testing and evaluation to non-MSHA product

safety standards which have been determined by MSHA to be equivalent, under § 6.20 of this chapter, to MSHA's product approval requirements under this part.

■ 14. Amend § 20.14 by revising paragraph (a) to read as follows:

§ 20.14 Instructions for handling future changes in lamp design.

* * * * *

(a)(1) The manufacturer shall write to the Approval and Certification Center, Rural Route #1, Box 251, Industrial Park Road, Triadelphia, WV 26059, requesting an extension of the original approval and describing the change or changes proposed. With this letter the manufacturer should submit a revised drawing or drawings showing the changes in detail, and one of each of the changed lamp parts.

(2) Where the applicant for approval has used an independent laboratory under part 6 of this chapter to perform, in whole or in part, the necessary testing and evaluation for approval of changes to an approved product under this part, the applicant must provide to MSHA as part of the approval application:

(i) Written evidence of the laboratory's independence and current recognition by a laboratory accrediting organization;

(ii) Complete technical explanation of how the product complies with each requirement in the applicable MSHA product approval requirements;

(iii) Identification of components or features of the product that are critical to the safety of the product; and

(iv) All documentation, including drawings and specifications, as submitted to the independent laboratory by the applicant and as required by this part.

* * * * *

PART 22—PORTABLE METHANE DETECTORS

■ 15. The authority for part 22 continues to read as follows:

Authority: 30 U.S.C. 957, 961.

■ 16. Revise § 22.4 to read as follows:

§ 22.4 Applications.

(a) Before MSHA will undertake the active investigation leading to approval of any methane detector, the manufacturer shall make application by letter for an investigation leading to approval of the detector. This application, accompanied by a check, bank draft, or money order, payable to the U.S. Mine Safety and Health Administration, to cover all the necessary fees, shall be sent to the

Approval and Certification Center, Rural Route #1, Box 251, Industrial Park Road, Triadelphia, WV 26059, together with the required drawings, one complete detector, and instructions for its operation.

(b) Where the applicant for approval has used an independent laboratory under part 6 of this chapter to perform, in whole or in part, the necessary testing and evaluation for approval under this part, the applicant must provide to MSHA as part of the approval application:

(1) Written evidence of the laboratory's independence and current recognition by a laboratory accrediting organization;

(2) Complete technical explanation of how the product complies with each requirement in the applicable MSHA product approval requirements;

(3) Identification of components or features of the product that are critical to the safety of the product; and

(4) All documentation, including drawings and specifications, as submitted to the independent laboratory by the applicant and as required by this part.

(c) An applicant may request testing and evaluation to non-MSHA product safety standards which have been determined by MSHA to be equivalent, under § 6.20 of this chapter, to MSHA's product approval requirements under this part.

■ 17. Section 22.11 is amended by revising paragraph (a) to read as follows:

§ 22.11 Instructions on handling future changes in design.

* * * * *

(a)(1) The manufacturer must write to the Approval and Certification Center, Rural Route #1, Box 251, Industrial Park Road, Triadelphia, WV 26059, requesting an extension of the original approval and stating the change or changes desired. With this request, the manufacturer should submit a revised drawing or drawings showing changes in detail, together with one of each of the parts affected.

(2) Where the applicant for approval has used an independent laboratory under part 6 of this chapter to perform, in whole or in part, the necessary testing and evaluation for approval of changes to an approved product under this part, the applicant must provide to MSHA as part of the approval application:

(i) Written evidence of the laboratory's independence and current recognition by a laboratory accrediting organization;

(ii) Complete technical explanation of how the product complies with each

requirement in the applicable MSHA product approval requirements;

(iii) Identification of components or features of the product that are critical to the safety of the product; and

(iv) All documentation, including drawings and specifications, as submitted to the independent laboratory by the applicant and as required by this part.

* * * * *

PART 23—TELEPHONES AND SIGNALING DEVICES

■ 18. The authority for part 23 continues to read as follows:

Authority: 30 U.S.C. 957, 961.

■ 19. Revise § 23.3 to read as follows:

§ 23.3 Applications.

(a) Before MSHA will undertake the active investigation leading to approval of any telephone or signaling device, the manufacturer shall make application by letter for an investigation leading to approval of the device. This application, accompanied by a check, bank draft, or money order, payable to the U.S. Mine Safety and Health Administration, to cover all the necessary fees, shall be sent to the Approval and Certification Center, Rural Route #1, Box 251, Industrial Park Road, Triadelphia, WV 26059, together with the required drawings, one complete telephone or signaling device, and instructions for its operation.

(b) Where the applicant for approval has used an independent laboratory under part 6 of this chapter to perform, in whole or in part, the necessary testing and evaluation for approval under this part, the applicant must provide to MSHA as part of the approval application:

(1) Written evidence of the laboratory's independence and current recognition by a laboratory accrediting organization;

(2) Complete technical explanation of how the product complies with each requirement in the applicable MSHA product approval requirements;

(3) Identification of components or features of the product that are critical to the safety of the product; and

(4) All documentation, including drawings and specifications, as submitted to the independent laboratory by the applicant and as required by this part.

(c) An applicant may request testing and evaluation to non-MSHA product safety standards which have been determined by MSHA to be equivalent, under § 6.20 of this chapter, to MSHA's product approval requirements under this part.

■ 20. Amend § 23.14 by revising paragraph (a) to read as follows:

§ 23.14 Instructions for handling future changes in design.

* * * * *

(a)(1) The manufacturer shall write to the Approval and Certification Center, Rural Route #1, Box 251, Industrial Park Road, Triadelphia, WV 26059, requesting an extension of the original approval and stating the change or changes desired. With this request, the manufacturer should submit a revised drawing or drawings showing the changes in detail, together with one of each of the parts affected.

(2) Where the applicant for approval has used an independent laboratory under part 6 of this chapter to perform, in whole or in part, the necessary testing and evaluation for approval of changes to an approved product under this part, the applicant must provide to MSHA as part of the approval application:

(i) Written evidence of the laboratory's independence and current recognition by a laboratory accrediting organization;

(ii) Complete technical explanation of how the product complies with each requirement in the applicable MSHA product approval requirements;

(iii) Identification of components or features of the product that are critical to the safety of the product; and

(iv) All documentation, including drawings and specifications, as submitted to the independent laboratory by the applicant and as required by this part.

* * * * *

PART 27—METHANE-MONITORING SYSTEMS

■ 21. The authority for part 27 continues to read as follows:

Authority: 30 U.S.C. 957, 961.

■ 22. Amend § 27.4 by revising paragraph (a) to read as follows:

§ 27.4 Applications.

(a)(1) No investigation or testing for certification will be undertaken by MSHA except pursuant to a written application, accompanied by all drawings, specifications, descriptions, and related materials and also a check, bank draft, or money order payable to the U.S. Mine Safety and Health Administration, to cover the fees. The application and all related matters and correspondence concerning it shall be addressed to the Approval and Certification Center, Rural Route #1, Box 251, Industrial Park Road, Triadelphia, WV 26059.

(2) Where the applicant for approval has used an independent laboratory under part 6 of this chapter to perform, in whole or in part, the necessary testing and evaluation for approval under this part, the applicant must provide to MSHA as part of the approval application:

(i) Written evidence of the laboratory's independence and current recognition by a laboratory accrediting organization;

(ii) Complete technical explanation of how the product complies with each requirement in the applicable MSHA product approval requirements;

(iii) Identification of components or features of the product that are critical to the safety of the product; and

(iv) All documentation, including drawings and specifications, as submitted to the independent laboratory by the applicant and as required by this part.

(3) An applicant may request testing and evaluation to non-MSHA product safety standards which have been determined by MSHA to be equivalent, under § 6.20 of this chapter, to the product approval requirements under this part.

* * * * *

■ 23. Amend 27.11 by revising paragraph (a) to read as follows:

§ 27.11 Extension of certification.

* * * * *

(a)(1) Application shall be made as for an original certification, requesting that the existing certification be extended to cover the proposed changes. The application shall include complete drawings, specifications, and related data, showing the changes in detail.

(2) Where the applicant for approval has used an independent laboratory under part 6 of this chapter to perform, in whole or in part, the necessary testing and evaluation for approval of changes to an approved product under this part, the applicant must provide to MSHA as part of the approval application:

(i) Written evidence of the laboratory's independence and current recognition by a laboratory accrediting organization;

(ii) Complete technical explanation of how the product complies with each requirement in the applicable MSHA product approval requirements;

(iii) Identification of components or features of the product that are critical to the safety of the product; and

(iv) All documentation, including drawings and specifications, as submitted to the independent laboratory by the applicant and as required by this part.

* * * * *

PART 33—DUST COLLECTORS FOR USE IN CONNECTION WITH ROCK DRILLING IN COAL MINES

■ 24. The authority for part 33 continues to read as follows:

Authority: 30 U.S.C. 957, 961.

■ 25. Amend § 33.6 by revising paragraph (a) to read as follows:

§ 33.6 Applications.

(a)(1) No investigation or testing will be undertaken by MSHA except pursuant to a written application (except as otherwise provided in paragraph (e) of this section), accompanied by a check, bank draft, or money order, payable to the U.S. Mine Safety and Health Administration, to cover the fees; and all prescribed drawings, specifications, and all related materials. The application and all related matters and all correspondence concerning it shall be sent to the Approval and Certification Center, Rural Route #1, Box 251, Industrial Park Road, Triadelphia, WV 26059.

(2) Where the applicant for approval has used an independent laboratory under part 6 of this chapter to perform, in whole or in part, the necessary testing and evaluation for approval under this part, the applicant must provide to MSHA as part of the approval application:

- (i) Written evidence of the laboratory's independence and current recognition by a laboratory accrediting organization;
- (ii) Complete technical explanation of how the product complies with each requirement in the applicable MSHA product approval requirements;
- (iii) Identification of components or features of the product that are critical to the safety of the product; and
- (iv) All documentation, including drawings and specifications, as submitted to the independent laboratory by the applicant and as required by this part.

(3) An applicant may request testing and evaluation to non-MSHA product safety standards which have been determined by MSHA to be equivalent, under § 6.20 of this chapter, to MSHA's product approval requirements under this part.

* * * * *

■ 26. Amend § 33.12 by revising paragraph (a) to read as follows:

§ 33.12 Changes after certification.

* * * * *

(a)(1) Application shall be made as for an original certificate, requesting that the existing certification be extended to cover the proposed changes, and shall

be accompanied by drawings, specifications, and related data showing the changes in detail.

(2) Where the applicant for approval has used an independent laboratory under part 6 of this chapter to perform, in whole or in part, the necessary testing and evaluation for approval of changes to an approved product under this part, the applicant must provide to MSHA as part of the approval application:

- (i) Written evidence of the laboratory's independence and current recognition by a laboratory accrediting organization;
- (ii) Complete technical explanation of how the product complies with each requirement in the applicable MSHA product approval requirements;
- (iii) Identification of components or features of the product that are critical to the safety of the product; and
- (iv) All documentation, including drawings and specifications, as submitted to the independent laboratory by the applicant and as required by this part.

* * * * *

PART 35—FIRE-RESISTANT HYDRAULIC FLUIDS

■ 27. The authority for part 35 continues to read as follows:

Authority: 30 U.S.C. 957, 961.

■ 28. Amend § 35.6 by revising paragraph (a) to read as follows:

§ 35.6 Applications.

(a)(1) No investigation or testing will be undertaken by MSHA except pursuant to a written application, accompanied by a check, bank draft, or money order, payable to the U.S. Mine Safety and Health Administration, to cover the fees; and all descriptions, specifications, test samples, and related materials. The application and all related matters and correspondence concerning it shall be sent to the Approval and Certification Center, Rural Route #1, Box 251, Industrial Park Road, Triadelphia, WV 26059.

(2) Where the applicant for approval has used an independent laboratory under part 6 of this chapter to perform, in whole or in part, the necessary testing and evaluation for approval under this part, the applicant must provide to MSHA as part of the approval application:

- (i) Written evidence of the laboratory's independence and current recognition by a laboratory accrediting organization;
- (ii) Complete technical explanation of how the product complies with each requirement in the applicable MSHA product approval requirements;

(iii) Identification of components or features of the product that are critical to the safety of the product; and

(iv) All documentation, including drawings and specifications, as submitted to the independent laboratory by the applicant and as required by this part.

(3) An applicant may request testing and evaluation to non-MSHA product safety standards which have been determined by MSHA to be equivalent, under § 6.20 of this chapter, to MSHA's product approval requirements under this part.

* * * * *

■ 29. Amend § 35.12 by revising paragraph (a) to read as follows:

§ 35.12 Changes after certification.

* * * * *

(a)(1) Application shall be made, as for an original certificate of approval, requesting that the existing certification be extended to cover the proposed change. The application shall be accompanied by specifications and related material as in the case of an original application.

(2) Where the applicant for approval has used an independent laboratory under part 6 of this chapter to perform, in whole or in part, the necessary testing and evaluation for approval of changes to an approved product under this part, the applicant must provide to MSHA as part of the approval application:

- (i) Written evidence of the laboratory's independence and current recognition by a laboratory accrediting organization;
- (ii) Complete technical explanation of how the product complies with each requirement in the applicable MSHA product approval requirements;
- (iii) Identification of components or features of the product that are critical to the safety of the product; and
- (iv) All documentation, including drawings and specifications, as submitted to the independent laboratory by the applicant and as required by this part.

* * * * *

PART 36—APPROVAL REQUIREMENTS FOR PERMISSIBLE MOBILE DIESEL-POWERED TRANSPORTATION EQUIPMENT

■ 30. The authority for part 36 continues to read as follows:

Authority: 30 U.S.C. 957, 961.

■ 31. Amend § 36.6 by revising paragraph (a) to read as follows:

§ 36.6 Applications.

(a)(1) No investigation or testing will be undertaken by MSHA except

pursuant to a written application, accompanied by a check, bank draft, or money order, payable to the U.S. Mine Safety and Health Administration, to cover the fees; and all descriptions, specifications, test samples, and related materials. The application and all related matters and correspondence concerning it shall be sent to the Approval and Certification Center, Rural Route #1, Box 251, Industrial Park Road, Triadelphia, WV 26059.

(2) Where the applicant for approval has used an independent laboratory under part 6 of this chapter to perform, in whole or in part, the necessary testing and evaluation for approval under this part, the applicant must provide to MSHA as part of the approval application:

(i) Written evidence of the laboratory's independence and current recognition by a laboratory accrediting organization;

(ii) Complete technical explanation of how the product complies with each requirement in the applicable MSHA product approval requirements;

(iii) Identification of components or features of the product that are critical to the safety of the product; and

(iv) All documentation, including drawings and specifications, as submitted to the independent laboratory by the applicant and as required by this part.

(3) An applicant may request testing and evaluation to non-MSHA product safety standards which have been determined by MSHA to be equivalent, under § 6.20 of this chapter, to MSHA's product approval requirements under this part.

* * * * *

■ 32. Amend § 36.12 by revising paragraph (a) to read as follows:

§ 36.12 Changes after certification.

* * * * *

(a)(1) Application shall be made, as for an original certificate of approval, requesting that the existing certification be extended to cover the proposed change. The application shall be accompanied by specifications and related material as in the case of an original application.

(2) Where the applicant for approval has used an independent laboratory under part 6 of this chapter to perform, in whole or in part, the necessary testing and evaluation for approval of changes to an approved product under this part, the applicant must provide to MSHA as part of the approval application:

(i) Written evidence of the laboratory's independence and current recognition by a laboratory accrediting organization;

(ii) Complete technical explanation of how the product complies with each requirement in the applicable MSHA product approval requirements;

(iii) Identification of components or features of the product that are critical to the safety of the product; and

(iv) All documentation, including drawings and specifications, as submitted to the independent laboratory by the applicant and as required by this part.

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Federal Register

**Tuesday,
June 17, 2003**

Part IV

Department of Housing and Urban Development

**Super Notice of Funding Availability
(SuperNOFA) for HUD's Discretionary
Programs for Fiscal Year 2003; Technical
Correction; Notice**

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

[Docket No. FR-4800-C-2A]

Super Notice of Funding Availability (SuperNOFA) for HUD's Discretionary Programs for Fiscal Year 2003; Technical Correction

AGENCY: Office of the Secretary, HUD.

ACTION: Super Notice of Funding Availability (SuperNOFA) for HUD Discretionary Programs; technical correction.

SUMMARY: On April 25, 2003, HUD published its Fiscal Year 2003 Super Notice of Funding Availability (SuperNOFA) for HUD's Discretionary Programs. This document makes certain technical corrections to the General Section and the following programs: Assisted Living Conversion Program; Community Development Technical Assistance; Continuum of Care Homeless Assistance; Fair Housing Initiatives Program (FHIP); Healthy Homes Demonstration; Housing Counseling; Housing Opportunities for Persons with AIDS; Lead Hazard Control; Lead Outreach Grant Program; Resident Opportunities and Self-Sufficiency (ROSS); Rural Housing and Economic Development; Service Coordinators in Multifamily Housing; and Youthbuild.

This notice also extends the application due date for the ROSS for Homeownership Supportive Services to July 7, 2003.

DATES: The application due date for the ROSS Program for Homeownership Supportive Services is extended to July 7, 2003. All other application due dates remain as published in the **Federal Register** on April 25, 2003.

FOR FURTHER INFORMATION CONTACT: For the Programs listed in this notice, please contact the office or individual listed under the "For Further Information" heading in the individual program section of the SuperNOFA, published on April 25, 2003.

SUPPLEMENTARY INFORMATION: On April 25, 2003 (68 FR 21001), HUD published its Fiscal Year (FY) 2003 Super Notice of Funding Availability (SuperNOFA) for HUD's Discretionary Programs. The FY 2003 SuperNOFA announced approximately \$2.3 billion in HUD program funds covering 43 funding opportunities within programs operated and administered by HUD offices.

Summary of Technical Corrections

Summaries of the technical corrections that will be made by this document are as follows. The page

numbering shown in brackets identifies where the individual funding availability announcement that is being corrected can be found in the April 25, 2003, SuperNOFA.

General Section of SuperNOFA [Page 21002]

On page 21002, the "Addresses" paragraph is amended by removing the references to appendices and substituting the references to the correctly numbered appendices.

HUD amends the SuperNOFA Funding Chart, on page 21011, to include Catalog of Federal Domestic Assistance (CFDA) numbers for programs for which CFDA numbers were inadvertently transposed in the April 25, 2003, publication.

In the SuperNOFA Funding Chart on page 21015, HUD amends the application due date for the ROSS for Homeownership Supportive Services by extending the due date to July 7, 2003.

Paragraph (H) "Forms, Certifications, and Assurances," on page 21019, is amended to substitute the correct form number for HUD's Program Outcome Logic Model form (HUD-96010).

On page 21019, paragraph (K) "OMB Circulars and Government-wide Regulations Applicable to Financial Assistance Programs" is amended to add an additional URL from which applicants may obtain Office of Management and Budget (OMB) circulars.

On pages 21066 and 21067, the form "Certification Regarding Debarment and Suspension" is removed.

Community Development Technical Assistance [Page 21083]

Paragraph I(A) of page 21085 is amended to change the application due date to June 4, 2003.

On page 21092, in paragraph VI(I) "Forms," the reference to the General Section of the SuperNOFA is corrected to read "Section V(H) of the General Section."

Fair Housing Initiatives Program (FHIP) [Page 21195]

Under "Eligible Activities," on pages 21199-21200, the language is amended to clarify the requirements under the Regional/Local/Community-Based Programs.

Under "Rating Factor 3: Soundness of Approach," on page 21208, the text is changed to clarify that four points under this subfactor will be given if the applicant is a grassroots faith-based or other community-based organization, or if the applicant proposes to partner or sub-contract with a grassroots, faith-

based, or other community-based organization.

Housing Counseling Program [Page 21241]

In paragraph (A) under Rating Factor 1, on page 21247, the language is corrected to state that scoring will be based on the number of years of recent experience of project directors in addition to counselors. In addition, on page 21249, Rating Factor 1 is amended to instruct applicants to indicate the total dollar value of the resources the applicant was able to leverage in support of the housing counseling program, not including the applicant's HUD housing counseling grants (if applicable), for the period October 1, 2001, to September 30, 2002. (See page 21249.)

Paragraph 3 under Rating Factor 5, entitled "Submission Requirements for Factor 5," is amended to instruct applicants that they must submit a program evaluation plan using the Program Outcome Logic Model form (HUD-96010) that demonstrates how the applicant will measure program performance. (See page 21251.)

On page 21252, paragraph (1), under section VI. "Application Submission Requirements" is amended to exclude: Form HUD-424-CB, Grant Application Detailed Budget; Form HUD-424-CBW, Grant Application Detailed Budget Worksheet; and Form HUD-27061, Race and Ethnic Data Reporting Form.

Appendix B, on page 21254, is amended to substitute contact person E. Carolyn Hogans, (404) 331-5001, extension 2129, for Fellece Sawyer-Coleman.

Section 8 Homeownership Voucher-Housing Counseling Grant Program [Page 21261]

Paragraph (A) under Rating Factor 1, on page 21266, is amended to include a statement that scoring will be based on the number of years of recent experience of project directors in addition to counselors. In addition, on page 21267, Rating Factor 1 is amended to instruct applicants to indicate the total dollar value of the resources the applicant was able to leverage in support of the housing counseling program, not including the applicant's HUD housing counseling grants (if applicable), for the period October 1, 2001, to September 30, 2002.

Paragraph 3 under Rating Factor 5, on page 21269, is amended to instruct applicants that they must submit a program evaluation plan using the Program Outcome Logic Model form (HUD-96010) that demonstrates how

the applicant will measure program performance.

On page 21271, paragraph (1) under section VI. "Application Submission Requirements," is amended to exclude: Form HUD-424-CB, Grant Application Detailed Budget; Form HUD-424-CBW, Grant Application Detailed Budget Worksheet; and Form HUD-27061, Race and Ethnic Data Reporting Form.

Appendix B is amended to substitute contact person E. Carolyn Hogans, (404) 331-5001, extension 2129, for Fellece Sawyer-Coleman. (See page 21272.)

Lead-Based Paint Hazard Control Grant Program [Page 21279]

On page 21282, middle column, paragraph (B)(4) is amended to state that prior to actual execution of the grant agreement, local and state applicants must enter into contractual relationships or other formal arrangements with grassroots, faith-based or other community-based organizations.

On page 21290, middle column, paragraph (4), entitled, "Lead Hazard Control Outreach and Community Private Sector Involvement," is amended to clarify that applicants that partner, fund, or subcontract with grassroots, faith-based, or other community-based organizations will receive one point under this subfactor.

In Rating Factor 4: Leveraging Resources, on page 21291, the language is amended to clarify that state and local government applicants must have a contractual or other formal relationship with a grassroots, faith-based, or other community-based organization.

In Appendix C, on page 21312, a new paragraph is inserted prior to "Required Forms" and subsequent to "Abstract Summary." The new paragraph, "Work Plan and Budget," applies to current grantees that are eligible to submit a Performance-Based Renewal Application.

Healthy Homes Demonstration Program [Page 21363]

Under Rating Factor 1: Capacity of the Applicant and Related Organizational Experience, on page 21369, the description of the rating factor requirements is corrected to explain that higher points will be received by applicants that are, or propose to partner, fund or sub-contract with grassroots organizations, including faith-based or other community-based nonprofits.

Lead Outreach Grant Program [Page 21399]

Under Rating Factor 1: Capacity of the Applicant and Related Organizational

Experience, on page 21403, the language is amended to clarify requirements under this rating factor.

On page 21404, under Rating Factor 3: Soundness of Approach, the text is amended to instruct applicants that higher rating points will be received by applicants that include higher percentages of funding or sub-contracting for substantive work by grassroots organizations, including faith-based, or other community based, nonprofit organizations. In addition, on page 21405, paragraph (6) is amended to further clarify the requirements under Rating Factor 3.

Youthbuild Program [Page 21453]

On page 21455, under Additional Information, two references to the application due date are amended to clarify the due date and application submission processes.

In Appendix B, HUD removes the form entitled, "Line Item Budget for Federal Funds for the Rural Housing and Economic Development Program," which was inadvertently included in the Youthbuild NOFA at page 21476.

Rural Housing and Economic Development (RHED) [Page 21477]

On page 21480, in the definition of "A Firm Commitment," the earliest date that the letter of firm commitment may be dated is corrected from the date not earlier than the date of publication of the SuperNOFA to the date on which the SuperNOFA was made available for public inspection, April 17, 2003.

On page 21485, under Rating Factor 4 "Leveraging Resources, the list of available points, based on the ratio of leveraged to RHED funds, are amended to include 8 points for applicants that demonstrate evidence of 49-40 percent of requested HUD RHED funds. Consequently, the document is amended to state that 6 points are available for applicants that demonstrate 39-30 percent of requested HUD RHED funds, 4 points are available for applicants that demonstrate 29-20 percent of requested HUD RHED funds, 2 points are available for applicants that demonstrate 19-9 percent of requested HUD RHED funds, and 0 points will be awarded if less than 9 percent of HUD RHED requested funds are leveraged.

Resident Opportunities and Self-Sufficiency (ROSS) [Page 21507]

The application due date for the Homeownership Supportive Services category is July 7, 2003 (see page 21510). If you submitted an application for the Homeownership Supportive Services NOFA, you will be provided the opportunity to resubmit your

application in accordance with the July 7, 2003, deadline date. The address for submission remains unchanged. In evaluating applications received for the Homeownership Supportive Services NOFA, HUD will consider the application with the latest date.

A new table is inserted that identifies the due dates, funding available, and application submission address.

On page 21509, a correction is made to clarify that resident organizations are not eligible for the Neighborhood Networks funding category. In addition, a clarification is made to explain that only PHAs, Tribes/TDHEs, and qualified nonprofits are eligible to apply for the Homeownership Supportive Services category.

On page 21510, the reference to Appendix B is corrected to refer to Appendix A. Also, on page 21510, the NOFA is corrected to reflect the application submission address. The correct address is: Grants Management Center, Mail Stop: (Insert Name of Program or Funding Category), 2001 Jefferson Davis Highway, Suite 703, Arlington, VA 22202.

In section III of the ROSS NOFA, Resident Services Delivery Models-Family, four corrections are made. On page 21515, paragraph (H)(3) concerning the need for Contract Administrators, the reference to "Section III" is corrected to "Section II." In addition, paragraph (H) in the middle column is changed to (I). On page 21516, in the paragraph entitled "Note," the reference to "Section VIII" is corrected to read "Section VII." In addition, on page 21517, under Rating Factor 3, paragraph (A) (1) "Specific Services and/or Activities" the reference to "Appendix B" is corrected to refer to "Appendix A." Finally, on page 21518, under Rating Factor 5, the reference to "consortium members" is changed to "partners."

In section IV of the ROSS NOFA, Resident Services Delivery Models-Elderly/Persons with Disabilities, five corrections are made. First, on page 21520, paragraph (H)(3) concerning need for Contract Administrators corrects the reference to "Section III" to "Section II." On page 21521, in the paragraph entitled "Note," the reference to "Section VIII" is corrected to refer to "Section VII." In addition, on page 21522, paragraph (A)(1), under Rating Factor 3, "Specific Services and/or Activities" corrects the reference from "Appendix B" to "Appendix A." In paragraph (A)(1)(b) of the same rating factor, the reference to "economic opportunity" is changed to "quality of life." Finally, on page 21524, under Rating Factor 5, reference to

“consortium members” is changed to “partners.”

In section V of the ROSS NOFA, Homeownership Supportive Services, five corrections are made. First, on page 21524, in paragraph (C)(1)(a), the sentence that reads, “Nonprofit entities that have resident support or RAs/ROs are limited to \$100,000 for each RA/RO” is corrected to read: “Nonprofit entities that have resident support or the support of RAs/ROs are limited to \$100,000 for each RA/RO.” Second, on page 21526, paragraph (H)(3), regarding need for Contract Administrators, the reference to “Section III” is corrected to refer to “Section II.” On page 21527, in the paragraph entitled “Note”, the reference to “Section VIII” is changed to refer to “Section VII.” On page 21528, in paragraph (A)(1), under Rating Factor 3, the reference to “Appendix B” is changed to “Appendix A.” Finally, on page 21529, the reference to “consortium members” is changed to “partners.”

In section VI of the ROSS NOFA, Neighborhood Networks, several corrections are made. On page 21530, in paragraph (A), entitled “Program Description,” reference to “Appendix B” is corrected to refer to “Appendix A.” On page 21530, in paragraphs (C)(1) and (2), the sentences that read, “Nonprofit entities that have resident support or RAs/ROs are limited to \$100,000 for each RA/RO” are changed to read: “Nonprofit entities that have resident support or the support of RAs/ROs are limited to \$100,000 for each RA/RO.” In addition, on page 21531, in paragraph (F)(17), “Administrative Costs,” the sentence: “For existing NN centers, administrative costs must not exceed 10 percent of the total grant amount requested from HUD” is changed to read: “For both new and existing NN centers, administrative costs must not exceed 10 percent of the total grant amount requested from HUD.”

In addition, in section VI, Neighborhood Networks, on page 21532, paragraph (H)(3) concerning need for Contract Administrators, the reference to “Section III” is corrected to refer to “Section II.” On page 21532, paragraph (I)(3) regarding the work plan, the reference to “Appendix B” is corrected to be “Appendix A.” In addition, on page 21533, in the paragraph entitled “Note”, the reference to “Section VIII” is corrected to refer to “Section VII.”

Also, in section VI, Neighborhood Networks, on page 21534, Rating Factor 2, the scores for each subfactor are

changed to total the 15 points available for Rating Factor 2, as follows:

- (1) Socioeconomic Profile (5 points).
- (2) Local Training Program Information (3 points).
- (3) Resource Documentation (3 points).
- (4) Demonstrated Link Between Proposed Activities and Local Need (4 points).

In addition, in section VI, Neighborhood Networks, on page 21534, in the first paragraph under Rating Factor 3, the reference to “Appendix B” is changed to refer to “Appendix A.” On page 21535, in Rating Factor 5, the reference to “consortium members” is changed to “partners.” On page 21538, the paragraph entitled, “Unacceptable Applications” is amended to state, “Notification of rejection must state the basis for the decision.”

Continuum of Care Homeless Assistance Programs [Page 21579]

On page 21589, the page limitation for Exhibit 1, the Continuum of Care Narrative, is amended to reflect a page limitation of 30 pages.

Housing Opportunities for Persons with AIDS (HOPWA) [Page 21739]

On page 21749, the application submission requirements for Part C of the HOPWA NOFA are amended to include the completion of the HOPWA Project Budget Form and statutory certifications form.

Appendix A, beginning at page 21760, is amended by inserting a form, “Permanent Supportive Housing Worksheet,” which was inadvertently excluded from the April 25, 2003, publication.

Assisted Living Conversion Program [Page 21794]

On page 21795, the application due date is corrected to reflect a July 10, 2003, due date. In addition, on page 21795, the data listed in the chart, “Fiscal Year Allocation 2003 for the Assisted Living Conversion Program (ALCP) of Eligible Assisted Multifamily Projects” will be updated to reflect the accurate allocations. Also, on page 21805 under “Appendix A” and on page 21806 under “Appendix B,” entitled, “HUD Field Office List for Mailing Assisted Living Conversion Program Application,” the zip code for the HUD Minneapolis Office is corrected to read as 55402–4012.

Service Coordinators in Multifamily Housing Program [Page 21855]

In Appendix A, beginning in the third column on page 21861, the “HUD Field Office List for Mailing Service Coordinator Applications” is amended to include the corrected address and/or telephone information for HUD Field Offices in: Alaska, Arizona, Connecticut, Hawaii, Idaho, Minnesota, Montana, North Dakota, South Dakota, Wyoming, New York, Ohio, Cleveland, Ohio, Oregon, Puerto Rico, South Carolina, Texas, San Antonio, Texas, Utah, and Washington.

Accordingly, in the Super Notice of Funding Availability (SuperNOFA) for HUD’s Discretionary Programs for Fiscal Year 2003 (Docket No. FR–4800–N–01), beginning at 68 FR 21002, in the issue of April 25, 2003, the following corrections are made:

1. General Section of SuperNOFA, Beginning at Page 21002

On page 21002, in the third column in the paragraph titled “Addresses,” the fourth and fifth sentences are amended as follows, “Addresses for field offices are listed in Appendix A–1 of the General Section of the SuperNOFA. For applications directed to the Office of Native American Programs Field Offices, please be sure to use the addresses provided in Appendix A–3.”

On page 21011, in the first column of the “HUD 2003 SuperNOFA Funding Chart,” under “Community Development,” the cell labeled “McKinney-Vento Homeless Assistance Programs TA,” is amended to remove CFDA No. 14.241 and insert the following CFDA numbers: CFDA No. 14.231, CFDA No. 14.235, CFDA No. 14.238.

On page 21011, in the first column of the “HUD 2003 SuperNOFA Funding Chart,” under “Community Development,” the cell labeled “HOPWA TA” is amended to remove CFDA No. 14.235 and insert the following CFDA number: CFDA No. 14.241.

On page 21015, in the first column of the “HUD 2003 SuperNOFA Funding Chart,” in the third column “Application Due Date,” in the row labeled, “ROSS for Homeownership Supportive Services,” the date is amended by removing June 7, 2003, and substituting July 7, 2003.

A corrected “HUD 2003 SuperNOFA Funding Chart” that reflects these revisions reads as follows:

HUD 2003 SuperNOFA Funding Chart (Technical Correction)

Program Name	Funding Available (funding is approximate)	Application Due Date	Submission Location and Room Number
Community Development \$240.955 million			
Community Development Technical Assistance (TA)	\$22.9 million		
HOME TA CFDA No. 14.239 OMB Approval No: 2506-0166	\$8.3 million	June 4, 2003	HUD Headquarters Robert C. Weaver Building 451 7 th ST SW Room 7251 Washington, DC 20410 and a copy to the appropriate HUD Field Office
CHDO (HOME) TA CFDA No: 14.239 OMB Approval No: 2506-0166	\$6 million	June 4, 2003	HUD Headquarters Robert C. Weaver Building 451 7 th ST SW Room 7251 Washington, DC 20410 and a copy to the appropriate HUD Field Office
McKinney-Vento Homeless Assistance Programs TA CFDA No: 14.231 CFDA No: 14.235 CFDA No: 14.238 OMB Approval No: 2506-0166	\$6.6 million	June 4, 2003	HUD Headquarters Robert C. Weaver Building 451 7 th ST SW Room 7251 Washington, DC 20410 and a copy to the appropriate HUD Field Office
HOPWA TA CFDA No: 14.241 OMB Approval No: 2506-0133	\$2 million	June 4, 2003	HUD Headquarters Robert C. Weaver Building 451 7 th ST SW Room 7251 Washington, DC 20410 and a copy to the appropriate HUD Field Office
University and College Programs	\$34.092million		
Historically Black Colleges and Universities (HBCU) Program CFDA No. 14.520 OMB Approval No.: 2506-0122	\$9.935 million	June 12, 2003	HUD Headquarters Robert C. Weaver Building 451 7 th ST SW Room 7251 Washington, DC 20410 and a copy to appropriate HUD Field Office
Hispanic-Serving Institutions Assisting Communities (HSIAC) Program CFDA No. 14.514 OMB Approval No.: 2528-0198	\$7.046 million	June 12, 2003	HUD Headquarters Robert C. Weaver Building 451 7 th ST SW Room 7251 Washington, DC 20410

Program Name	Funding Available (funding is approximate)	Application Due Date	Submission Location and Room Number
Alaska Native/Native Hawaiian Communities Program (AN/NHIAC) CFDA No. 14.515 OMB Approval No.: 2528-0206	\$6.981 million	June 12, 2003	HUD Headquarters Robert C. Weaver Building 451 7 th ST SW Room 7251 Washington, DC 20410
Tribal Colleges and Universities Program (TCUP) CFDA No.: 14.519 OMB Approval No.:	\$3.175 million	June 12, 2003	HUD Headquarters Robert C. Weaver Building 451 7 th ST SW Room 7251 Washington, DC 20410
Community Outreach Partnership Centers (COPC) CFDA No: 14.511 OMB Approval No: 2528-0180	\$5 million	June 24, 2003	HUD Headquarters Robert C. Weaver Building 451 7 th ST SW Room 7251 Washington, DC 20410
COPC Community Futures Demonstration CFDA No: 14.511 OMB Approval No: 2528-0180	\$1.955 million	June 24, 2003	HUD Headquarters Robert C. Weaver Building 451 7 th ST SW Room 7251 Washington, DC 20410
Student Research and Study Programs	\$3.65 million		
Early Doctoral Student Research Grant Program CFDA No.: 14.517 OMB Approval No.: 2528-0216	\$150,000	May 27, 2003	Danya International Inc. Office of University Partnerships Clearinghouse 8737 Colesville Road Suite 1200 Silver Spring, MD 20910
Doctoral Dissertation Research Grant Program CFDA No.: 14.516 OMB Approval No.: 2528-0213	\$400,000	May 27, 2003	Danya International Inc. Office of University Partnerships Clearinghouse 8737 Colesville Road Suite 1200 Silver Spring, MD 20910
Community Development Work Study Program CFDA No.: 14.512 OMB Approval No.: 2528-0175	\$3.1 million	May 27, 2003	HUD Headquarters Robert C. Weaver Building 451 7 th ST SW Room 7251 Washington, DC 20410
Fair Housing Initiative Program	\$17.618 million		
Fair Housing - Private Enforcement Initiative (PEI) CFDA No. 14.410 OMB Approval No.: 2539-0033	\$10.2 million	June 5, 2003	HUD Headquarters Robert C. Weaver Building 451 7 th ST SW Room 5254 Washington, DC 20410

Program Name	Funding Available (funding is approximate)	Application Due Date	Submission Location and Room Number
Fair Housing Education and Outreach Initiative –(EOI) CFDA No.14.409 OMB Approval No.: 2539--0033	\$5.318 million	June 5, 2003	HUD Headquarters Robert C. Weaver Building 451 7 th ST SW Room 5254 Washington, DC 20410
Fair Housing Organizations Initiative (FHOI) CFDA No. 14.413 OMB Approval No.: 2539-0033	\$2.1 million	June 5, 2003	HUD Headquarters Robert C. Weaver Building 451 7 th ST SW Room 5254 Washington, DC 20410
Housing Counseling Programs	\$37.56 million		
Housing Counseling – Local Housing Counseling Agencies (LHCA) CFDA No. 14.169 OMB Approval No.: 2502-0261	\$12.45 million	June 25, 2003	Appropriate HUD Homeownership Center
Housing Counseling – National and Regional Intermediaries CFDA No. 14. 169 OMB Approval No.: 2502-0261	\$18.16 million	June 25, 2003	HUD Headquarters Robert C. Weaver Building 451 7 th ST SW Room 9166 Washington, DC 20410
Housing Counseling – State Housing Finance Agencies (SHFA) CFDA No. 14. 169 OMB Approval No.: 2502-0261	\$2 million	June 25, 2003	Appropriate HUD Homeownership Center
Housing Counseling – Colonias CFDA No. 14. 169 OMB Approval No.: 2502-0261	\$250,000	June 25, 2003	Santa Ana Homeownership Center
Housing Counseling – Predatory Lending CFDA No. 14. 169 OMB Approval No.: 2502-0261	\$2.7 million	June 25, 2003	Santa Ana Homeownership Center
Housing Counseling – Section 8 Homeownership CFDA No. 14. 169 OMB Approval No.: 2502-0261	\$2 million	June 25, 2003	HUD Headquarters Robert C. Weaver Building 451 7 th ST SW Room 9266 Washington, DC 20410

Program Name	Funding Available (funding is approximate)	Application Due Date	Submission Location and Room Number
Healthy Homes and Lead Hazard Control Programs	\$125.135 million		
Lead Hazard Control Program CFDA No.: 14.900 OMB Control No.: 2539-0015	\$103 million	June 10, 2003	HUD Headquarters Robert C. Weaver Building 451 7 th ST SW Room P3206 Washington, DC 20410
Healthy Homes and Lead-Technical Studies CFDA No.: 14.902 OMB Control No.: 2539-0010	\$5 million	June 10, 2003	HUD Headquarters Robert C. Weaver Building 451 7 th ST SW Room P3206 Washington, DC 20410
Healthy Homes Demonstration Program CFDA No.: 14.901 OMB Control No.: 2539-0015	\$5 million	June 10, 2003	HUD Headquarters Robert C. Weaver Building 451 7 th ST SW Room P3206 Washington, DC 20410
Lead Outreach Grant Program CFDA No: 14.904 OMB Control No	\$2.2 million	June 10, 2003	HUD Headquarters Robert C. Weaver Building 451 7 th ST SW Room P3206 Washington, DC 20410
Operation Lead Elimination Action Program CFDA No: 14.903 OMB Control No.	\$9.935 million	June 10, 2003	HUD Headquarters Robert C. Weaver Building 451 7 th ST SW Room P3206 Washington, DC 20410
Economic Development and Empowerment Programs \$231.334 million			
Economic Development Programs	\$181.66 million		
Brownfields Economic Development Initiative (BEDI) CFDA No.: 14.246 OMB Control No.:2506-0153	\$29.5 million	July 16, 2003	HUD Headquarters Robert C. Weaver Building 451 7 th ST SW Room 7251 Washington, DC 20410
Self-Help Homeownership Opportunity Program (SHOP) CFDA No.: 14.247 OMB Control No.: N/A	\$25.08 million	July 3, 2003	HUD Headquarters Robert C. Weaver Building 451 7 th ST SW Room 7251 Washington, DC 20410
Youthbuild CFDA No.: 14.243 OMB Approval No.: 2506-0142	\$54.6 million	June 6, 2003	HUD Headquarters Robert C. Weaver Building 451 7 th ST SW Room 7251 Washington, DC 20410

Program Name	Funding Available (funding is approximate)	Application Due Date	Submission Location and Room Number
Rural Housing and Economic Development CFDA No.: 14.250 OMB Approval No.: 2506-0169	\$24.8 million	May 27, 2003	HUD Headquarters Robert C. Weaver Building 451 7 th ST SW Room 7251 Washington, DC 20410
Housing Choice Voucher (HCV) Family Self-Sufficiency (FSS) Program Coordinators CFDA No.: 14.855 & 14.85 OMB Approval No.: 2577-0198	\$47.68 million	May 30, 2003	PIH Grants Management Center Mail Stop: Housing Choice Voucher Family Self-Sufficiency Program 2001 Jefferson Davis Hwy Suite 703 Arlington, VA 22202
Public Housing Resident Opportunity and Self-Sufficiency (ROSS)	\$49.674 million		
ROSS for Resident Services Delivery Model-Elderly and Persons With Disabilities CFDA No.: 14.870 OMB Approval No.: 2577-0229	\$9.30 million	June 11, 2003	PIH Grants Management Center Mail Stop: ROSS for Resident Services Delivery Model-Elderly 2001 Jefferson Davis Hwy Suite 703 Arlington, VA 22202
ROSS for Resident Services Delivery Model- Family CFDA No.: 14.870 OMB Approval No.: 2577-0229	\$14.345 million	June 19, 2003	PIH Grants Management Center Mail Stop: ROSS for Resident Services Delivery Model- Family 2001 Jefferson Davis Hwy Suite 703 Arlington, VA 22202
ROSS for Neighborhood Networks CFDA No.: 14.870 OMB Approval No.: 2577-0229	\$14.902 million	May 27, 2003	PIH Grants Management Center Mail Stop: ROSS for Neighborhood Networks 2001 Jefferson Davis Hwy Suite 703 Arlington, VA 22202
ROSS for Homeownership Supportive Services CFDA No.: 14.870 OMB Approval No.: 2577-0229	\$11.127 million	July 7, 2003	PIH Grants Management Center Mail Stop: ROSS for Homeownership Supportive Services 2001 Jefferson Davis Hwy Suite 703 Arlington, VA 22202

Program Name	Funding Available (funding is approximate)	Application Due Date	Submission Location and Room Number
Targeted Housing and Homeless Assistance Programs \$1.822 billion			
Continuum of Care Homeless Assistance Supportive Housing CFDA No. 14.235 Shelter Plus Care CFDA No. 14.238 Section 8 Moderate Rehabilitation SRO CFDA No. 14.249 OMB Approval No. 2506-0112	\$1.06 billion	July 15, 2003	HUD Headquarters Robert C. Weaver Building 451 7 th ST SW Room 7270 Washington, DC 20410 and two copies to the appropriate HUD Field Office
Housing Opportunities for Persons With AIDS (HOPWA) Renewal Permanent Supportive Housing Projects CDC Study New or Continuing Projects CFDA No.: 14.241 OMB Approval No.: 2506-0133	\$28.8 million	June 17, 2003 (renewals) July 9, 2003 (others) July 9, 2003 (others)	HUD Headquarters Robert C. Weaver Building 451 7 th ST SW Room 7251 Washington, DC 20410 and two copies to the appropriate HUD Field Office
Assisted Living Conversion Program for Eligible Multifamily Projects CFDA No.: 14.314 OMB Approval No.: 2502-0542	\$64 million	July 10, 2003	Appropriate Multifamily Hub Office
Service Coordinators in Multifamily Housing CFDA No.: 14.191 OMB Approval No.: 2502-0447	\$25 million	July 10, 2003	Appropriate HUD Multifamily Hub Office or Multifamily Program Center
Mainstream Housing Opportunities For Persons With Disabilities (Mainstream Program) CFDA No.: 14.871 OMB Approval No.: 2577-0169	\$53.6 million	June 18, 2003	Grants Management Center Mail Stop: Mainstream Program 2001 Jefferson Davis Highway Suite 703 Arlington, VA 22202
Section 202 Supportive Housing for the Elderly CFDA No.: 14.157 OMB Approval No.: 2502-0267	\$473.8 million	June 13, 2003	Appropriate HUD Multifamily Hub Office or Multifamily Program Center

Program Name	Funding Available (funding is approximate)	Application Due Date	Submission Location and Room Number
Section 811 Supportive Housing for Persons With Disabilities CFDA No.: 14.181 OMB Approval No.: 2502-0462	\$116.8 million	June 13, 2003	Appropriate HUD Multifamily Hub Office or Multifamily Program Center

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On page 21019, the bulleted list under paragraph (H) "Forms, Certifications, and Assurances" is amended by revising the last bullet on the list to read, "Program Outcome Logic Model form (HUD-96010)."

On page 21019, at the top of the third column within the paragraph (K) that begins in the middle column, the last sentence of the paragraph is amended to read as follows, "Copies of the OMB Circulars may be obtained from EOP Publications, Room 2200, New Executive Office Building, Washington, DC 20503, telephone (202) 395-3080 (this is not a toll-free number) or 1-800-877-8399 (TTY Federal Information Relay Service) or from HUD's Web site: <http://www.hud.gov/offices/adm/grants/fundsavail.cfm> or <http://www.whitehouse.gov/omb/circulars/index.html>."

On pages 21066 and 21067, the form, HUD-2992 is removed.

2. Community Development Technical Assistance, Beginning at Page 21083

On page 21085, under paragraph 1.(A) "Application Due Date," the paragraph is amended to read as follows, "(A) Application Due Date. Applicants must submit completed applications on or before June 4, 2003, to the addresses shown below."

3. Fair Housing Initiatives Program (FHIP), beginning at page 21195

On page 21199, paragraph (b) "Eligible Activities," which begins at the bottom of the third column and continues to the first column of page 21200, is corrected to read as follows: "(b) Eligible Activities. The following are eligible activities for EOI: conducting educational symposia or other training; developing new and innovative fair housing activities or materials throughout your project area; providing outreach and information on fair housing through printed and electronic media; developing fair housing curricula, and providing outreach to persons with disabilities and/or their support organizations and

service housing providers working with homeless activists or persons to determine if fair housing plays a part in the homeless situation, and the general public regarding the rights of persons with disabilities under the Act. When conducting your outreach activities, we also encourage the use of existing, fair housing materials; except that we require that you translate these existing materials in languages other than English. The applicants for the Regional/Local/Community-Based Programs who submit an application in conjunction with a grassroots faith-based, or other community-based organization must include in their application a letter of firm commitment from that grassroots faith-based, or other community based organization. This letter of firm commitment must: (1) Identify the grassroots, faith-based, or other community-based organization; (2) identify the activities/tasks to be undertaken by the grassroots faith-based, or other community-based organization under the project; and (3) be signed by the individual or organization with legal authority to make commitments for the organization. These components are described below:"

On page 21208, in the middle column, paragraph (a)(1)(v)(a) is corrected to read as follows: "(a) Four points under this subfactor if you are a grassroots faith-based, or other community-based organizations, or propose to partner or sub-contract with grassroots faith-based, or other community-based organizations."

4. Housing Counseling Program, Beginning at Page 21241

On page 21247, in the middle column under Rating Factor 1, the second paragraph under section (A) is amended to read as follows: "Specifically, for LHCA's, scoring will be based on the number of years of recent experience of project directors and recent housing counseling experience of counselors. For intermediaries and SHFA's, scoring will be based on: the number of years of recent experience of project directors

and recent housing counseling experience of counselors in affiliates and branches; and the number of years, for key intermediary/SHFA personnel, of recent experience running a housing counseling program consisting of a network of multiple counseling agencies. Related experience, such as experience in mortgage lending, will also be considered, but will not be weighted as heavily as direct housing counseling or housing counseling program management experience."

On page 21249, in the first column, the second paragraph in section (B3) is amended to read as follows: "Provide all the information requested in Section B1 and B2 above, except outcomes, relevant to the non-HUD funded activities recorded on the form HUD-9902, submitted with this application. Indicate the total dollar value of the resources you were able to leverage in support of your housing counseling program, not including your HUD housing counseling grant(s) (if applicable), for the period October 1, 2001, to September 30, 2002."

On page 21251, in the middle column, the introductory paragraph to the subsection titled, "Submission Requirements for Factor 5" is amended to read as follows: "Submission Requirements for Factor 5. Applicants must submit an effective, quantifiable, outcome-oriented evaluation plan for measuring performance and determining that output and outcome goals have been met. You must submit a program evaluation plan, using the Program Outcome Logic Model form (HUD-96010), that demonstrates how you will measure your own program performance. Your Evaluation Plan should identify what you are going to measure, how you are going to measure it, and the steps you have in place to make adjustments to your work plan if performance targets are not met within established timeframes. Specifically, you plan must identify:"

On page 21252, in the third column, paragraph (1) under section VI., "Application Submission Requirements" is amended to read as

follows: "The standard forms, certifications, and assurances listed in Section V(H) of the General Section of the SuperNOFA (collectively, referred to as the "standard forms,") with the exception of the HUD-424-CB, Grant Application Detailed Budget; the HUD-424-CBW, Grant Application Detailed Budget Worksheet; and the HUD-27061, Race and Ethnic Data Reporting Form."

On page 21254, Appendix B, in the first column, the contact information for the Atlanta Homeownership Center is amended as follows: "Atlanta Homeownership Center, Ms. Gayle Knowlson, 40 Marietta Street, 8th Floor, Atlanta, GA, 30303-2806, Contact: E. Carolyn Hogans, (404) 331-5001, x2129."

5. Section 8 Homeownership Voucher—Housing Counseling Grant Program, Beginning at Page 21261

On page 21266, in the middle column under Rating Factor 1, the second paragraph under section (A) is amended to read as follows: "Specifically, for LHCA's, scoring will be based on the number of years of recent experience of project directors and recent housing counseling experience of counselors. For intermediaries and SHFA's, scoring will be based on: the number of years of recent experience of project directors and recent housing counseling experience of counselors in affiliates and branches; and the number of years, for key intermediary/SHFA personnel, of recent experience running a housing counseling program consisting of a network of multiple counseling agencies. Related experience, such as experience in mortgage lending, will also be considered, but will not be weighted as heavily as direct housing counseling or housing counseling program management experience."

On page 21267, in the third column, the second paragraph in section (E) is amended to read as follows: "Provide all the information requested in Section C and D above, except outcomes, relevant to the non-HUD funded activities recorded on the form HUD-9902, submitted with this application. Indicate the total dollar value of the resources you were able to leverage in support of your housing counseling program, not including your HUD housing counseling grant(s) (if applicable), for the period October 1, 2001, to September 30, 2002."

On page 21269, in the third column, the introductory paragraph to the subsection titled, "Submission Requirements for Factor 5" is amended to read as follows: "Submission Requirements for Factor 5. Applicants must submit an effective, quantifiable,

outcome-oriented evaluation plan for measuring performance and determining the output and outcome goals have been met. You must submit a program evaluation plan, using the Program Outcome Logic Model form (HUD-96010), that demonstrates how you will measure your own program performance. Your Evaluation Plan should identify what you are going to measure, how you are going to measure it, and the steps you have in place to make adjustments to your work plan if performance targets are not met within established timeframes. Specifically, you plan must identify:"

On page 21271, in the first column, paragraph (1) is amended to read as follows: "The standard forms, certifications, and assurances listed in Section V(H) of the General Section of the SuperNOFA (collectively, referred to as the "standard forms,") with the exception of the HUD-424-CB, Grant Application Detailed Budget; the HUD-424-CBW, Grant Application Detailed Budget Worksheet; and the HUD-27061, Race and Ethnic Data Reporting Form."

On page 21272, Appendix B, in the first column, the contact information for the Atlanta Homeownership Center is amended as follows: "Atlanta Homeownership Center, Ms. Gayle Knowlson, 40 Marietta Street, 8th Floor, Atlanta, GA, 30303-2806, Contact: E. Carolyn Hogans, (404) 331-5001, x2129."

6. Lead-Based Paint Hazard Control Grant Program, Beginning at Page 21279

On page 21282, in the middle column, paragraph (B)(4) is corrected to read as follows: "(4) Contracts or other formal arrangements with nonprofit, grassroots, faith-based, or other community-based organizations. If selected for funding, local and state applicants must enter into contractual relationships or other formal arrangements with grassroots, faith-based, or other community-based organizations. Such relationships must be established prior to actual execution of the grant agreement. This requirement does not apply to Native American Tribes."

On page 21290, in the middle column, paragraph (4) is corrected to read as follows: "(4) Lead Hazard Control Outreach and Community Private Sector Involvement (6 points). Applicants are encouraged to solicit participation of grassroots, faith-based, or other community-based and private sector organizations to accomplish outreach and community involvement activities and to build long-term capacity to sustain accomplishments in the target area. Applicants that partner, fund, or subcontract with grassroots, faith-based,

or other community-based organizations will receive one point in this subfactor. Your application must describe:"

On page 21291, in the first column, the first paragraph under Rating Factor 4: Leveraging Resources, is corrected to read as follows: "This factor addresses your ability to obtain other community and private sector resources that can be combined with HUD's program resources to achieve program objectives. In evaluating this factor, HUD will consider the extent to which you have established working partnerships with other entities to get additional resources or commitments to increase the effectiveness of the proposed program activities (see Appendix A of this NOFA for Sample Worksheet 7 (Match Funding) and Worksheet 8 (Grant Partners)). Resources may include cash or in-kind contributions of services, equipment, or supplies allocated to the proposed program. Resources may be provided by governmental entities, public or private organizations, and other entities partnering with you. Leveraging arrangements with rental property owners may have the benefits of increasing the efficiency of public lead hazard identification and control expenditures and creating a financial stake for rental property owners in the quality of lead hazard control work. Contractual or other formal relationships with grassroots, faith-based, or other community-based organizations are a requirement for state and local government applicants. Documentation of relationships with grassroots, faith-based, or community-based organizations must be provided in this application either in the form of signed agreements or commitment letters. This requirement does not apply to Native American Tribe applicants. You also may partner with other program funding recipients to coordinate the use of resources in your target area(s)."

On page 21312, in the third column, prior to the section titled, "Required Forms," and subsequent to the section titled, "Abstract Summary," the NOFA is amended by inserting the following section: "Work Plan and Budget. Current grantees that are eligible to submit a Performance-Based Renewal application and are successful applicants will have their current grant agreements modified to allow for an additional 36-month grant. Eligible current grantee applicants are required to submit the budget forms included in this NOFA and develop a work plan strategy with benchmark standards for conducting lead hazard control program activities. A work plan and budget

should be developed for the 36-month period.”

7. Rural Housing and Economic Development, Beginning at Page 21477

On page 21480, the last paragraph in the first column, and continuing into the middle column, is corrected to read as follows: “A Firm commitment means the agreement by which an applicant’s partner agrees to perform an activity specified in the application and demonstrates the financial capacity to deliver the resources necessary to carry out the activity, and commits the resources to the activity either in cash or through in-kind contributions and is irrevocable, subject only to approval and receipt of a FY 2003 RHED grant. Each letter of commitment should include the organization’s name, the applicant’s name, the proposed program, the proposed total level of commitment and responsibilities as they relate to the proposed program. The commitment must be written on letterhead from the participating organization, must be signed by an official of the organization legally able to make commitments on behalf of the organization and dated not earlier than the date on which this NOFA was made available for public inspection (April 17, 2003). In documenting a firm commitment, the applicant’s partner must:

On page 21485, in the third column, the numbered list in the first full paragraph is amended to read as follows:

- (i) 50% or more of requested HUD RHED funds will receive 10 points;
- (ii) 49–40% of requested HUD RHED funds will receive 8 points;
- (iii) 39–30% of requested HUD RHED funds will receive 6 points;
- (iv) 29–20% of requested HUD RHED funds will receive 4 points;
- (v) 19–9% of requested HUD RHED funds will receive 2 points;
- (vi) Less than 9% of HUD RHED funds requested will receive 0 points.”

8. Healthy Homes Demonstration Program, Beginning at Page 21363

On page 21369, in the middle column, the first paragraph under Rating Factor 1: Capacity of the Applicant and Related Organizational Experience is corrected to read as follows: “This factor addresses your organizational capacity necessary to successfully implement your proposed activities in a timely manner. The rating of you or your staff includes any faith-based and other community-based organizations, sub-contractors, consultants, sub-recipients, and members of consortia that are firmly committed to your project. Applicants

that are, or propose to either partner, fund, or sub-contract with grassroots organizations, including faith-based or other community-based nonprofits, in conducting their work programs will receive higher rating points as specified in the Section II of the General Section of the SuperNOFA. In rating this factor, HUD will consider the four items listed below:”

9. Lead Outreach Grant Program, Beginning at Page 21399

On page 21403, in the third column, the first paragraph under Rating Factor 1: Capacity of the Applicant and Related Organizational Experience, is corrected to read as follows: “This factor addresses your organizational capacity necessary to successfully implement your proposed activities in a timely manner. The rating of you or your staff includes any grassroots organizations, including faith-based or other community-based non-profit organizations, sub-contractors, consultants, sub-recipients, and members of consortia that are firmly committed to your project. For all of the descriptions of personnel and organizational qualifications and experience in this factor, more points will be given for more recent relevant experience of high quality with this kind of work, as documented below. Applicants who are funding or sub-contracting with grassroots organizations, including faith-based, or other community-based nonprofit organizations, in conducting their work programs should include the qualifications and experience of these organizations in responding to this rating factor. In rating this factor HUD will consider:”

On page 21404, in the third column, the last sentence of the first paragraph under Rating Factor 3: Soundness of Approach, is corrected to read as follows: “Applicants will receive higher rating points for approaches that include higher percentages of funding or sub-contracting for substantive work by grassroots organizations, including faith-based, or other community-based, nonprofit organizations.”

On page 21405, in the first column, paragraph (6) is corrected to read as follows: “(6) Proposed involvement of grassroots organizations, including faith-based or other community-based, nonprofit organizations in the proposed activities. HUD strongly encourages you to substantively use grassroots organizations, including faith-based or other community-based, nonprofit organizations. (10 points).”

10. Youthbuild Program, Beginning at Page 21453

On page 21455, in the first column, the introductory paragraph under the section entitled, “Additional Information,” is amended to read as follows: “If you are interested in applying for funding under this program, please carefully review the General Section of this SuperNOFA. Applications are due on or before June 6, 2003.”

On page 21455, beginning in the first column, the first paragraph under 1. Application Due Date and Technical Assistance, is corrected to read as follows: “Application Due Date. Completed applications (one original and two copies) are due on or before June 6, 2003 at the address shown below.”

On page 21476, HUD removes from Appendix B of the Youthbuild Program NOFA the form entitled, “Line Item Budget for Federal Funds for the Rural Housing and Economic Development Program” (HUD–40211).

11. Resident Opportunities and Self-Sufficiency (ROSS), Beginning at Page 21507

On page 21509, in the third column, the paragraph titled, “Eligible Applicants” is amended to read as follows: “Eligible Applicants. Eligible Applicants are Public Housing Agencies (PHAs), tribes/TDHEs, resident management corporations (RMCs), resident councils (RCs), resident organizations (ROs), Intermediary Resident Organizations (IROs), City-Wide Resident Organizations (CWROs), and nonprofits including grassroots, faith-based, and other community-based organizations that have resident support or the support of tribes. Tribes/TDHEs and resident organizations are not eligible for the Neighborhood Networks funding category. Resident Organizations are not eligible to apply for the Homeownership Supportive Services Category. The following chart summarizes the funding categories available under ROSS, eligible applicants, and applicant procedures.”

On page 21509, in the middle column of the table, under “Eligibility” corresponding to the Homeownership Supportive Services program, the text is corrected to read as follows: “Only PHAs, Tribes/TDHEs, and qualified nonprofits are eligible to apply.”

On page 21510, in the first column, under section 1. “Application Due Date, Required Forms, Security Procedures, Further Information and Technical Assistance Application Due Date,” the paragraph titled, “Required Forms” is

corrected to read as follows: "Required Forms. In addition to the forms required in the General Section of the SuperNOFA, there are ROSS forms that are required. Please see Section VII and Appendix A of this NOFA for more information on form submission."

On page 21510, in the first column, under section 1. "Application Due Date, Required Forms, Security Procedures, Further Information and Technical Assistance Application Due Date," the paragraph titled, "Addresses" is corrected to read as follows:

"Addresses. When submitting your application, you must refer to the program for which you are seeking funding and include the room number to ensure that your application is properly directed. The address to use for the GMC is the following: Grants Management Center, Mail Stop: (Insert Name of Program or Funding Category), 2001 Jefferson Davis Highway, Suite 703, Arlington, VA, 22202."

On page 21515, in the middle column, the last sentence in the paragraph (3) that begins at the bottom of the first column, is corrected to read as follows: "See the definition in Section II of Contract Administrator for more information."

On page 21515, in the middle column, paragraph (H), entitled, "Program Requirements" is corrected to read: "(I) Program Requirements."

On page 21516, in the first column, the "Note" is corrected to refer applicants to section VII., instead of section VIII. The amended "Note" now reads as follows: "**NOTE:** Applicants should carefully review each rating factor before writing a response. Applicants' narratives should be as descriptive as possible, ensuring that every requested item is addressed. Applicants should make sure to include all requested information, according to the instructions found in Section VII of this NOFA. This will help ensure a fair and accurate review of your application. Applications must not be longer than 30 narrative pages. Supporting documentation and certificates will not be counted towards the 30 page limit. However, applicants should make every effort to submit only what is necessary in terms of supporting documentation."

On page 21517, in the middle paragraph under Rating Factor 3, paragraph (A)(1) is amended to refer to Appendix A. The paragraph is corrected to read as follows: "(1) Specific Services and/or Activities (6 points). Your narrative must describe the specific services and activities you plan to offer and who will be responsible for each. You must also provide a work plan which will enumerate the specific

services and activities and outcomes you expect. Please see a sample work plan in Appendix A. HUD will consider how well your proposed activities will:"

On page 21518, in the third column, under Rating Factor 5, the reference to "consortium members" is changed to "partners." The fourth paragraph in the third column is corrected to read as follows: "In order to satisfy the requirements for Factor 5, you must submit a work plan and a Logic Model that demonstrates how you will measure your own program performance. Your plan must identify the outcomes you expect to achieve or goals you hope to meet over the term of your proposed grant and benchmarks, outputs, and timeframes for accomplishing these goals. Your work plan must show how you will measure actual accomplishments against anticipated achievements. You must indicate how your plan will measure the performance of individual partners and affiliates, including the standards, data sources, and measurement methods, and the steps you have in place or how you plan to make adjustments if you begin to fall short of established benchmarks and timeframes."

On page 21520, in the middle column, paragraph (3) is amended to read as follows: "(3) All applicants except non-troubled PHAs and tribes/TDHEs are required to submit a signed Contract Administrator Partnership Agreement. The agreement must be for the thirty-six (36) month duration of the grant term. Your grant award shall be contingent upon having a Partnership Agreement included in your application. The Contract Administrator must assure that the financial management system and procurement procedures that will be in place during the thirty-six (36) month grant term will fully comply with either 24 CFR part 84 or 85. Troubled PHAs are not eligible to be Contract Administrators. Grant writers who help applicants to prepare their ROSS applications are also ineligible to be Contract Administrators. See the definition in Section II of Contract Administrator for more information."

On page 21521, in the middle column, the paragraph "Note" is corrected to read as follows: "**NOTE:** Applicants should carefully review each rating factor before writing a response. Applicants' narratives should be as descriptive as possible, ensuring that every requested item is addressed. Applicants should make sure to include all requested information, according to the instructions found in Section VII of this NOFA. This will help ensure a fair and accurate review of your application. Applications must not be longer than 30

narrative pages. Supporting documentation and certificates will not be counted towards the 30-page limit. However, applicants should make every effort to submit only what is necessary in terms of supporting documentation."

On page 21522, in the third column, paragraph (A)(1) is corrected to read as follows: "(1) Specific Services and/or Activities (6 points). Your narrative must describe the specific services and activities you plan to offer and who will be responsible for each. You must also provide a work plan which will enumerate the specific services and activities and outcomes you expect. Please see a sample work plan in Appendix A. HUD will consider how well your proposed activities will: (a) Involve community partners in the delivery of services; and (b) Offer comprehensive services versus a small range of services geared toward enhancing quality of life for residents."

On page 21524, in the first column, the third full paragraph is corrected to read as follows: "In order to satisfy the requirements for Factor 5, you must submit a work plan and a Logic Model form (HUD-96010) that demonstrates how you will measure your own program performance. Your plan must identify the outcomes you expect to achieve or goals you hope to meet over the term of your proposed grant and benchmarks, outputs, and timeframes for accomplishing these goals. Your work plan must show how you will measure actual accomplishments against anticipated achievements. You must indicate how your plan will measure the performance of individual partners and affiliates, including the standards, data sources, and measurement methods, and the steps you have in place or how you plan to make adjustments if you begin to fall short of established benchmarks and timeframes."

On page 21524, in the third column, under paragraph (C)(1)(a), the last of the bulleted paragraphs is corrected to read as follows: "Nonprofit entities that have resident support or the support of RAs/ROs are limited to \$100,000 for each RA/RO. A nonprofit may submit a single application for no more than three different RAs from the same PHA for a maximum grant award of \$300,000. Nonprofits may submit more than one application provided they target residents of distinct PHAs."

On page 21526, in the first column, paragraph (3) is corrected to read as follows: "(3) All applicants except nontroubled PHAs and tribe/TDHEs are required to submit a signed Contract Administrator Partnership Agreement. The agreement must be for the thirty-six

(36) month duration of the grant term. Your grant award shall be contingent upon having a Partnership Agreement included in your application. The Contract Administrator must assure that the financial management system and procurement procedures that will be in place during the thirty-six (36) month grant term will fully comply with either 24 CFR part 84 or 85. Troubled PHAs are not eligible to be Contract Administrators. Grant writers who help applicants to prepare their ROSS applications are also ineligible to be Contract Administrators. See the definition in Section II of Contract Administrator for more information."

On page 21527, in the first column, the "Note" paragraph is corrected to read as follows: **NOTE:** Applicants should carefully review each rating factor before writing a response. Applicants' narratives should be as descriptive as possible, ensuring that every requested item is addressed. Applicants should make sure to include all requested information, according to the instructions found in Section VII of this NOFA. This will help ensure a fair and accurate review of your application. Applications must not be longer than 30 narrative pages. Supporting documentation and certificates will not be counted towards the 30 page limit. However, applicants should make every effort to submit only what is necessary in terms of supporting documentation."

On page 21528, in the middle column, paragraph (1) is corrected to read as follows: "(1) Specific Services and/or Activities (6 points). Your narrative must describe the specific services and activities you plan to offer and who will be responsible for each. You must also provide a work plan which will enumerate the specific services and activities and outcomes you expect. Please see a sample work plan in Appendix A. HUD will consider how well your proposed activities will:"

On page 21529, in the third column, the third paragraph is amended to read as follows: "In order to satisfy the requirements for Factor 5, you must submit a work plan and a Logic Model form (HUD-96010) that demonstrates how you will measure your own program performance. Your plan must identify the outcomes you expect to achieve or goals you hope to meet over the term of your proposed grant and benchmarks, outputs, and timeframes for accomplishing these goals. Your work plan must show how you will measure actual accomplishments against anticipated achievements. You must indicate how your plan will measure the performance of individual partners and affiliates, including the

standards, data sources, and measurement methods, and the steps you have in place or how you plan to make adjustments if you begin to fall short of established benchmarks and timeframes. Applicants should also use the Logic Model form (HUD-96010) provided in the General Section of this SuperNOFA for reporting on how they will conduct performance measurement. You will be evaluated based on how comprehensively you propose to measure your program's outcomes."

On pages 21529-21530, paragraph (A) that begins on the bottom of the third column of page 21529 and continues to the first column of page 21530 is corrected to read as follows: "(A) Program Description. This funding category provides grants to PHAs and qualified nonprofit organizations to: (1) update, maintain and expand existing Neighborhood Networks/community technology centers; or (2) establish new Neighborhood Networks (NN) computer technology centers. NN centers provide computer and Internet access to public housing residents and offer a full range of supportive services. Applicants should submit proposals that will: Provide job training; reduce welfare dependency; promote economic self-sufficiency; increase the use of computer technology; expand educational opportunities for residents; develop access to health and nutrition information; and meet other needs of residents. All applicants must complete a Work Plan (see sample provided in Appendix A) covering the thirty-six (36) month grant term. Applicants' work plan and narrative must indicate how the centers will become self-sustaining after the grant term expires."

On page 21530, in the middle column, the last bulleted paragraph, prior to paragraph (2), is corrected to read as follows: "Nonprofit entities that have resident support or the support of RAs/ROs are limited to \$100,000 for each RA/RO. A nonprofit may submit a single application for no more than three different RAs from the same PHA for a maximum grant award of \$300,000. Nonprofits may submit more than one application provided they target residents of distinct PHAs."

On page 21530, in the middle column, the last bulleted paragraph, prior to paragraph (D), is corrected to read as follows: "Nonprofit entities that have resident support or the support of RAs/ROs are limited to \$100,000 for each RA/RO. A nonprofit may submit a single application for no more than three different RAs from the same PHA for a maximum grant award of \$300,000. Nonprofits may submit more than one

application provided they target residents of distinct PHAs."

On page 21531, in the third column, paragraph (17) "Administrative Costs" is amended to read as follows: "(17) Administrative Costs. Administrative costs may include, but are not limited to, purchase of furniture, office equipment and supplies, salaries for resident employees hired as part of this grant program, quality assurance, local travel, and utilities. Nonprofit organizations only may use administrative funds to pay for rental of space. For both new and existing NN centers, administrative costs must not exceed 10 percent of the total grant amount requested from HUD."

On page 21532, in the first column, paragraph (3) is corrected to read as follows: "(3) All applicants except nontroubled PHAs are required to submit a signed Contract Administrator Partnership Agreement. The agreement must be for the thirty-six (36) month duration of the grant term. Your grant award shall be contingent upon having a Partnership Agreement included in your application. The Contract Administrator must assure that the financial management system and procurement procedures that will be in place during the thirty-six (36) month grant term will fully comply with either 24 CFR part 84 or 85. Troubled PHAs are not eligible to be Contract Administrators. Grant writers who help applicants to prepare their ROSS applications are also ineligible to be Contract Administrators. See the definition in Section II of Contract Administrator for more information."

On page 21532, in the middle column, paragraph (I)(3) is corrected to read as follows: "(3) Applicants shall submit a work plan with their application (see Appendix A for a sample) which shall indicate level and type of expenditures over the three year grant term, contributions from partners, and efforts applicants will make to ensure the NN center will be sustainable once the grant term expires."

On page 21533, in the first column, the paragraph entitled, "Note" is corrected to read as follows: **NOTE:** Applicants should carefully review each rating factor before writing a response. Applicants' narratives should be as descriptive as possible, ensuring that every requested item is addressed. Applicants should make sure to include all requested information, according to the instructions found in Section VII of this NOFA. This will help ensure a fair and accurate review of your application. Applications must not be longer than 30 narrative pages. Supporting documentation and certificates will not

be counted towards the 30 page limit. However, applicants should make every effort to submit only what is necessary in terms of supporting documentation.”

On page 21534, in the first and middle columns, the scores for each subfactor (the text otherwise remains unchanged), are corrected to total the 15 points available for Rating Factor 2 as follows:

- (1) Socioeconomic Profile (5 points).
- (2) Local Training Program Information (3 points).
- (3) Resource Documentation (3 points).
- (4) Demonstrated Link Between Proposed Activities and Local Need (4 points).

On page 21534, in the middle column, the first paragraph under “Rating Factor 3 Soundness of Approach (30 Points)” is corrected as follows: “This factor addresses both the quality and cost-effectiveness of your proposed work plan. (A sample work plan is included in Appendix A.) Your work plan and supporting narrative must indicate a clear relationship between your proposed activities, the targeted population’s needs, and the purpose of the program funding. Your activities must address HUD’s policy priorities which relate to this program.”

On page 21535, in the third column, the fourth paragraph is corrected to read as follows: “In order to satisfy the requirements for Factor 5, you must submit a work plan and a Logic Model form (HUD-96010) that demonstrates how you will measure your own program performance. Your plan must identify the outcomes you expect to achieve or goals you hope to meet over the term of your proposed grant and benchmarks, outputs, and timeframes

for accomplishing these goals. Your work plan must show how you will measure actual accomplishments against anticipated achievements. You must indicate how your plan will measure the performance of individual partners and affiliates, including the standards, data sources, and measurement methods, and the steps you have in place or how you plan to make adjustments if you begin to fall short of established benchmarks and timeframes. Applicants should also use the Logic Model form (HUD-96010) provided in the General Section of this SuperNOFA for reporting on how they will conduct performance measurement. You will be evaluated based on how comprehensively you propose to measure your program’s outcomes.”

On page 21538, in the middle column, the paragraph titled, “Unacceptable Applications” is corrected to read as follows: “Unacceptable Applications. After the 14-day technical deficiency correction period, the Grants Management Center (GMC), or the DPONAP for tribal and TDHE applicants, will disapprove all applications that the GMC or DPONAP determines are not acceptable for processing. Notification of rejection must state the basis for the decision. The applicant may request a debriefing. Applicants requesting to be debriefed must send a written request to Michael Diggs, Director, Grants Management Center, Department of Housing and Urban Development, 501 School Street, SW., Suite 800, Washington, DC 20024. For tribal and TDHE applicants, contact Deborah Lalancette, Director, Grants Management, DPONAP, 1999 Broadway, Suite 3390, Denver, CO 80202.”

12. Continuum of Care Homeless Assistance Programs, Beginning at Page 21579

On page 21589, in the first column, in the third full paragraph, the first two sentences are amended by substituting the following sentences that reflect an increase in page limitation from 25 to 30 pages: “The application requires a description of the Continuum of Care system and the proposed project(s). To ensure that no applicant is afforded an advantage in the rating of the Continuum of Care element (described in Section V (A)(4) above), HUD is establishing a limitation of 30 pages, excluding required multiple page tables or charts but including any attachments, on the length of Exhibit 1 of any application submitted in response to this NOFA.”

13. Housing Opportunities for Persons With AIDS (HOPWA), Beginning at Page 21739

On page 21749, in the middle column, section VII, entitled “Application” is amended by adding the following:

“(D) Budget. You must complete the HOPWA Project Budget Forms found in Appendix D of the Program Section of the SuperNOFA, which lists the amount of requested HOPWA funds designated for each type of HOPWA-eligible activity.

(E) Statutory Certifications. You must complete the statutory certifications as outlined in Part A, Section VI of this Program section.”

Appendix A, beginning at page 21760, is amended by adding a new form, “Permanent Supportive Housing Worksheet.”

BILLING CODE 4210-32-P

HOPWA Application
Part B – Forms

U.S. Department of Housing
and Urban Development
Office of HIV/AIDS Housing

OMB Approval No. 2506-0133
Expiration Date: 11/31/2003

Permanent Supportive Housing Worksheet

Applicants seeking renewal under Part B of the HOPWA NOFA, must demonstrate that the HOPWA project supported by the prior HOPWA grant and continued through this renewal provides permanent supportive housing to eligible clients. Permanent supportive housing is defined in Part B, Section II of the HOPWA program NOFA. To meet this definition, you must document that at least 51 percent of the HOPWA program activity funds awarded to the grant you are seeking to renew provided direct permanent supportive housing assistance or provided supportive services to clients living in permanent housing you provided with resources other than HOPWA funds. Complete the following worksheet to determine if your project at least meets this 51 percent threshold.

INSTRUCTIONS

Part 1: Calculation of Funding

1. HOPWA Project Funding – Funding amount of the original or amended HOPWA grant, which you seek to renew.

Column A - Original or Amended HOPWA Grant. In Column A, for HOPWA funds only, enter the total program activity costs requested and approved in the prior HOPWA grant. Please note, these costs do not include administrative or project outcome costs. Total Column A.

2. Permanent Supportive Housing Funding – Percentage of funding dedicated to permanent supportive housing, as defined in the HOPWA NOFA.

Column B - HOPWA. In Column B, enter the amount of HOPWA funds from the prior HOPWA grant expended or pending use as approved in the grant that directly provide permanent supportive housing. HOPWA funds used for services or housing of clients in emergency, short-term, or transitional situations, may not be included (except in relation to short-term rent, mortgage, or utility payments). For example, if part of the supportive services provided actually provides services in a short-term, transitional housing situation or to clients not receiving housing assistance, then only the amount of funds directly providing the permanent supportive housing may be used in the calculation.

Please note, HUD has determined that only the following activity categories allow expenditures that meet the definition of permanent supportive housing under your prior grant. You may only account for the percentage of funds that were expended or will be expended on permanent housing activities through:

- Acquisition
- Rehabilitation, repair, and conversion
- New construction
- Rental Assistance
- Short-term rent, mortgage, or utility payments
- Lease
- Operating Costs

HOPWA Application
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and Urban Development**
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- Supportive Services (for residents of permanent housing only)
- Other HUD approved permanent housing activities

Other HOPWA funded activities, like housing information or resource identification, do not meet the definition of permanent supportive housing. Total Column B.

Column C – Other Funding. If applicable, enter the amount of other funds that provide permanent supportive housing. Other funding resources must be documented in the prior HOPWA grant and documentation that such assistance will continue during the term of the renewal grant must be provided to HUD. Total Column C.

Eligible Activity	HOPWA Project Funding	Permanent Supportive Housing*	
		B. HOPWA	C. Other
1. Acquisition	\$	\$	\$
2. Rehabilitation, Repair, & Conversion	\$	\$	\$
3. New Construction	\$	\$	\$
4. Lease	\$	\$	\$
5. Operating Costs	\$	\$	\$
6. Supportive Services	\$	\$	\$
7. Housing Information	\$		
8. Technical Assist. & Resource Identification	\$		
9. Rental Assistance	\$	\$	\$
10. Short-term rent, mortgage, & Utility Payments	\$	\$	\$
11. Other (name the type of alternative activity – must be approved in the prior HOPWA grant)	\$		
12. Total	\$	\$	\$

* Enter only the amounts of HOPWA or other resources that directly provide permanent supportive housing. You may not consider funds providing other types of housing assistance.

HOPWA Application
Part B – Forms

**U.S. Department of Housing
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Part 2: Calculation

To determine if your project uses at least 51 percent of funding to provide permanent supportive housing, please make the following calculation:

a. Amount of HOPWA funds providing permanent supportive housing (Total of Column B)	
b. Total amount of project activities (Total of Column A)	
c. Divide Row (a) by Row (b) and multiply by 100.	X100
d. Percentage of project funds providing permanent supportive housing.	*

***Please note:**

- 1) If the percentage is less than 51 percent, you are not eligible to apply for renewal under Part B.
- 2) If the percentage is 51 percent or over, you are eligible to apply for renewal under Part B and must complete the "Certification of Permanent Supportive Housing".

Part 3: Other Resources

If your project relies on other state, local, Federal, or private resources to provide the permanent housing or supportive services portion of your project, you must demonstrate that the other resources will continue to be available for that purpose throughout the term of the renewal grant. The continuing assistance must have been documented within the original application to HUD and be used in conjunction with requested HOPWA funds. Evidence of continuing assistance must be provided, as follows:

- A. Permanent Housing. Permanent housing provided through other resources must be documented in the renewal application through a leveraging letter. The leveraging letter must outline the amount of funds for the housing to be provided, the term the funds will be made available, and be signed by the organization providing such housing or funding for the housing. See Part D, Section V, Rating 4: Leveraging Resources of the HOPWA NOFA, for acceptable leveraging letter examples.
- B. Supportive Services. Supportive services provided through other resources must be documented through a commitment letter(s), which outline(s) the type of support that will be provided to clients, the organizations providing such support, and the length of time such supportive will be available. Supportive services must be available to clients in permanent housing throughout the term of the renewal grant.

14. Assisted Living Conversion Programs, Beginning at Page 21794

On page 21795, in the third column, the table that appears at the end of the column and that continues to the first column on page 21796, is amended as follows:

Office	\$ allocation
Boston, MA	2,758,217
Buffalo, NY	1,093,990
New York, NY	3,683,840
Baltimore, MD	2,111,481
Philadelphia, PA	4,575,436
Atlanta, GA	4,263,039
Greensboro, NC	2,650,130
Jacksonville, FL	4,152,573
Chicago, IL	3,508,109
Columbus, OH	1,796,621
Detroit, MI	1,717,273
Minneapolis-St. Paul, MN	1,573,456
Ft. Worth, TX	4,997,288
Kansas City, KS	2,530,207
Denver, CO	1,294,088
Los Angeles, CA	4,660,878
San Francisco, CA	4,587,804
Seattle, WA	2,045,568
Total	54,000,000

On page 21795, in the first column, in the first paragraph under "1. Application Due Date, Application, and Technical Assistance" the paragraph is corrected to read as follows:
"Application Due Date. Your completed

application (one original and four copies) is due on July 10, 2003, at the address shown below."

On page 21805 in the first column, under the HUD Minneapolis Hub, the zip code is corrected to read: 55402-4012.

On page 21806, in the first column, under the HUD Minneapolis Hub, the zip code is corrected to read: 55402-4012.

15. Service Coordinators in Multifamily Housing Program, Beginning at Page 21855

In Appendix A, beginning in the third column on page 21861, the following corrections are made to the list of HUD Field Offices: (Information that is not corrected in this document remains unchanged from the April 25, 2003 publication)

Alaska, Idaho, Oregon, Washington, OFC Phone: (206) 220-6420.

Arizona, MF Division, Phoenix Program Center, One North Central, Suite 600, Phoenix, AZ 85004, OFC Phone: (602) 379-7153.

Connecticut, OFC Phone: (860) 240-4800 Ext. 3041.

Hawaii, Dept. of Housing and Urban Development, 500 Ala Moana Blvd., Suite 3A, Honolulu, HI 96813.

Minnesota, 920 2nd Ave. South, Suite 1300, Minneapolis, MN 55402-4012.

Montana, North Dakota, South Dakota, Utah, Wyoming, TTY Number: (303) 672-5113.

New York, HUD Buffalo Office, Multifamily Housing Program Center, 465 Main Street, Lafayette Court, 2nd Floor, Buffalo, NY 14203-1780.

Ohio:

HUD Cincinnati Office, Multifamily Housing Program Center, 15 East 7th Street, Cincinnati, OH 45202.

HUD Cleveland Office, Fax: (216) 522-4120.

Puerto Rico, HUD Caribbean Office, Multifamily Housing Program Center, 159 Carlos E. Chardon Avenue, San Juan, PR 00918-1804.

South Carolina, OFC Phone: (803) 253-3288, Fax: (803) 253-3429.

Texas:

HUD Houston Office, OFC Phone: (713) 313-2274 ext. 7124, fax number (713) 313-2350.

HUD San Antonio Office, Office of Housing, Multifamily Program Center, One Alamo Center, 106 South St. Mary's, Suite 405, San Antonio, TX 78205.

Dated: June 11, 2003.

Vickers B. Meadows,

Assistant Secretary for Administration.

[FR Doc. 03-15370 Filed 6-16-03; 8:45 am]

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S. 330/P.L. 108-29

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S. 870/P.L. 108-30

To amend the Richard B. Russell National School Lunch Act to extend the availability of funds to carry out the fruit and vegetable pilot program. (May 29, 2003; 117 Stat. 774)

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